



East-West Rail Sketch Level Ridership Forecast Update

Prepared for the Capitol Region Council of Governments (CRCOG) and the Pioneer Valley Planning Commission (PVPC) – October 11, 2021

As requested by CRCOG and PVPC, AECOM utilized the NEC FUTURE Intercity Model as a sketch-planning tool, to test potential ridership for East-West rail options incorporating into the Northeast Corridor service.

This work was follow-on to the *Metro Hartford-Springfield Rail Improvements Economic Impacts Study* conducted for CRCOG/PVPC. The Economic Impacts study focused on what the economic benefits would be with the re-establishment of the inland rail route from New Haven-Hartford-Springfield-Worcester-Boston.

The study revealed a significant positive relationship between implementation of these rail improvements, including the addition of up to 40,000 jobs over 30 years and an economic return on investment ratio of 10:1. Since the study assumed direct service from the proposed East-West rail to the Hartford line to New Haven, CRCOG requested that a sketch level update of the previous East-West ridership be performed that would include the direct service to the Hartford Line and use of the recently calibrated NEC FUTURE model.

Results of Sketch level East-West ridership analysis

Starting from a 2025 model developed for CTDOT, we added in East-West service based on the Hybrid Alt 4-5 scenario from the MassDOT E-W analysis. The stations modeled included Boston-Worcester-Springfield, with the western portion and additional stations factored in based on the modeled results. A second test assumed half of the East-West trains would continue onto the Hartford line, which resulted in greater ridership. The chart below shows the ridership attributed to both scenarios' years 2025 and 2040.



It should be noted the NEC FUTURE model showed a significant increase in ridership near term when factoring in direct service to the Hartford Line, for the 2025 forecast year, which was forecasted at 650,000.

The official MassDOT East-West forecast for the year of 2040 had a ridership of 469,000, while the NEC FUTURE model (a more detailed and recent model, which included induced demand) forecasts approximately 15 percent more ridership.

In the initial NNEIRI analysis, the Boston-Springfield-New Haven travel market made up most of the ridership, and direct service on the Hartford Line was not tested in the MassDOT East-West analysis.

Shifting half of the East-West roundtrips to travel onto the Hartford Line as opposed to traveling out to Pittsfield yields ridership approximately 54 percent over the official East-West forecast, indicating it is an important market to include.

It should be noted that the sketch-planning undertaken for this analysis is high-level and not a detailed ridership study as was done for the MassDOT East-West study and is merely intended to show the additional potential ridership to the corridor with coordinated service onto the Hartford Line.

Additionally, neither the original East-West study nor the sketch-planning analysis included demographic shifts due to increased rail service to Western Massachusetts or connecting further to New York City, which could both additionally increase ridership demand.