Final New Haven Hartford Springfield Line Status Update: 12/11/14

Introduction

The Legislative Program Review and Investigations Committee directed its staff in May 2014 to develop a point-in-time status report on the New Haven-Hartford-Springfield Rail Project (referred to in this report as the NHHS Project or Project). This Project is currently being carried out by the Connecticut Department of Transportation (CTDOT), in partnership with the Massachusetts Department of Transportation along with a number of other interested parties. Concern about the status of the Project springs largely from the lack of additional federal high speed, intercity program funding since Connecticut's last award in 2011, as that program has been the primary source of the Project's federal funding so far.

October 1 update. Committee staff presented descriptive background material about the project and some status information on October 1, 2014. The update focused on CTDOT activities, including CTDOT's approach to divide the Project work into phases to match funding availability, which it did twice when faced with less federal funding than anticipated. The current unfunded phase—Phase 3B—includes the last section of double track to be restored, in Enfield, which is also one of four municipalities at which a new rail station is scheduled to be built as part of the Phase 4.

The update summarized that project status by:

- acknowledging there was no currently identified funding yet for Phase 3B. Nevertheless, DOT has announced that the current level of funding will allow new commuter service to begin by the end of 2016. While the service will not be as fully developed as the final plan ultimately provides, there will be 17 round trips a day from New Haven to Hartford and 12 round trips a day from Hartford to Springfield. The ultimate goal is 25 round trips daily between New Haven and Springfield;
- noting signal cable installation work along the entire line was in progress, indicating commitment to the desired end result of improvements along the entire 62 mile stretch; and
- focusing on the fact that the NHHS line is part of a larger rail network vision, and that its location, feeding directly into the NEC—that is, the Northeast Corridor connecting Washington, D.C. through Philadelphia, New York City, and up to Boston – maintains its status as a vitally important part of other plans.

It was this final aspect of the NHHS project, activities outside the state, which PRI staff looked into further and are described here. Key points are:

- work is in progress in other parts of New England on regional rail, and in particular the Inland Route (New Haven-Hartford-Springfield-Boston);
- Inland Route improvements are still in the planning stages until July 2015 per the project work plan; only after that, any available federal implementation funds can be applied for.

- A pre-2010 complication for the part of the Inland Route from Boston to Springfield was that the 99 miles of track were owned by a freight company, CSX. In 2010, Massachusetts purchased the 44 miles of track from Boston to Worcester from CSX primarily to improve commuter service outside Boston, but this purchase should also help with wider regional passenger train projects.
- Governor Malloy recently announced that transportation would be a focus of his administration going forward. This level of attention could provide a renewed platform from which projects such as NHHS can be viewed, explained, and assessed as part of a larger state transportation picture that also includes, for example, ongoing maintenance and improvement plans and schedules for already operating rail lines.

Finally, questions raised by committee members at the October 1 meeting are answered.

New England Regional Rail Vision

In June 2008, the transportation departments of all six New England states released a joint statement entitled *Vision for the New England High-Speed and Intercity Rail Network*. The statement said in part:

> "Recognizing the interdependency of our transportation systems, the New England states have come together responding to [this challenge] with a bold vision for rail in our region and commitment to work together to support our collective efforts."

The statement also made specific mention of the New Haven-Hartford-Springfield rail line:

> "Through Connecticut's leadership, we understand the importance of restoring the doubletrack and replacing bridges on the Springfield Line that serves the cities of New Haven, Hartford, and Springfield *in order to provide the foundation for the larger rail network.* Expanded train service will provide key connections between New York City, Bradley International Airport and will allow further development of the inland high speed rail line between Boston and New York. This line, part of the Northeast Corridor as well as the Northern New England High Speed Rail Corridor, benefits from the significant amount of work already." (*Emphasis added)*

The inland rail line between Boston and New York, mentioned in the passage above, is referred to as the Inland Route. It is shown in Figure 1, which is a map used at a recent presentation of proposed alternatives on behalf of Massachusetts and Vermont for the Northern New England Intercity Rail Initiative (NNEIRI), of which CTDOT is a partner. The Northern New England Intercity Rail Initiative is examining the "implementation and operation of more frequent and higher speed intercity passenger rail service on the Inland Route and the Boston-to-Montreal corridors along with the corresponding ridership potential and necessary infrastructure improvements." Although preliminary planning work began on these corridors in the early 2000s, project adjustments needed to be made after New Hampshire decided to end its

participation in the Boston-to-Montreal effort in 2003. The work plan for this latest NNEIRI effort was issued in June 2013.

Of note is the NNEIRI planning process has ruled out high speed rail (i.e., 110 m.p.h. plus) as an objective at least along the Boston to Springfield segment of the Inland Route as infeasible given the characteristics of the area. Rather, higher speeds than what are available now are part of the plan assumptions. Also, the NNEIRI project work plan acknowledges that the segment of the Inland Route between Springfield and New Haven is the "focus of the New Haven-Hartford-Springfield (NHHS) High-Speed Intercity Passenger Rail (HSIPR) Project headed by the Connecticut Department of Transportation." The work plan notes that the key planning documents for the NHHS rail line "incorporate traffic from expanded Boston to Springfield passenger rail operations into their analyses, as such; MassDOT, to the extent possible, will incorporate the NHHS planning effort into this study."

