

# **Lower Snake River Dams Transportation Study**

## **Technical Advisory Committee Meeting #7**

May 28, 2025

# Agenda



**Overall Study Update**



**Model Review and Description of Scenarios**



**Recent Model Runs**



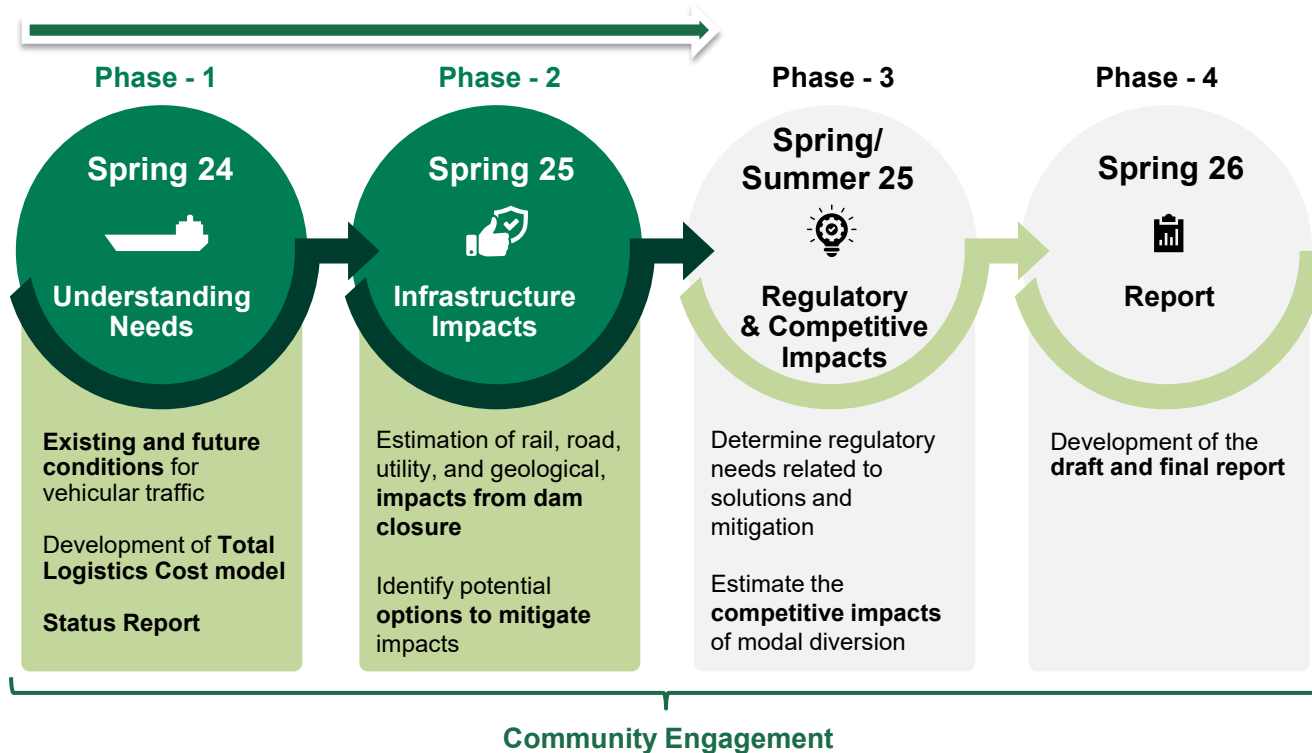
**Brainstorming Session**



**Next Steps**

## **Study Overview**

# Study Phases: Where we are now



# Steps for Model Runs & Scenario Analysis (up to 4)

## May

- Run first set of alternative future scenarios – one complete
- Discuss results with TAC (Today)
- Discuss second set of scenarios with TAC (Today)

2025

## April

- Continue model development
- Run base scenarios of 2020, 2045 with and without dams

## June

- Run second set of scenarios
- Discuss second set of scenario runs results with TAC (June 26)
- In-person open houses

## **Model Overview and Description of Scenarios**

# Total Logistics Cost (TLC) Model Overview & Development



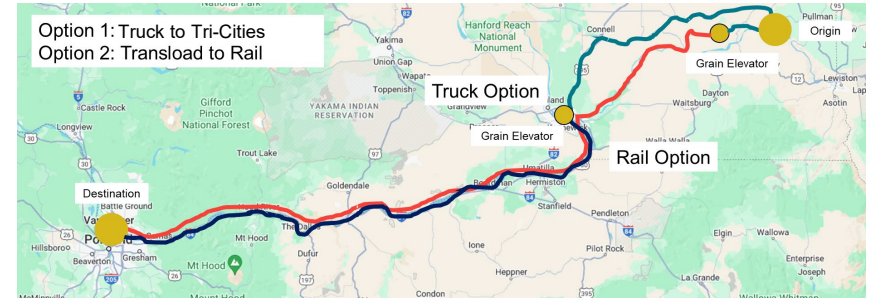
TLC model re-creates transportation decision-making based on costs and assigns transportation routings based on lowest-cost pathways through a multimodal network

