

I-205 Toll Project

Fact sheet: I-205 Toll Project Level 2 Toll Traffic and Revenue Study

December 16, 2022

Overview

The I-205 Toll Project team recently completed the attached I-205 Toll Project's Level 2 Toll Traffic and Revenue Study (T&R Study). The purpose of the toll T&R Study is to assess the traffic levels and performance along with forecasts of the potential gross and net toll revenues from tolling the Abernethy and Tualatin River bridges. The net toll revenue forecasts allow ODOT to estimate the funding contribution from tolling for the planned capital and safety improvements on I-205. The Level 2 Toll T&R Study shows a net revenue forecast that has the capacity to provide \$500-800 million in toll funding, inclusive of an allowance for a low-income toll program.

The Level 2 analysis is the second of three levels of traffic and revenue studies ODOT will complete and serves to inform discussions around tolling objectives and policies. A future Level 3 toll T&R study will be completed after conclusion of the environmental process that will include a deeper evaluation and to support formal rate-setting by the Oregon Transportation Commission, inform investors and lenders, help obtain a credit rating, and secure financing.

The Level 2 Toll T&R study tells us that **tolling would provide revenue** to support critical I-205 improvements but **does not tell us what the toll rates** will be. Toll rates for the Abernethy and Tualatin River bridges will be determined after a more robust analysis and a full public process by the Oregon Transportation Commission.



I-205 improvements will benefit local communities

Toll funding is needed to complete construction of the I-205 Improvements Project, which includes critical seismic improvements to the Abernethy, Tualatin River and seven other bridges and the addition of a third lane in each direction of I-205 from Stafford Road to OR 213. Variable-rate tolling on the Abernethy and Tualatin River bridges along I-205 is expected to begin in December 2024.

Phase one of the Improvements project – Abernethy Bridge reconstruction – is currently underway.

Together, variable-rate tolls and corridor improvements will improve safety for all drivers, reduce congestion to save travelers time, and provide a more predictable trip on I-205:

- **Congestion on some areas of I-205 would be reduced to 2 hours or less per day when improvements are complete;** without highway improvements and tolling, there would be up to 14 hours of congestion per day.
- Travel times through the seven-mile I-205 corridor would be **about 25 percent shorter in the morning rush hour and up to 50 percent shorter in the afternoon rush hour.**
- **Freight trucks would experience similar or shorter travel times,** whether on I-205 or other routes like OR 99E.
- **A safer roadway, with up to 21 percent fewer crashes on I-205** when compared to not building the improvements and tolling.
- An economic benefit of more than \$40 million per year between 2027 and 2045¹.
- Supports ODOT's carbon emission reduction goals. By implementing congestion pricing, ODOT is able to **add additional through lanes and improve congestion and safety without raising carbon emissions.**

Variable-rate tolls are fees to use a road or bridge that can vary based on time of day and can be a strategy to shift demand to less congested times of day.

In contrast, fixed-rate tolls remain the same price throughout the day, no matter how congested a road is. This means there is no incentive for people to change their trips if they have flexibility in their schedules.

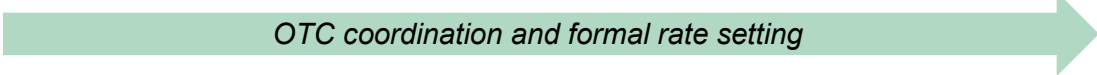
*Charging different toll rates based on the volume of traffic is also known as **congestion pricing.***

Description: Toll Traffic and Revenue Studies

Transportation agencies use traffic and revenue studies to understand future travel demand and to support financial planning. Toll T&R studies are typically categorized into three levels of analysis that narrow possible toll scenarios and revenue forecast results over time. For I-205, ODOT is currently in the Level 2 analysis, being conducted concurrently with the project's draft Environmental Assessment (expected to be published in early 2023). Levels of toll traffic and revenue studies include:

¹ Reductions in congestion delays and vehicle miles traveled are estimated have an average net present value of over \$42 million per year in constant 2020 dollars between 2027 and 2045, when discounted using a 7% real discount rate.

Level 1 Sketch 2017-18	Level 2 Comprehensive <i>We are here</i>	Level 3 Investment-Grade 2023-2024
<ul style="list-style-type: none"> Examines feasibility of tolling and tests high-level alternatives. Usually takes 1-6 months. Completed during the Value Pricing Feasibility Analysis prior to the environmental process beginning (2020). 	<ul style="list-style-type: none"> More detailed evaluation of alternatives and toll scenarios that support initial rate setting and policy development. Usually takes 6-8 months but may take longer with multiple iterations. Prepared concurrently with the Environmental Assessment. 	<ul style="list-style-type: none"> Deeper evaluation of a preferred toll scenario that supports formal rate-setting, informs investors and lenders, helps to obtain a credit rating, and secures financing. Usually takes 12 months. May be refreshed periodically. Will begin as the Environmental Assessment process ends, finishing about six months before tolling starts in December 2024.



