

## Background

The service development plan (SDP) requires the development of a market analysis. The market analysis includes data collected in partnership with interested parties and provides a starting point to understand the potential market for high-speed rail (HSR). Subsequent analysis will build on this work by modeling future demand and ridership projections for different HSR route and service options.

## Market Analysis Overview

The market analysis identifies both existing and projected characteristics and conditions of intercity transportation in the Cascadia Megaregion, as well as trends influencing the megaregion as a whole. This analysis is key to understanding the potential for HSR and the potential benefits the service could offer in context with the existing supply of transportation modes and the current demand for those modes. The market analysis is intended to provide a better understanding of the potential markets for HSR service; a comparison of the potential trade-offs with other modes; megaregion-wide data trends, such as passenger travel volumes by mode; and demographic trends.

## Market Analysis Area

The market analysis area encompasses the potential HSR travel markets and considers potential users spanning the area from the greater Vancouver, British Columbia metropolitan area to the greater Portland, Oregon metropolitan area. The area captures the existing Amtrak Cascades rail line and the Interstate-5/Highway 99 corridor, the major metropolitan areas they pass through, and broader swaths of the region.

## Market Analysis Preliminary Key Findings

The findings from the Market Analysis described below are preliminary. Some preliminary results are being reviewed and confirmed with staff at WSDOT, MOTT, Oregon Metro and MOTT. The findings will be final when the Market Analysis is accepted by FRA.

### *Market area trends*

- The Cascadia Megaregion is on track for significant growth over the next several decades, with an estimated additional 3.4 million people by 2050, a 25 percent increase from 2025. The increasing population and employment trends are expected to drive increased intercity travel demand.
- The Cascadia Megaregion has a robust economy with growing industries in strategic sectors, indicating continued job and economic growth in the decades to come.
- The megaregion has limited affordable housing, with median home prices increasing by 50

percent in the past 5 years near metropolitan areas, and rental rates increasing by 15 to 23 percent.

### *Existing travel demand*

- The travel market today is primarily served by automobiles (95 percent of mode share), with data analysis finding 60.2 million trips per average summer weekday for ground transportation modes. On an average 2024 summer weekday, there were approximately 300,000 trips over 100 miles. These 100+ mile trips are most applicable for comparison to HSR.
- Other travel options connecting the major metropolitan areas include air, intercity rail and bus. These modes currently move considerably fewer passengers than automobiles.<sup>1</sup> Each mode has associated tradeoffs in terms of travel time.
- Truck traffic accounts for up to 20 percent of total highway volume on the corridor, occupying capacity for which passenger vehicles are also competing. Freight is growing even faster than passenger vehicle demand, with truck traffic expected to grow by 50 to 67 percent by 2050.
- Post-pandemic travel patterns vary by mode; highway, air, and intercity rail services have rebounded strongly, while local transit and regional bus travel continues to lag, reflecting languishing shifts in travel behavior and service availability.

### *Existing transportation system constraints*

- Over 80 percent of all I-5 mainline segments in Washington are expected to operate at a medium or high level of congestion in 2050, compared to 59 percent of I-5 mainline segments in Washington today.
- Due to the high levels of congestion, highway travel times are unreliable, which negatively affects automobile, regional bus, and freight trips.
- Intercity passenger rail is dependent on shared track for operations and has many stations to stop at, resulting in low on-time performance and reliability challenges.
- Approximately one-third of air travel trips connecting the metropolitan areas are delayed.

## Next Steps for the Market Analysis

Further analysis will continue to evaluate the potential for HSR to serve as a travel mode connecting the Cascadia Megaregion. Specifically, as part of the travel demand and ridership forecasting task under the SDP, the Project will model future demand and ridership projections for different high-speed rail service options. Ridership modeling will help the Project understand how additional demand expected in the megaregion due to population growth could be addressed by high-speed rail. Ongoing data analysis will occur as more datasets are made available.

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