

## 2.0 PURPOSE AND NEED

### Purpose

The purpose of this proposed project is to increase the frequency and speed of passenger service along the NHHS rail corridor and to address the current and future transportation needs of Connecticut, Central Massachusetts, Boston and Vermont. By improving the existing rail infrastructure and passenger rail service between New Haven, Connecticut, and Springfield, Massachusetts, this project will allow the partnering states of Vermont and Massachusetts to realize the benefits of the infrastructure improvements already funded or planned in those states under FRA's HSIPR Program, including expanded Vermonter Service extending as far north as Montreal, Canada, and inland service between Springfield and Boston. The improved passenger service will be integrated with growing freight rail operations so that those operations will also benefit from the capacity increases and scheduling efficiencies associated with the installation of double track from New Haven to Springfield.

Intercity benefits of the proposed improvements include a significant increase in passenger service across the region, increased ridership, diversion of automobile trips to rail, and significantly enhanced connectivity to other transit and transportation modes.

The project will serve as a catalyst for integrating the existing regional transit system, providing beneficial economic stimulus at existing and proposed station locations, and enhancing regional economic growth and transit-oriented development opportunities in a way that is consistent with Connecticut's smart growth and long-term sustainability policies. This project is also intended to fulfill Connecticut's goal of providing additional commuting options along the corridor by increasing the number of daily trains through several of the communities along the corridor.

This project proposes to significantly expand the High-Speed Intercity network in the Northeast Region by creating seamless connections between trains operating on the NHHS rail corridor and trains operating on the Northeast Corridor southward to New York and Washington and northeastward to New London, Providence, and Boston. Travel to Boston will also now be possible via the Inland Route, rather than having to rely on connecting to Amtrak trains in New Haven and taking the existing Northeast Corridor route along the coastline. In addition, the project will connect Bradley International Airport to the proposed High-Speed Intercity passenger network via a planned shuttle service to and from the Windsor Locks Station. The New Britain-Hartford Busway (construction is anticipated to begin in 2012) will also connect with Amtrak and regional trains along the corridor.

### Need

The Northeast is projected to be a robust market for Intercity travel estimated to reach 200 million medium-distance trips (between 100 and 400 miles) across all major transportation modes – auto, air and rail – by 2025. With expected demographic growth, and increased capacity constraints on the study area's highways and at major airports, Amtrak's preliminary estimates are that Intercity passenger rail ridership in the Northeast could double by 2030 to 28 million and quadruple by 2050 to 60 million riders, depending on future network configuration options. Moreover, a substantial portion of this growth is expected in small- to medium-sized markets, as well as those linking outlying areas of the region to the core urban markets between Boston and Washington, D.C. The current rail infrastructure between Springfield,

Massachusetts, and New Haven, Connecticut, is insufficient to handle the growth expected in the Northeast market. Due to restricted capacity and speed, current intercity passenger rail options along the NHHS rail corridor are very limited and insufficient to provide a realistic alternative for most travelers in the region. Interstates 95, 91, 84, 89 and 90 are critical commerce corridors and primary connections for the movement of people and goods linking New Haven, Hartford, Springfield, Worcester, Boston, Burlington, VT, and Montreal, Canada. Congestion along these routes contributes to the State of Connecticut ranking the 4<sup>th</sup> worst in the nation for urban Interstate congestion. As the expressway corridors grow and the state remains dependent on trucking for 98 percent of its freight needs, congestion problems are anticipated to increase and negatively impact the economic competitiveness of the region. The Urban Mobility Report (UMR) estimates that congestion causes more than 32 million hours of delay annually in Connecticut's three largest urban areas, imposing a huge cost on residents and businesses. Conservative estimates state this costs Connecticut more than \$670 million annually. The costs to the Hartford and New Haven urban areas are more than \$203 million and \$117 million, respectively. These estimates are considered conservative due to the fact that congestion in the area often extends beyond typical peak periods. The congestion, if not addressed, will have the potential to curtail future mobility and slow economic growth.

Traffic congestion occurs on I-91 in pockets located primarily near New Haven and Hartford. Congestion is especially severe at the interchange of Interstates 95/91 and Route 34 in New Haven, where traffic slows to average speeds of 15 miles per hour during peak hours. Lesser congestion is experienced at the I-91 interchange with I-84 in Hartford, where area speeds drop below 40 miles per hour and some peak-hour trips can take up to 35 percent longer than off-peak trips. Businesses in these highly congested areas are at a competitive disadvantage due to higher wages needed to attract employees and lower productivity resulting from employee commute travel time and from the cost of required business delivery services.

Along with increased congestion along the corridor is a corresponding reduction in air quality. CTDOT's Greenhouse Gas Emission Analysis, dated March 2, 2009, based on CTDOT's Travel Demand Model, predicts that greenhouse gas emissions would increase about 20 percent by 2030.

Compounding the congestion problem is the region's lack of integrated transit service. Though investment has been made in the service that is available, the lack of trip frequency, boarding locations and interconnectedness of services provided ensure the automobile remains the mode of choice when commuting to and from work and for basic needs, as well as for intercity travel.