## General Approach:

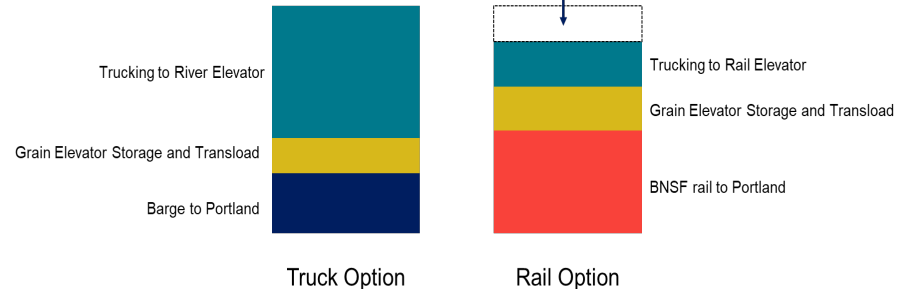
- Define road, rail, and barge networks
- Establish origins and destinations
- Assign costs to road, rail, and barge segments
- Assign costs to terminals (e.g. unit train terminals)
- Model optimizes for lowest-cost path through network

## Items that Can Change for a Model Scenario:

- Location and capacity of grain and rail facilities
- Capacity of rail and highway segments
- Transportation rates per ton-mile
- Transloading and storage costs



What is the cost or time difference for various routings?



# Initial Scenarios Descriptions

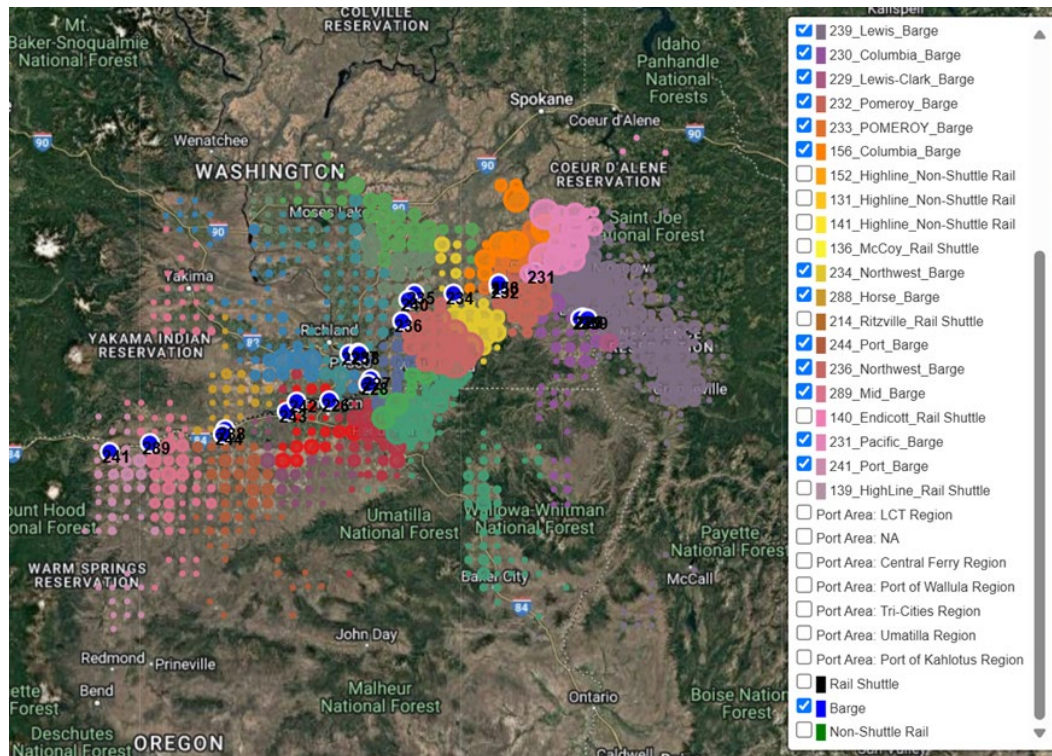
## Scenario #1: Base year (2020) model with dams in place

- Discussed at previous TAC meeting
- Showed catchment areas for each port and rail terminal
- Examined lock volumes, pool volumes, and river volumes relative to existing data

## Scenario #2: Base year (2020) model with dam breaches

## Scenario #3: Future year (2045) model with dams in place

## Scenario #4: Future year (2045) model with dam breaches



# Alternative Future Scenarios (2045) Descriptions

**Future Scenario #5:** Add unit train terminals at:

- Lewiston
- Central Ferry

**Future Scenario #6:** Shortline rail to barge (provides options in addition to existing Class I RRs)

- Add unit train terminal at Lewiston (still uses UP)
- Dayton: UP line section to Wallula (second track needed for 1-mile UP track)
- Endicott: Capacity increase and connect trails-to-rail alignment to Tri-Cities
- Rosalia: Rosalia-to-Thornton allows connection between McCoy all the way to Pasco without touching Class I

