

# New Haven-Hartford-Springfield Rail Corridor High-Speed Intercity Passenger Rail Project

Federal Railroad Administration

## FINDING OF NO SIGNIFICANT IMPACT

### 1. INTRODUCTION

The Connecticut Department of Transportation (CTDOT) is proposing the New Haven-Hartford-Springfield (NHHS) High-Speed Intercity Passenger Rail Project (Project), a program of rail infrastructure and service improvements under the Federal Railroad Administration's (FRA) High-Speed Intercity Passenger Rail (HSIPR) Project along the existing 62-mile NHHS Rail Corridor between New Haven, Connecticut and Springfield, Massachusetts. The 62-mile NHHS Rail Corridor is owned and operated by the National Railroad Passenger Corporation (Amtrak). Historically, the NHHS Rail Corridor included two or more tracks along its entire length, but today consists of just 23.3 miles of double track and 38.7 miles of single track. The southern and northern termini are, respectively, at Union Station in New Haven, Connecticut, and just east of Springfield Union Station in Springfield, Massachusetts.

The FRA awarded to CTDOT three grants totaling \$190.9 million toward the cost of designing and constructing the NHHS Project. As the lead federal agency, FRA has overall responsibility for completing the environmental review process and ensuring CTDOT complies with the environmental review requirements in the National Environmental Policy Act (NEPA) 42 U.S.C. 4331 et seq., NEPA's implementing regulations at 40 CFR Part 1500 et seq., and FRA's Procedures for Considering Environmental Impacts ("FRA Environmental Procedures") (64 FR 28545, May 26, 1999).

This Finding of No Significant Impact (FONSI) is for the NHHS Project and is being made at the Tier 1 level of review. FRA, the Federal Transit Administration (FTA; Cooperating Agency) and CTDOT prepared a Tier-1 Environmental Assessment (EA/EIE) in May 2012 to analyze the potential environmental impacts of the proposed improvements. The EA/EIE was also prepared in accordance with the Connecticut Environmental Policy Act (CEPA), Connecticut General Statutes Sections 22a-1a through 22a-1h, and meets the requirements for preparation of an Environmental Impact Evaluation (EIE). The Tier 1 EA/EIE was consistent with FRA's guidance on Compliance with NEPA in Implementing the HSIPR, issued August 13, 2009 (which describes Service NEPA for corridor programs).<sup>1</sup> Prior to release of construction funding for the remaining individual phases and site-specific Projects within the NHHS Rail corridor, FRA or FTA, CTDOT and/or Massachusetts DOT (MASSDOT) will complete all required site-specific (Tier-2) NEPA evaluation, documentation, and required determinations.

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<sup>1</sup> Tiering is a concept encouraged by the Council on Environmental Quality (CEQ) in environmental impact assessment reviews, so as to eliminate repetitive discussions of the same issues and focus on the actual issues for decisions at each level of environmental review (see 49 CFR §1502.20 and §1508.28). This Tier-1 Service-level NEPA addresses broader issues and likely environmental effects for the entire Rail Corridor relating to the type of service(s) being proposed, including cities and stations served, route alternatives, service levels, types of operations (speed, electric, or diesel powered), ridership Projections, major infrastructure components, and identification of major terminal area or facility capacity constraints.

The NHHS Project phases comprise the following:

Phase 1 (Meriden-Newington) (CE): Using \$40 million in federal obligated American Recovery and Reinvestment Act (ARRA) funding and \$20 million in state funding, the 10.2 miles of track between Meriden and Newington will be upgraded by construction of a second track, installation of new signal and power cables and rehabilitation of bridges and culverts. FRA issued a categorical exclusion determination (CE) on September 14, 2011 for this Phase (determining that implementing these improvements would not have a significant impact on the environment), contingent on section 106 and consultation with the Connecticut Department of Energy and Environmental Protection (DEEP) and the U.S. Army of Corps of Engineers (USACOE) being completed.

Phase 2 (New Haven-Hartford): The May 2012 EA/EIE contains sufficient analysis to meet the requirement of a Tier-2 NEPA environmental review for this phase of the Project conditional upon completion of Section 106 requirements. Once the \$120.9 million in federal funding is obligated, along with a state match of \$141 million, the following infrastructure improvements will be implemented:

- Upgrade the existing single track to double track from Mile Post (MP) 7.1-17.0.
- Construct Parkville Siding, MP 34.3-34.8.
- Install signal, communications, and train control system between New Haven and Hartford, with the exclusion of the work already included in Phase 1.
- Install three new interlockings at MP 8.2 (“Cedar”), MP 16.5 (“Holt”), and MP 26.6 (“Willow”).
- Upgrade seventeen highway/rail at-grade crossings.
- Close four private highway/rail at-grade crossings.
- Close public highway/rail at-grade crossing at Brook Street (MP 18.75).
- Repair, rehabilitate or replace bridge and culvert structures at the following locations:

7.46	North Haven	8’ stone arch over stream	Rehab/Repair
7.99	North Haven	2’-8”x2’-6” stone box	Rehab/Repair
10.46	Wallingford	17’ stone arch over Wharton Brook	Rehab/Repair
12.91	Wallingford	5’ rail top over stream	Replace/Remove
13.96	Wallingford	10’ stone arch over waterway	Rehab/Repair
15.00	Wallingford	6’ rail top over stream	Replace
15.26	Yalesville	58’ 3-span concrete beam over Falls brook	Rehab/Repair
15.66	Yalesville	20’ stone arch over route 50	Rehab/Repair
16.19	Wallingford	2’ x 3’ brick arch	Rehab/Repair
16.78	Meriden	28’ deck girder over Gypsy Lane	Rehab/Repair
16.84	Meriden	18” corrugated metal pipe with brick arch	Rehab/Repair
17.00	Meriden	3’ x 4’ brick arch	Rehab/Repair
21.12	Meriden	Overhead bridge abutment	Remove

- Upgrade stations to provide 500’ high-level platforms on both sides of the tracks, connected with a pedestrian bridge, including parking to accommodate the projected ridership at Wallingford, Meriden, and Berlin. The Hartford, Union Station, platform will be upgraded to provide high-level boarding over the platform’s entire length.

Phase 3A (Hartford-Windsor) (CE): Using \$30 million in federal obligated ARRA funding and a state match of \$12.8 million, the railroad infrastructure between Hartford and Windsor will be upgraded. The work includes installation of double track, at-grade crossing improvements, and rehabilitation of bridges and culverts. In addition, new signal and power cables will be installed between Hartford and Springfield in order to complete installation of the cables along the entire NHHS Rail Corridor. FRA issued a CE on

September 14, 2011 for this Phase, contingent on section 106 and consultation with DEEP and the USACOE being completed.

**Phase 3B (Windsor-Springfield):** Additional federal funding would be needed to complete the remaining improvements between Windsor and Springfield, including stations at Windsor, Windsor Locks and Springfield, and improvements to facilitate shuttle bus connections between Bradley International Airport and the Windsor Locks Station. The work includes installation of double track, at-grade crossing improvements, rehabilitation of bridges and culverts and construction of a permanent layover and light maintenance facility in the Springfield area. Prior to the release of construction funding, CTDOT, and or MASSDOT together with the appropriate funding agency, will complete all required site-specific (Tier-2) NEPA evaluation, documentation, and required determinations for this component phase.

**Regional Rail Stations:** To increase the benefits of improved rail service along the NHHS Rail Corridor, CTDOT intends to apply for FTA funding to add four new regional rail stations at Enfield, West Hartford, Newington, and North Haven, as well as an additional platform at the existing New Haven State Street Station. Prior to the release of construction funding, CTDOT, together with the appropriate funding agency, will complete all appropriate site-specific (Tier-2) NEPA evaluation, documentation, and required determinations for this phase.

This FONSI is conditioned on:

- Commitment from CTDOT that Tier 2 Project-specific environmental documentation will be prepared where appropriate.
- Commitment from CTDOT that all applicable permits and approvals are in place before construction begins.
- Commitment from CTDOT that any mitigation discussed in this FONSI will be performed.

A summary of the EA/EIE's environmental impact evaluation is provided in Table 1.

**TABLE 1**

Environmental Resource	Environmental Impact Evaluation		
	Reinstall Track: Mile Posts 7.1 to 17.0, and 31.1 to 35.1. New Siding: Mile Posts 26.6 to 27.8	Increased Passenger Train Frequency and Speed (Outcome of Proposed Improvements)	Station Improvements (All stations identified are included in this project)
Air Quality	No impacts anticipated.	No impacts anticipated. A shift to public transportation should reduce vehicle miles traveled and improve air quality.	No impacts anticipated.
Noise and Vibration	No impacts anticipated.	Noise: The increased number of trains, as well as associated sounding of horns, would result in the greatest noise impacts along the rail corridor at crossings. Only those receptors located very	No impacts anticipated. The duration of train horn noise at stations would be very brief and is not considered an adverse impact.

