# 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 2025 Transportation Budget (ESSB 5161, Section 217 (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 third quarter of 2025, WSDOT conducted activities in the following areas:

- Total logistics cost model calibration
- Engagement activities
- Geologic impacts analysis
- Utility impacts analysis
- Roadway impacts analysis
- Rail impacts analysis
- Transportation safety impacts analysis
- Environmental analysis

The sections below describe the work performed in these areas.

**Total logistics cost model calibration**

The Jacobs team continues work on calibrating the total logistics cost base model. This will ensure that modeling does its best to match real-world costs. Jacobs met with WSDOT and the Joint Transportation Committee's consultants on several occasions to discuss strengths and needed improvement areas of the model. Several changes were made in response to the JTC comments and the base model was finalized in mid-October. Now that the base model is complete, the scenarios can be built inside that model.

**Engagement activities**

The last three months have focused on technical analysis that will be part of reporting and public discussion when findings are available. Jacobs is currently planning to conduct the next Technical Advisory Committee and Community Advisory Committee meetings in December. These meetings will present the initial findings of scenarios 1-7. An online open house is being scheduled for January 2026 to present this same information to a broader audience.

**Geologic impacts analysis**

Jacobs conducted significant work to advance the understanding of geological conditions along the Lower Snake River. This work included collecting information from previous reports, site visits, and experience from previous studies to understand the current condition of embankments and likely short-term future drawdown conditions. The information was used to determine:

- Short term drawdown risks
- Long-term erosion risks
- Long-term bridge scour

Following the identification of the risk factors for the river, Jacobs determined the amount of rebuild needed for road and rail infrastructure located in places where settlement and erosion may occur. A report for geology is being developed that describes the methodology, data, and analysis conducted for the geology work in the study.

**Utility impacts analysis**

The Jacobs team analyzed the infrastructure impacts to utilities, including the identification of utilities that cross the river, estimating the size and depth of these utilities, and determining the need for relocation of these utilities. Jacobs also developed cost estimates to move or replace these utilities based on the river drawdown as needed. Jacobs is writing a utility infrastructure report that will capture the results of this analysis.

**Roadway impacts analysis**

Jacobs has conducted several activities to understand the road impacts of breaching the Lower Snake River. The team finalized locations to conduct traffic analysis in the study area based on key locations that are likely to change volumes significantly and locations that experience some level of congestion under current conditions. WSDOT collected traffic count data at these key locations that will be used as inputs for the traffic analysis models and ultimately determine the change in level of service for the future scenarios. Jacobs and Concord Engineering developed a spreadsheet to track the conditions at each of the locations and have set up the traffic analysis model to be ready to run as the TLC model scenarios are executed.

Jacobs finalized a cost template for developing estimates of highway improvements needed to maintain the road infrastructure in the case of a drawdown of the river. This includes estimating the costs for roadway reconstruction due to settlement and embankment protection due to erosion. The team is utilizing the geologic information discussed above as a basis for this work.

**Rail impacts analysis**

Jacobs is conducting several workstreams to understand the impact of the drawdown on rail infrastructure in the study area. This includes the development of draft designs for rail terminals identified for Scenario Five at Central Ferry, Port of Wilma, and Port of Lewiston. Additionally, the Jacobs team is developing draft designs for rail terminals identified for Scenario Six at Dayton, Khalotus, and Lyons Ferry. Cost estimates for designs will include the cost for engineering, construction, and right-of-way purchase. The study team is meeting with rail and port authorities regarding these designs and will incorporate their feedback in the designs.

Jacobs is applying the results of the geologic task to determine where rail needs to be rebuilt due to settlement and embankment protected from erosion.

**Environmental analysis**

Jacobs finalized the environmental analysis methodology based on comments from WSDOT environmental staff. Jacobs identified the needed model outputs that will be used as inputs for the environmental analysis. Jacobs has developed a spreadsheet that will be used to perform the analysis of estimating emissions for criteria pollutants and greenhouse gases in the study area.

**Transportation safety impacts analysis**

Jacobs developed truck-involved crash rates based on historical crash data in the study area. These crash rates will be used to generate estimates of the number of crashes that occur in each scenario. These rates were summarized into a methodology memorandum for WSDOT review. Based on that review, the final methodology for the study is under development.