**Future Scenario #7:** Same as Scenario #6 with no Lewiston terminal

**Future Scenario #8:** To be discussed today

**Note:** All future scenarios assume:

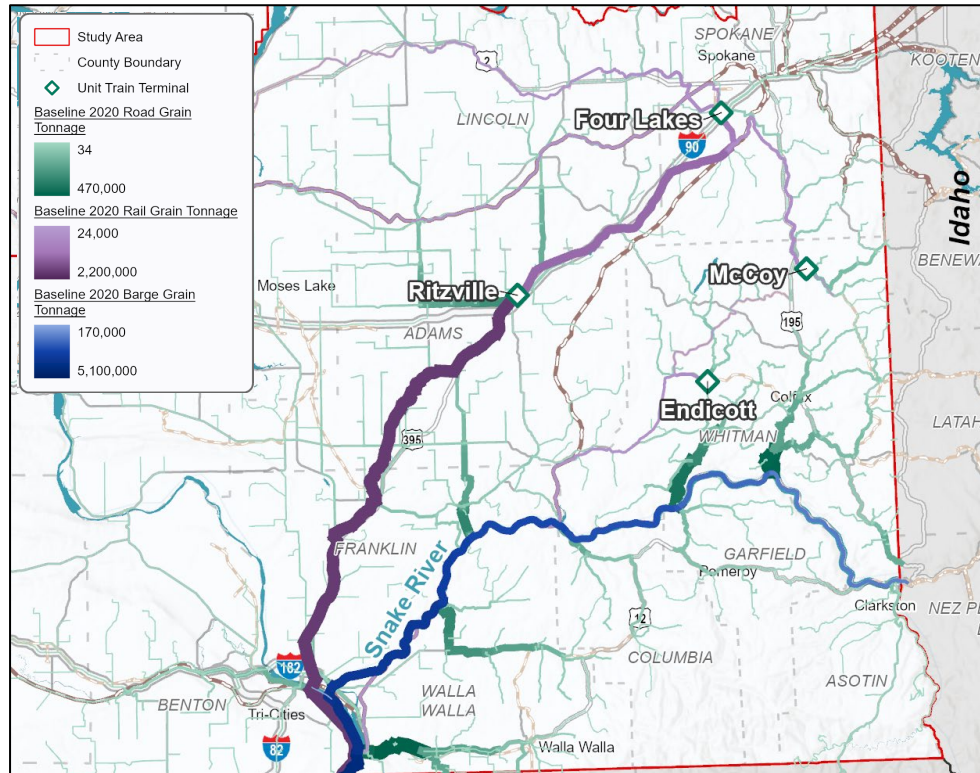
- Maintain Watco GNWR line on LSR
- Improve Fallon line north to feed into McCoy terminal

**Scenario #1 will be the primary comparison point for alternative future scenarios**

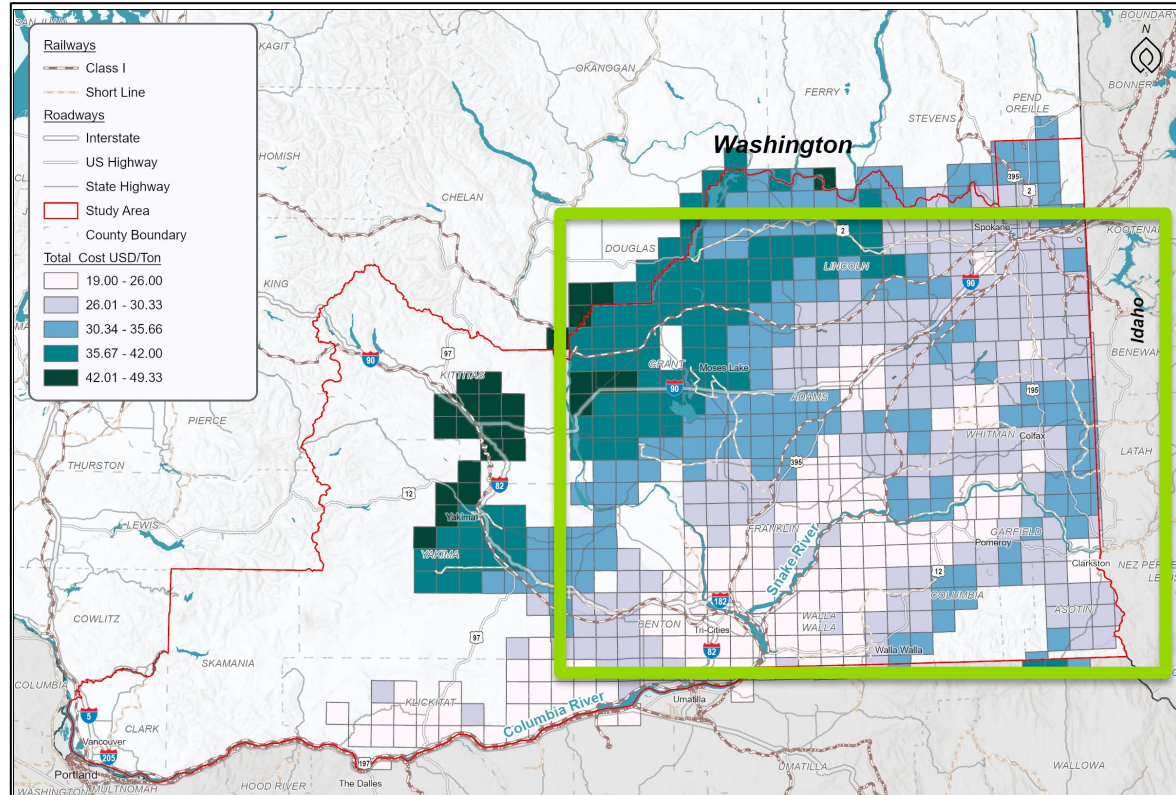
## **Model Run Results – Scenario #1: Base Year (2020) with Dams**