A toll T&R study used for financial planning differs somewhat from the traffic analysis included in environmental studies. Environmental studies like the I-205 Environmental Assessment are designed to identify potential project impacts and generally focus on weekday conditions – including the most congested travel times of day – in designated forecast years; for I-205, ODOT has identified 2027 (improvements completion) and 2045 as planning years. In contrast, financial planning analysis focuses on preparing reasonably conservative annual traffic and revenue forecasts covering each year over a 35- to 40-year forecast horizon.

I-205 Level 2 Toll Traffic and Revenue Study

The goal of the I-205 Level 2 Toll T&R Study is to better determine the feasibility that the tolling plan would provide net toll revenues needed to complete capital safety and traffic improvements on I-205.

Toll assumptions and results for the Level 2 Toll T&R Study include:

- The modeled toll rates for passenger cars and light trucks range from \$0.55 (11:00 p.m. to 5:00 a.m.) to \$2.20 (4:00 to 6:00 p.m.) in year of opening on each of the two tolled bridges on I-205 (Abernethy and Tualatin River bridges).
- Medium trucks were assumed to pay twice the auto rate, and heavy trucks were assumed to pay four times the auto rate.
- These variable tolls for a one-bridge trip in the year of opening represent a weighted-average value of \$1.45 over the course of a weekday (\$1.52 for Abernethy and \$1.31 for Tualatin).
- For a two-bridge trip in the year of opening where the toll cost would vary from \$1.10 to \$4.40, the weighted-average value is \$2.62 over the course of a weekday.
- Customers without a registered toll payment account are assumed to pay an additional \$2.00 per toll trip (one or two bridges) to cover the additional costs of identifying the vehicle owner from their license plate and collecting their payment via mail.

Other toll bridges on the west coast

Tolls on the SR 520 bridge in Washington state range from \$1.25 to \$4.30 weekdays for customers with a Good to Go! toll payment account. Customers without a Good to Go! account pay an additional \$2 for an invoice by mail. SR 520 toll rates will increase by an average of 15 percent beginning July 2023, with the highest peak period rate changing to \$4.50.

Bridge toll rates for cars in the San Francisco Bay Area range from \$7 to \$8.40 per bridge all times of day for customers with a FasTrak toll payment account.

- The toll traffic and revenue study forecasts show:
 - For one-way trips at the time of opening, 55% of travelers would pay one bridge toll, while 45% would pay two bridge tolls.
 - 39% of all weekday toll trips occur within the five peak hours with the highest toll rates (6-9 a.m. and 4-6 p.m.); during those peak hours the share of one-way trips paying two bridge tolls drops to 36%.
 - By 2045, the share of weekday trips occurring during the five peak hours decreases and the share of total weekday trips paying two bridge tolls increases.

The Level 2 Toll T&R report was completed based on the above toll rates in October 2022 and included a net toll revenue forecast for use in assessing the potential toll funding contribution for the I-205 Toll and Improvements Projects. Net toll revenues are what remain from gross revenues after an allowance for uncollectable tolls and deductions to pay for toll collection facility operation and maintenance costs.

ODOT then analyzed the financial capacity of this net toll revenue stream to contribute up-front project funding. This analysis included a revenue deduction allowance for a future low-income toll program and also conservatively restricted the growth of net toll revenues. **Based on this analysis, ODOT determined that forecasted I-205 net toll revenues would finance \$500-800 million construction funding from toll bonds.**

In 2024, the Oregon Transportation Commission (OTC) will determine toll rates and policies that balance performance objectives (such as congestion relief) and revenue needs.

Variable rate tolling at the Abernethy and Tualatin River bridges is the first step in developing a regional congestion pricing approach. As tolling is expanded regionally with ODOT's Regional Mobility Pricing Project (RMPP) and the I-5 Interstate Bridge Replacement program, the operating cost of I-205 toll collections is expected to be reduced due to economies of scale in operating a broader Oregon Toll Program. A reduction in operating costs would potentially increase the I-205 net toll revenue projections.

Next steps

ODOT will work with the OTC and the Statewide Toll Rulemaking Advisory Committee to identify additional toll scenarios to test and assess net toll revenues for these additional scenarios, including one with more specific details of a proposed low-income toll program, including benefits, eligibility and participation.

Following completion of the environmental process, the I-205 project team will complete a Level 3 investment-grade toll T&R study prior to toll commencement and issuance of toll bonds that will:

- Incorporate refined assumptions for socio-economic projections, values of time, traffic simulation, toll rate schedule, and other model assumptions, including more specific details about the proposed low-income toll program.
- Estimate refined net toll revenue projections with additional specificity for a preferred toll scenario that supports formal rate-setting, informs investors and lenders, helps to obtain a credit rating, and secures financing.
- Support OTC rate setting and toll bond financing for the I-205 Improvements Project.