The current feasibility and planning project work plan was produced in June 2013 and the tasks are scheduled for completion on July 3, 2015. Two significant final project milestones to be met by that date are the completion of the final service development plans for the Inland Route and the Boston-to-Montreal Corridor. A service development plan is the term used by at least the Federal Rail Administration (FRA) to refer to the document that sets out the "proposed service characteristics for the corridor." The significance of having a final service development plan is that it is required in order to apply for a federal transportation grant.

To give an idea of how far ahead Connecticut is in certain aspects of its part of the large scale New England vision, Connecticut submitted its service development plan for the NHHS line to the FRA in June 2010. As discussed at the update, this allowed Connecticut to seek funding when significant ARRA funds were available for high speed rail projects, some of which were awarded to the state (albeit at significantly lower amounts than requested.)

Massachusetts rail line purchase. While the segment of the Inland Route from Boston to Springfield is still in the planning stages, in 2010, Massachusetts took action that should help the realization of a more frequent and faster connection along the Inland Route.

What can complicate any rail service project is who owns the tracks. Most of the nation's tracks are privately owned by unregulated freight rail companies. Prior to 2010, the 99 miles of tracks from Boston to Springfield were owned by the freight company, CSX. The MBTA ran a commuter service from Boston to Worcester over CSX tracks, but to be able to make the kind of improvements desired for commuter service and accompanying economic development, Massachusetts purchased the 44 miles of track from Boston to Worcester from CSX, and agreed to other conditions (e.g., assist with renovating bridges in Western Massachusetts to allow CSX double stacked freight cars to pass under). The fact that Massachusetts sought and purchased ownership of almost half the track distance from Springfield to Boston only strengthens the viability of an active Inland Route—very important to the NHHS Line, and all the cities and towns along the NHHS line.

Update Questions

PRI committee members raised questions at the update about:

- Connecticut River Bridge improvement plans,
- the underlying feasibility of high speed rail in the central part of the state, and
- what rail cars will be used for the new commuter service.

The Connecticut Department of Transportation provided the answers set out below.

Connecticut River Bridge. "Due to the geometry of the track and the structural condition of the bridge, the speed of trains crossing the CT River Bridge in Windsor Locks is restricted to approximately 30 mph. Even if the bridge were to be completely rehabilitated, speed would still be somewhat restricted over the bridge due to the sharp curves coming in and out of it. Currently only one of the tracks over the bridge is active. That portion of the line will remain single tracked until additional construction funds are identified. Amtrak has completed a preliminary engineering study for the rehabilitation of the bridge which includes the replacement of the center span. The cost is approximately $70 Million. However, even with the single track over the CT River Bridge the Hartford Line Service can easily support the 12 to 17 round trip trains that are proposed to begin running in 2016. In fact, with additional double track installed around the CT River Bridge the service could potentially support up to 25 round trip trains while remaining single track over the bridge itself. All the bridges on the line are inspected regularly and are safe for the proposed operations."

Feasibility of High Speed Rail in Central Connecticut. "In regard to speed in general, [the] corridor from New Haven to Springfield is designated by FRA as "Regional High Speed" with target speeds ranging from 90 to 125 mph. The signal system and certain tangent track segments will be capable of reaching 110 mph which is well within the target range. A great many more locations along the corridor, including some curved track will handle speeds up to 90 mph, which meets the lower end of the target range. Currently speeds along the line max out at 80 mph. However, like any other rail corridor, including the tracks that carry the Acela service between Boston and New Haven, speeds along the corridor between New Haven and Springfield will vary according to the track geometry. Each curve along the line carries a specific speed rating and the engineer is required to vary the speed of the locomotive accordingly. Positive Train Control (PTC) will be installed over the line to enforce these speed ratings. Although the project will increase the speed along the Hartford Line, the real benefit of the project is the increase in service level, from the current 6 roundtrip trains per day to 17 roundtrips south of Hartford and 12 roundtrips north of Hartford."

Rail Cars To Be Used for Hartford Line. "The service will launch in 2016 using the equipment that is currently being used on the Shore Line East. The Shore Line East service will begin using the new M-8 electric cars since they can run on the Amtrak Catenary System. CTDOT is already looking at a future equipment purchase within the next 20 years to buy new cars and locomotives to run the new CT rail service between New Haven and Springfield."


Northern New England Intercity Rail Initiative
Study Area Map
Montréal
QC
Canadian National Line
CANADA
UNITED STATES
ME
Essex Jct
Montpelier
New England Central Main Line
VT
White River Jct
Portland
NH
NY
Concord
Brattleboro
Albany
Greenfield
Knowledge Corridor
MA
Boston
Worcester
Palmer
Springfield
Inland Route
Providence
RI
New Haven-Hartford-Springfield Corridor
Hartford
CT
New Haven
NJ
To NYC
0 20 40 80
Miles