**ALL RESULTS ARE PRELIMINARY**

# Scenario #1: Tonnage Bandwidth Maps for Truck, Rail, and Barge



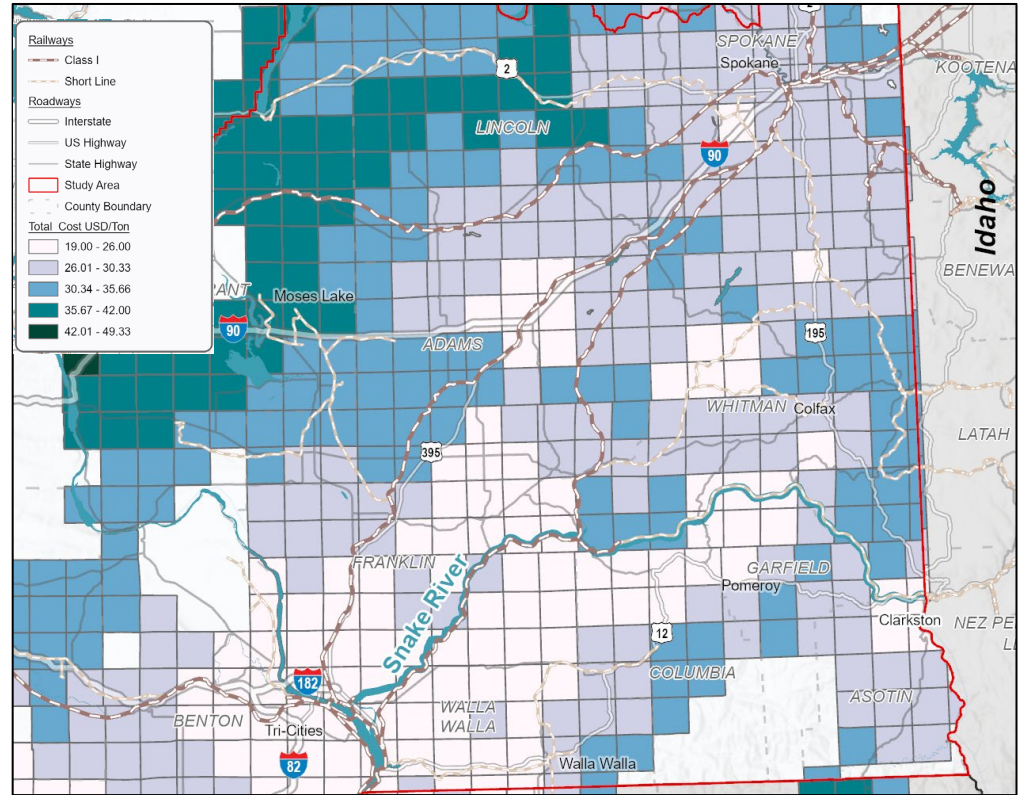
# Scenario #1: Transportation Costs by Township



# Scenario #1: Transportation Costs by Township

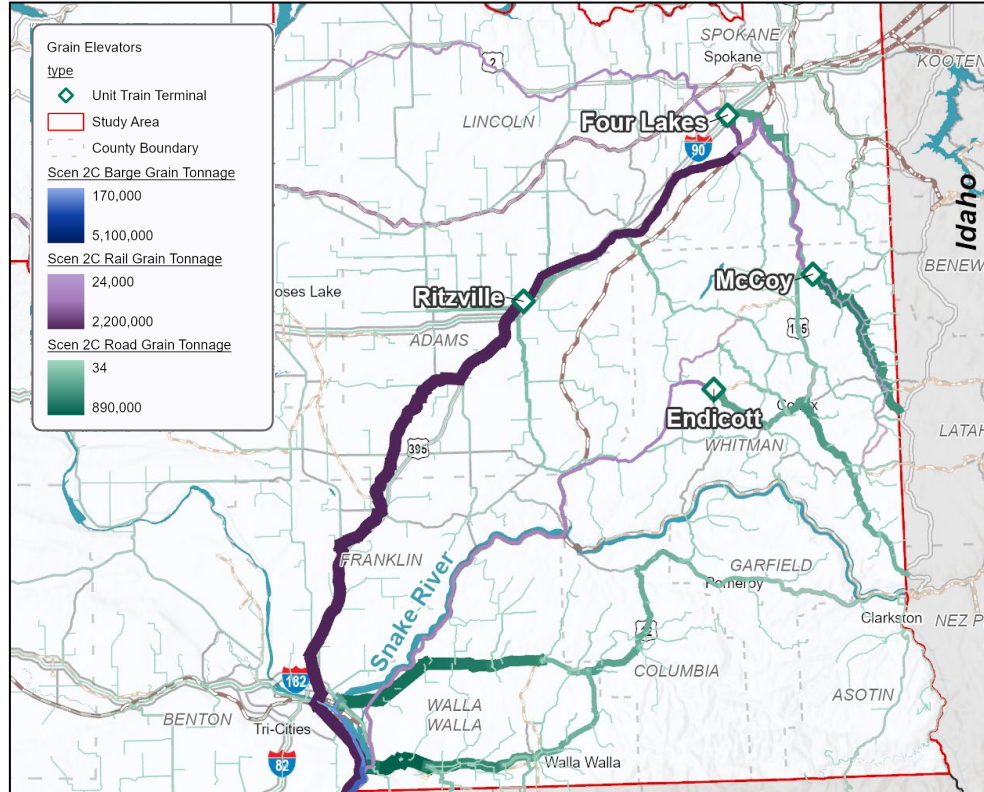
Transportation costs include:

- From township to intermediate facilities
- From intermediate facilities to the export port

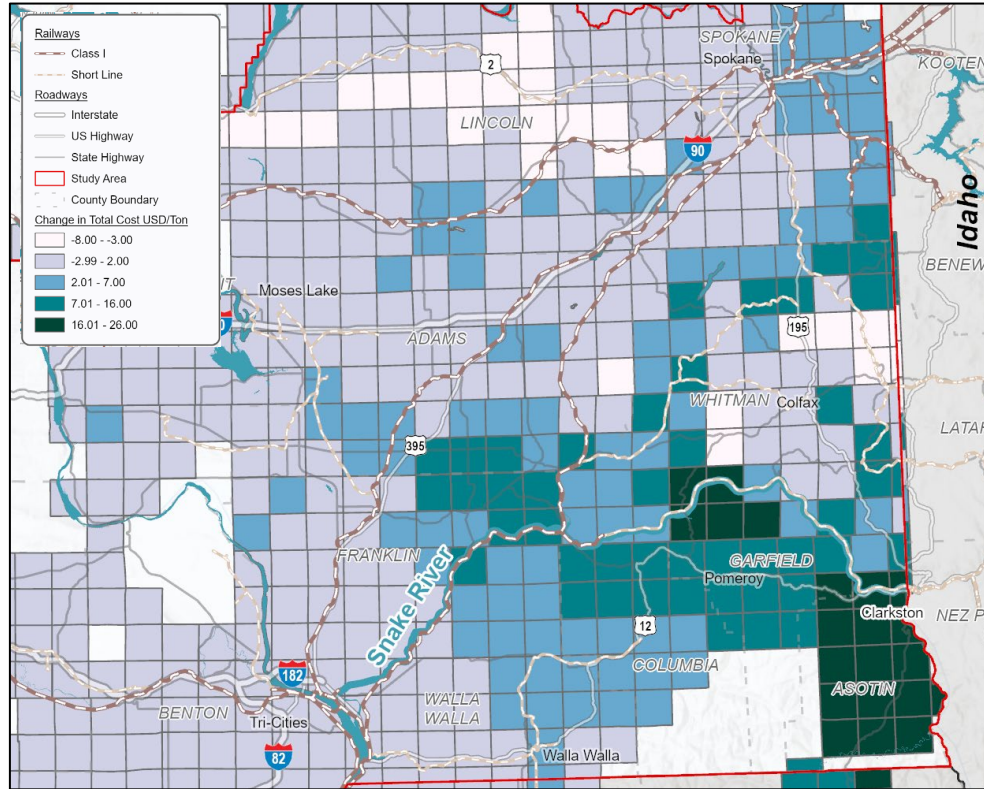


## **Model Run Results – Scenario #2: Base Year (2020) with Dams Breached**

# Scenario #2: Tonnage for Truck, Rail, and Barge

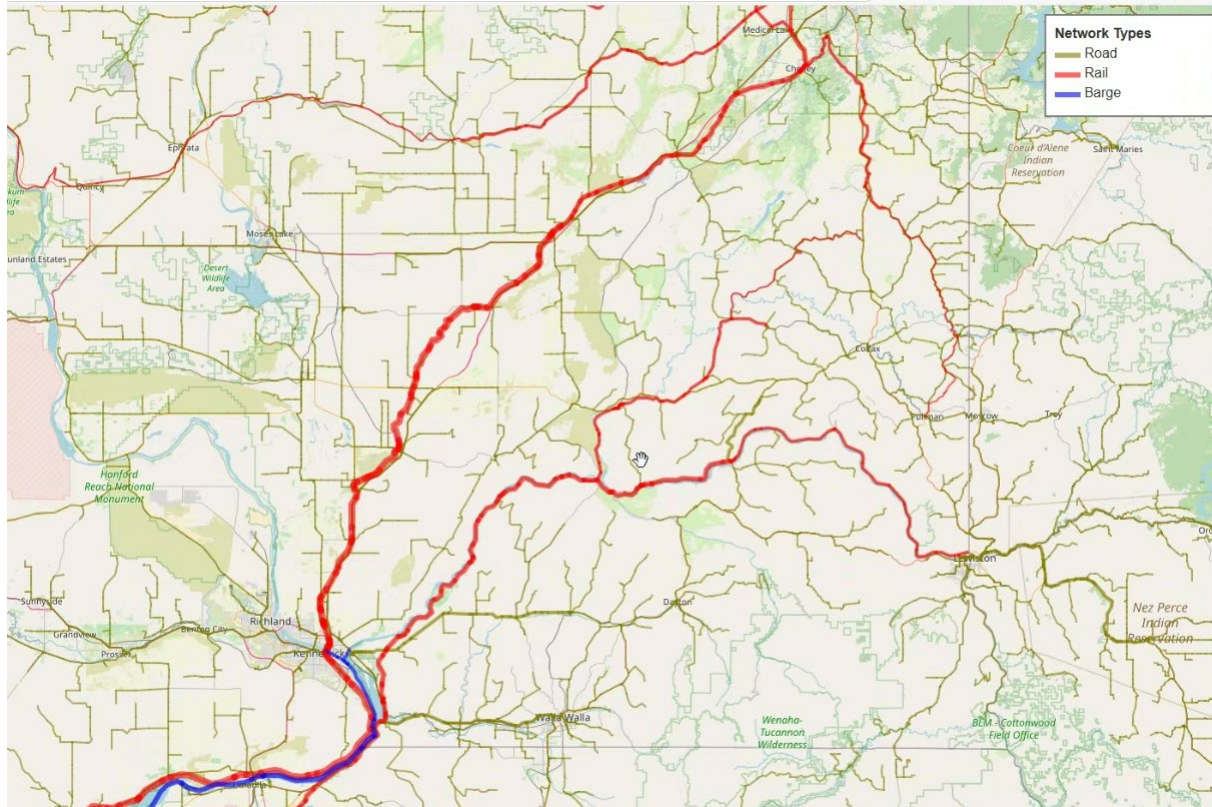


# Scenario #2: Change in Transportation Costs



**Model Run Results – Scenario #5: Future Year (2045)  
New Unit Train Terminals in Lewiston and Central  
Ferry with Dams Breached**

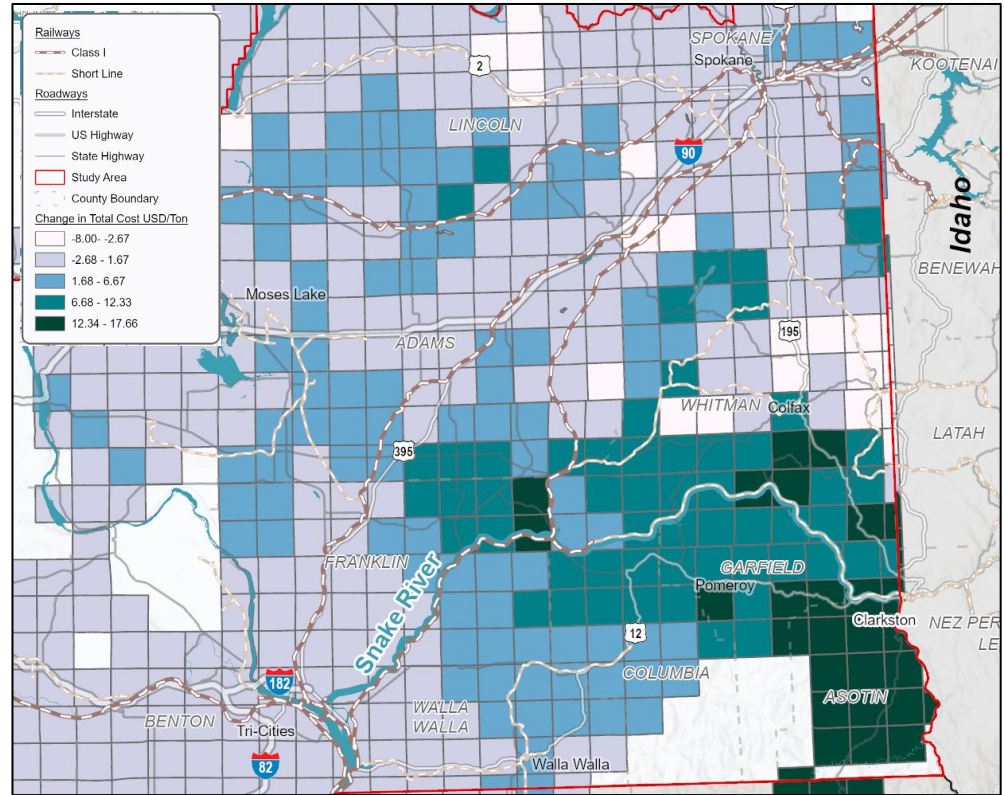
# Scenario #5: Tonnage for Truck, Rail, and Barge



# Scenario #5: Change in Transportation Costs

Scenario #5 has the highest change in transportation costs in the eastern part of the study area

This exacerbates the higher costs in the eastern part of the study area from Scenario #1



# Comparison Among Scenarios: Select Metrics






	Scenario #1	Scenario #2	Scenario #5
Total Transportation Costs	144,064,000	158,842,000	178,019,000
Truck VMT (Model Only)	73,000	12,000	130,000

## Other metrics to be added in the future

- Rail ton-miles
- Congestion (lane mileage of V/C above threshold)
- Safety
- Emissions and GHG

# Mitigation Scenarios Brainstorming Session

# Goals

-  **Minimize increase in transportation costs and traffic impacts**
-  **Consider reliability impacts**
-  **Preserve competitive balance**
-  **Replace as much lost capacity as reasonable**
-  **Provide decisionmakers with options**

# Scenario Brainstorming: Alternative Future Scenarios

## Future Scenario #5: Add unit train terminals at:

- Lewiston
- Central Ferry

## Future Scenario #6: Shortline rail to barge (provides options in addition to existing Class I RRs)

- Add unit train terminal at Lewiston (still uses UP)
- Dayton: UP line section to Wallula (second track needed for 1-mile UP track)
- Endicott: Capacity increase and connect trails-to-rail alignment to Tri-Cities
- Rosalia: Rosalia-to-Thornton allows connection between McCoy all the way to Pasco without touching Class I