Jacobs also developed a rail crash per vehicle miles traveled rate based on historical rail-related crash rates in the study area. This rate will be applied to rail vehicle miles traveled in future scenarios to estimate the number of rail crashes in the study area. The rail crash methodology is being summarized into a rail crash memorandum for review by WSDOT.

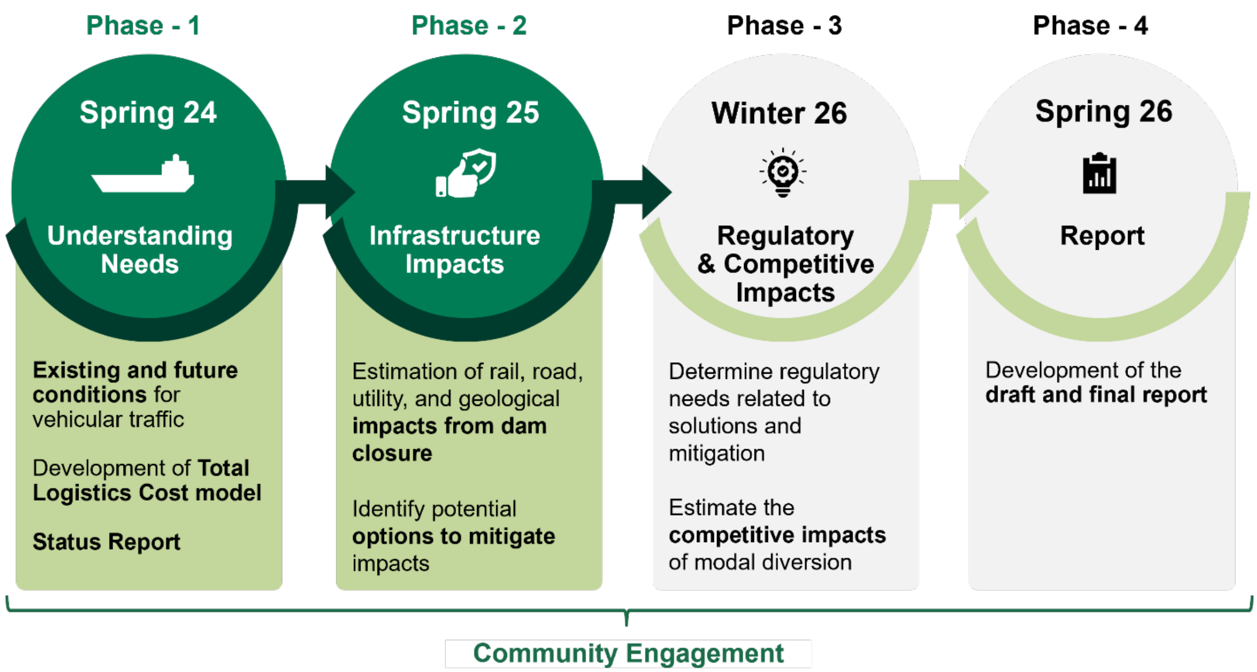
**Next steps**

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

- Run the TLC model for Scenarios 2-7 to understand the rail and truck impacts of breaching the dams.
- Identify additional infrastructure needed to manage additional truck and rail traffic resulting from the diversion of goods currently using the barges.
- Completing the geology task to understand the changes in geological conditions from the drawdown. Continuing with Phase Two work on highway and rail infrastructure impacts from shifting goods from barge on the Lower Snake River to other modes.
- Continue planning outreach through an online open house, a Technical Advisory Committee Meeting, and a Community Advisory Committee meeting in the December/January timeframe.
- Begin 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. Note that due to the extra time it has taken to complete the TLC base model, the start of Phase Three is delayed until 2026. This is not expected to cause a delay in the completion of the project.

# TIMELINE



Phase - 1
Spring 24
Understanding Needs
Existing and future conditions for vehicular traffic
Development of Total Logistics Cost model
Status Report
Phase - 2
Spring 25
Infrastructure Impacts
Estimation of rail, road, utility, and geological impacts from dam closure
Identify potential options to mitigate impacts
Phase - 3
Winter 26
Regulatory & Competitive Impacts
Determine regulatory needs related to solutions and mitigation
Estimate the competitive impacts of modal diversion
Phase - 4
Spring 26
Report
Development of the draft and final report
Community Engagement