

Lower Snake River Dams Transportation Study

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Background

The Snake River from Clarkston to Pasco contains four dams (Ice Harbor, Lower Monumental, Little Goose and Lower Granite). The 2026 Supplemental Transportation Budget (ESSB 6005, Section 216 (5)) directed the Washington State Department of Transportation to study highway, local road and freight rail transportation needs if the dams were removed. The study is evaluating scenarios for changes in infrastructure and operations that will be necessary to address the redistribution of shipments currently moved on barges to alternate modes such as road and rail. This work includes a mathematical and statistical analysis based on available data in terms of both financial and carbon emission costs. The analysis also includes a robust, inclusive public engagement process to solicit feedback from interested community members.

Overall progress

During the first quarter of 2026, WSDOT conducted activities in the following areas:

- Total logistics cost model calibration
- Truck and rail movement documentation refinement
- Geologic, utility, roadway and rail impacts analysis, concepts, cost estimates
- Engagement activities

The sections below describe the work done in these areas.

Total logistics cost model calibration

Work performed by the Jacobs team, related to running the TLC model, includes the continued development of Scenarios 5, 6 and 7. The study team worked closely with the JTC team to improve the model, including:

- Updating facility capacities for barge terminals;
- Updating facility capacities for rail shuttle terminals;
- Revising rail rates;
- Updated conversion factors from annual tons developed in the TLC model to peak daily trucks, trains and barges for system performance and reporting purposes; and
- Development of a model assumptions memo which described the specifications for development of the inputs for each of the scenarios, including factors such as which terminals would be active in each scenario, the capacity of each terminal, and the connection locations in the rail network which determine the possible origin-destination combinations.

To date, more than 100 model runs have been conducted as part of the calibration and validation process. We are learning from the model runs and improving the model each time.

Truck and rail movements analysis

The study team edited a report about documenting existing conditions for truck and rail to address comments received during WSDOT review. This work entailed comparing data and

calculation methods against information received from stakeholders so far in addition to refining maps presenting the data. The result of this report will be incorporated into the final report.

Geological impacts analysis

Work on the geological impacts analysis this quarter focused on polishing the report and appendices to address comments received during the WSDOT review. The primary refinement involved conducting additional analysis to incorporate drawdown impacts related to the Columbia Plateau Trail, which is included as a reinstated shortline rail line in Scenarios 6 and 7. This additional analysis also prompted revisions to quantities needed to stabilize embankments. In addition to the Columbia Plateau Trail analysis, various other changes to the report were made, such as the addition of a section noting potential future analyses to address uncertainty, refinements to selected calculations, and verifications of historical data. A final document will be submitted next quarter. The results of this report will be incorporated into the final report.

Dredging analysis methodology

Dredging will be required at ports at the mouth of the Snake River and at those just downstream. To understand these dredging impacts, the study team developed a draft methodology report for the dredging analysis. Based on other studies, most sediment deposition is expected to occur in the first five years post-drawdown, with deposition rates slowing in later years. This analysis will estimate the amount of sediment that will need to be dredged from the river under drawdown conditions and the anticipated associated costs.

Utility impacts analysis

The study team refined the utility impacts analysis report to address comments received during WSDOT review. Primary revisions included data refinement and additional validation. A final document will be submitted next quarter.

Roadway impacts analysis

The study team continued work to understand the physical infrastructure impacts on the roadways near the Lower Snake River due to the drawdown. The roadways potentially impacted by the drawdown were identified. The road segments were categorized into low- and high-risk for failure due to embankment risk. Roadways with supporting structures in the river, such as bridges, were categorized as low, medium or high risk of scour damage. The study team developed cost estimates for stabilizing impacted roadways.

The study team cross-referenced existing roadway segments with deficient pavement sections and/or bridges with those projected to experience a large increase in trucks. The team then met with county engineers in the study area to discuss preliminary results and identify information that could help the counties understand the impacts on their roadways. The

pavement and bridge analysis will support the development of cost estimates for truck-related impacts on roadway infrastructure on both state highways and county roads.

Rail impacts analysis

The study team continued to advance rail impacts analysis during the fourth quarter. Work conducted during this period included the following:

- Development of design and cost estimates for improving rail track for the current WATCO line.
- Development of design and cost estimates for converting the Columbia Plateau Trail back to rail services.
- Development of initial designs for rail terminals, including Lewiston, Wilma, Central Ferry, Dayton and Kahlotus.
- Development of cost estimates for initial designs for Lewiston, Wilma and Central ferry terminals.