## Future Scenario #7: Same as Scenario #6 with no Lewiston terminal

## Future Scenario #8: To be discussed today

### Note: All future scenarios assume:

- Maintain Watco GNWR line on LSR
- Improve Fallon line north to feed into McCoy terminal

# Scenario #5

OpenRailwayMap English

Last update:  
5/19/2025, 11:00:00 AM, 5 hours ago

More Info • Blog • Donate • Imprint & Privacy  
Policy • Permalink • Email • Twitter

Search

### Select a map style:

- Infrastructure
- Max speeds
- Signalling and train protection
- Electrification
- Track gauge

### Legend:

#### Track type

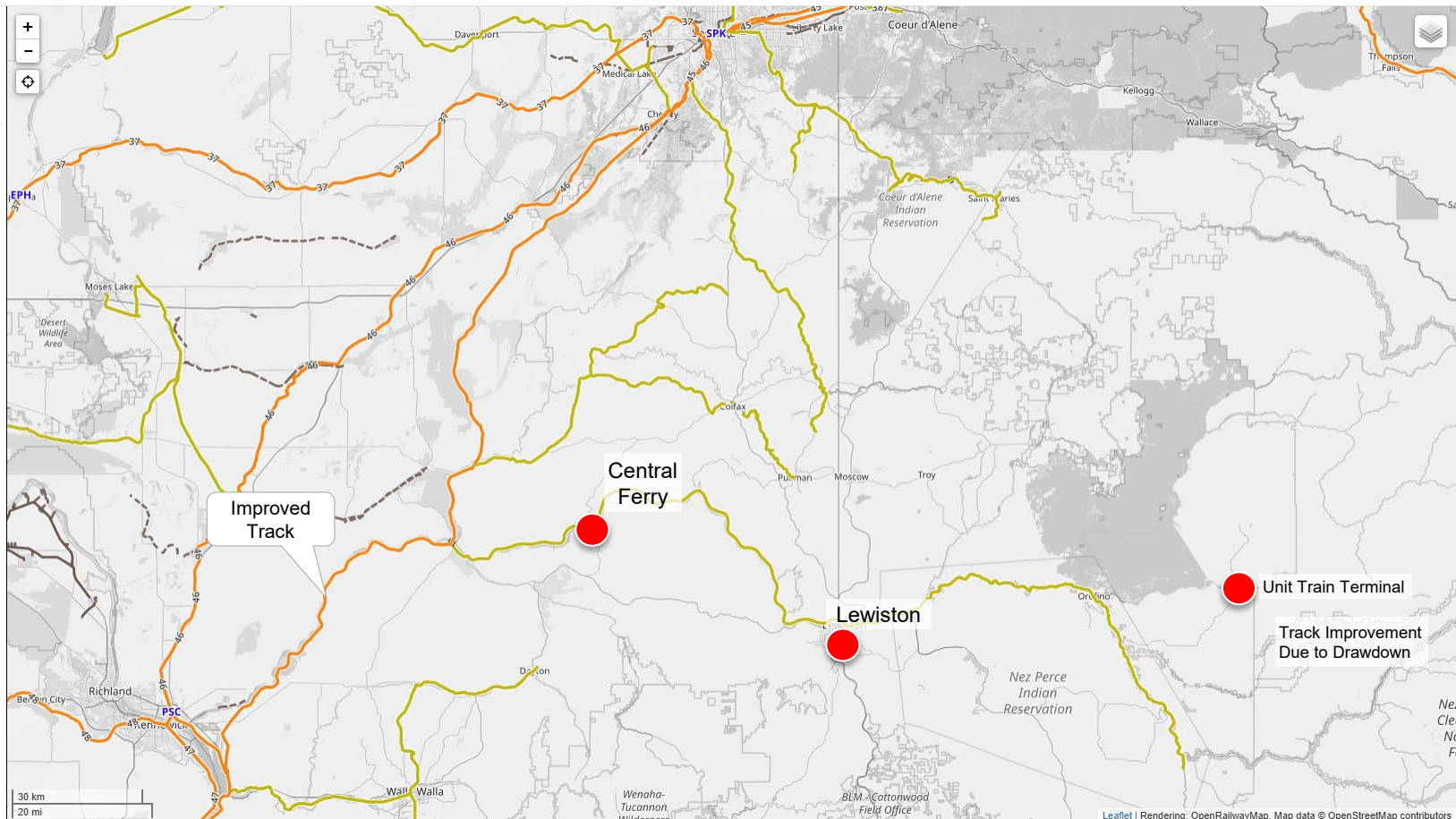
- Line ref
- Narrow gauge track

#### Track usage

- Branch line
- Main line
- High-speed line
- Preserved track
- Track under construction
- Proposed track
- Disused track
- Abandoned track
- Razed track

#### Operating Sites

- Station
- Yard
- Junction, Crossover, Service Station, Site



# Scenario #6

OpenRailwayMap English

Last update:  
5/19/2025, 11:00:00 AM, 5 hours ago

[More Info](#) • [Blog](#) • [Donate](#) • [Imprint & Privacy Policy](#) • [Permalink](#) • [Email](#) • [Twitter](#)

🔍  ✖

### Select a map style:

- Infrastructure
- Max speeds
- Signalling and train protection
- Electrification
- Track gauge