Cost estimates

The study team developed a standardized parametric cost-estimating model using WSDOT's guidance document. Estimated rail, road and utility costs will use standardized dollar years, escalation, contingencies and other methods.

Engagement activities

There have been several engagement outreach activities that occurred over the last three months. This includes two Technical Advisory Committee (TAC) meetings in January and March, and a Community Advisory Committee meeting in March. These meetings primarily focused on communicating results of the river drawdown/return to natural flow impacts (geologic, rail, road, utilities) analysis, model updates and community engagement activities.

The study team finalized the layout, content and other preparations for an online open house that ran from January 26 to February 16. The online open house included much of the same material discussed in the December 2025 TAC meeting. The team also analyzed the engagement results and presented the findings at the recent TAC and CAC meetings.

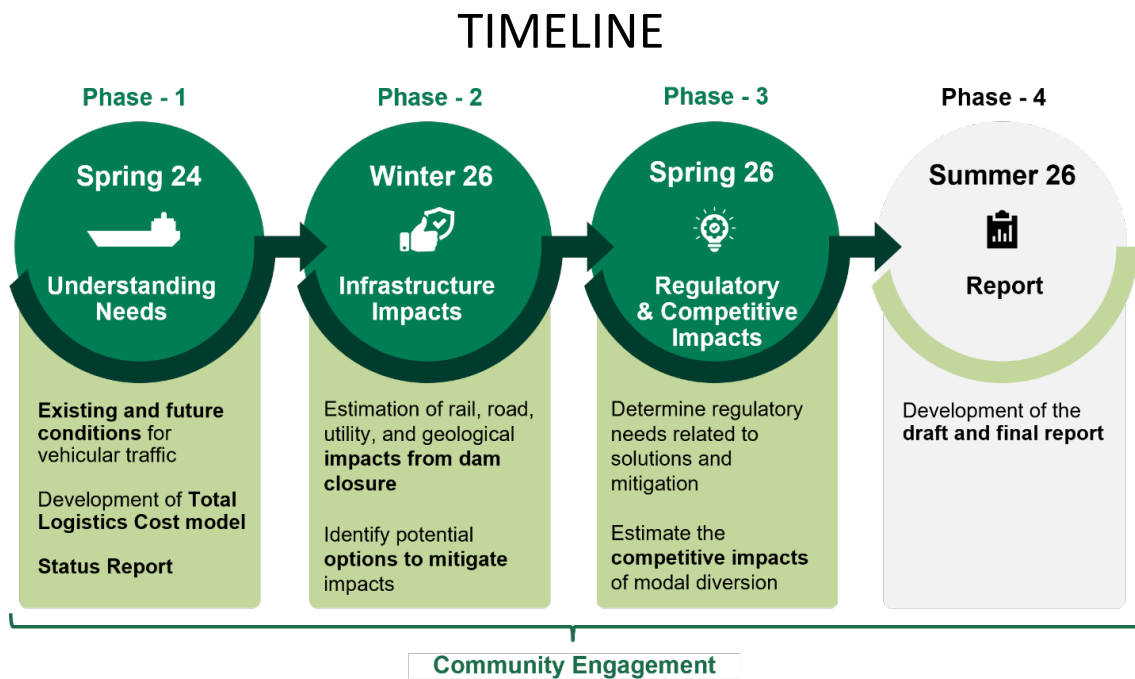
Next steps

During the next quarter, the study team will focus on the following major activities:

- Finalizing the TLC model and running final outputs for Scenarios 5-7
- Identifying and finalizing the description of what is to be included in Scenario 8
- Finalizing analysis of truck impacts on pavement and bridges
- Generating cost estimates of new and rehabilitated infrastructure in each of the future mitigation scenarios
- Finalizing the design of new train terminals in the mitigation scenarios
- Finalizing the reports for the geology and utility tasks

- Finalizing the report for the utilities task
- Finalizing the report for the existing truck and rail movements task
- Developing the final report for the Scenarios 1-4 model runs
- Continue planning outreach through conducting a Technical Advisory Committee meeting and a Community Advisory Committee meeting in the May/June timeframes
- Continue work on Phase Three of the study focused on regulatory and competitive impacts

Below is a high-level timeline for the study. The dates shown are the start dates for each of the phases. Phase 3 work began this quarter. Phase 4 work is expected to begin soon.



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