### Legend:

#### Track type

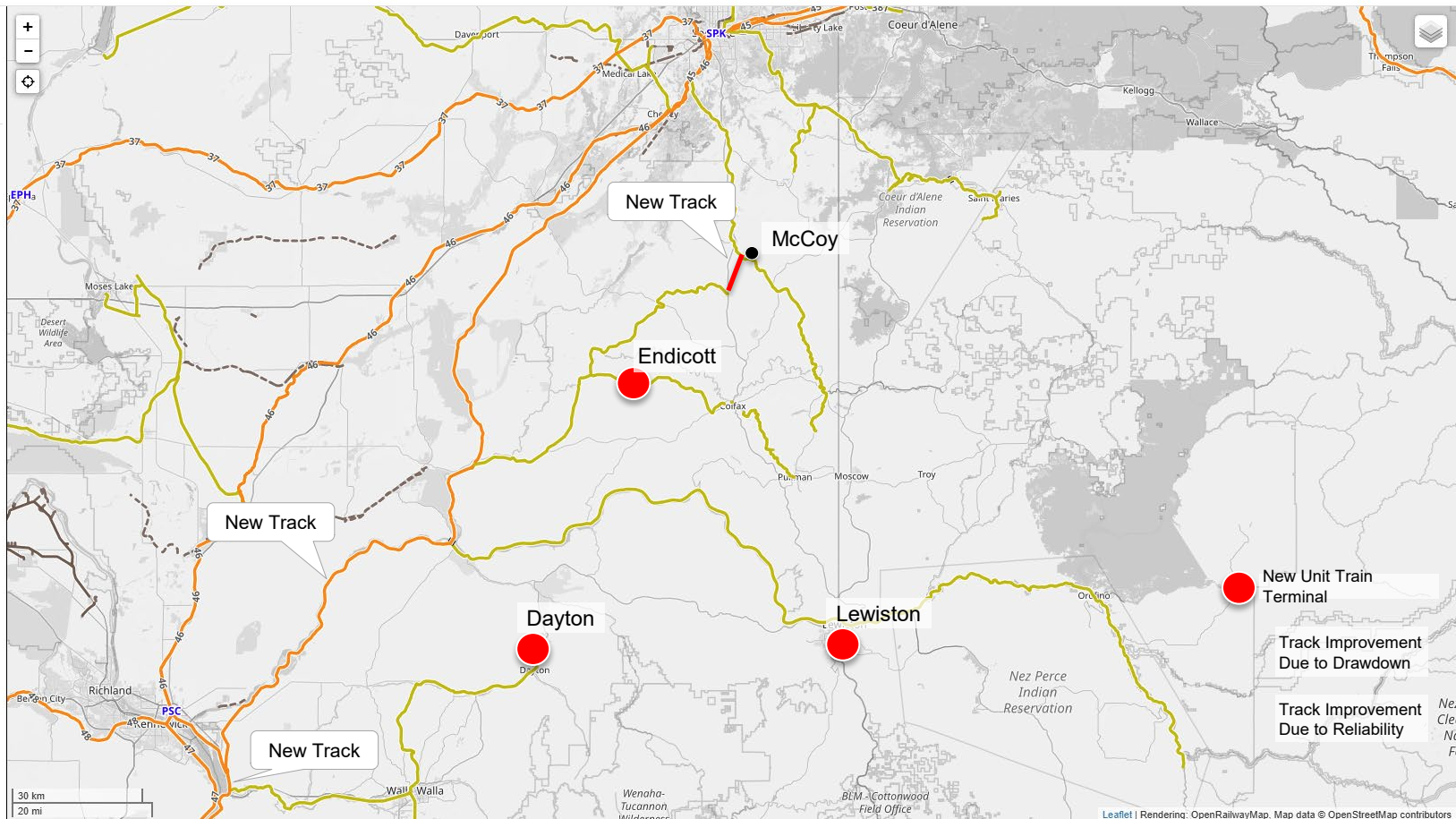
- Line ref
- Narrow gauge track

#### Track usage

- Branch line
- Main line
- High-speed line
- Preserved track
- Track under construction
- Proposed track
- Disused track
- Abandoned track
- Razed track

#### Operating Sites

- Station
- Yard
- Junction, Crossover, Service Station, Site



30 km  
20 mi

Leaflet | Rendering: OpenRailwayMap, Map data © OpenStreetMap contributors

# Scenario Brainstorming: Other Scenarios Considered

## Other locations for new unit train terminals:

- Fallon
- Lyon's Ferry
- Lacrosse
- Tri-Cities
- Genesee (ID)
- Endicott capacity increase
- Dayton with additional improvements

## Activate unused capacity

- Port of Pasco
- McCoy Terminal

## Increase trucking and rail rates by 10%, 25%, and 50%

- Need to consider potential labor and fleet shortages (other scenarios too)

## Others for Study Team to Consider?

## Next Steps

# Phase 1, Task 3 – Model Results: Next Steps

## May

- Run first set of alternative future scenarios
- Discuss results with TAC in a charette (May 28)
- Discuss second set of scenarios with TAC

2025

## April

- Continue model development
- Run base scenarios of 2020, 2045 with and without dams

## June

- Run second set of scenarios
- Discuss second set of scenario runs results with TAC (June 26)
- In-person open houses

# Appendix