		near the tracks or the grade crossing would be impacted by project-related train noise. Vibration: No vibration impacts anticipated.	
Topography and Geology	No impacts anticipated.	No impacts anticipated.	No impacts anticipated.
Floodplains and Stream Channel Encroachment Lines	Anticipated impacts of up to 0.5 acres floodway, 2.1 acres floodplains, and 0.3 acres stream channel encroachment lines (SCEL) from double-tracking and rail siding. Additional impacts from bridges and culverts.	No impacts anticipated.	Up to 1.0 acre of floodplain impacts at Meriden station.
Critical Environmental Areas and Threatened and Endangered Species	17 listed species and/or their habitats occur in CT in vicinity of double-track areas.	No impacts anticipated.	Two listed species and/or their habitats occur in CT in vicinity of Wallingford station.
Water Resources and Water Quality	No impacts anticipated to ground water, some potential impacts to surface water.	No impacts anticipated.	No impacts anticipated to ground water, some potential impacts to surface water.
Wetlands	Up to 0.8 acres of potential impact from double-tracking and rail siding. Additional impacts from bridges and culverts.	No impacts anticipated.	No impacts anticipated.
Wild and Scenic Rivers, Navigable Waterways, and Coastal Resources	No impacts anticipated.	No impacts anticipated.	No impacts anticipated.
Prime Farmlands and Farmlands of Statewide Importance	Potentially a total of 2.2 acres of impact along the entire project.	No impacts anticipated.	No impacts anticipated.
Land Use and Zoning	No impacts anticipated.	No impacts anticipated.	Proposed use is consistent with local zoning. Both beneficial and adverse impacts for station locations. No other anticipated land use impacts.
Consistency with State, Regional and Local Plans	No impacts anticipated.	No impacts anticipated.	The Towns of Wallingford and Windsor Locks have selected a preferred station location.
Property Acquisitions and Displacements	No impacts anticipated.	No impacts anticipated.	8 full and 1 partial property acquisitions, which would be consistent with local development plans.
Socio-economics	No impacts anticipated.	Project related impacts on socioeconomic conditions would be beneficial.	No impacts anticipated.

Community Resources and Neighborhood Character	No impacts anticipated.	Minimal impact due to noise and traffic congestion at grade crossings. Project related impacts on community resources and neighborhood character would be beneficial.	No impacts anticipated.
Visual Resources and Quality	No impacts anticipated.	No impacts anticipated.	Potential adverse impacts at Berlin and Wallingford. No impacts anticipated at other station locations.
Cultural Resources	Potential Impacts to Historic Properties	Potential Impacts to Historic Properties	Potential Impacts to Historic Properties
Section 4(f)	No Impacts to 4(f) Properties	No Impacts to 4(f) Properties.	Potential Impact to 4(f) Property
Section 6(f) Resources	No impacts anticipated.	No impacts anticipated.	No impacts anticipated.
Transportation	No impacts anticipated.	Project related impacts on transportation options available would be beneficial. Increased traffic congestion at 9 grade crossings.	Increased traffic congestion at 2 intersections.
Public Utilities and Energy Requirements	No impacts anticipated.	No impacts anticipated. Project related impacts on energy would be beneficial.	May require some utility relocation.
Hazardous Materials	Waste and toxic materials typical of railroad rights-of-way.	No impacts anticipated.	Buildings requiring demolition can contain lead and asbestos.
Safety and Security	No impacts anticipated.	Increased Passenger Train Frequency and Speed	No impacts anticipated.
Environmental Justice	No impacts anticipated.	Beneficial impact of new or improved access to regional rail service. Adverse impact from increased traffic congestion at several grade crossings.	Provide stations near to EJ Populations improving mobility options. Impact due to increased traffic congestion at several intersections.
Secondary and Cumulative Impacts	No impacts anticipated.	Secondary impacts are generally beneficial due to induced development.	Secondary impacts are generally beneficial due to induced development. Potential for traffic congestion impacts at intersections as station development increases.
Construction Impacts	Impacts will be temporary, including train speed restrictions, noise, air quality, water quality, disposal of construction waste, contaminated soils, and utility impacts.	No impacts anticipated.	Impacts will be temporary, including lane restrictions, train speed restrictions, noise, air quality, water quality, disposal of construction waste, contaminated soils, and utility impacts.

Irreversible and Irretrievable Commitment of Resources	No impacts anticipated.	No impacts anticipated.	No impacts anticipated.
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A summary of mitigation measures for the Project is provided in Table 2.

**TABLE 2**

<b>Environmental Resource</b>	<b>Mitigation</b>
Air Quality	None
Noise and Vibration	Appropriate mitigation of severe wayside noise impacts will be investigated on a case by case basis. As part of the project, Amtrak will install supplemental safety devices required for Quiet Zone designation at all public crossings along the NHHS rail corridor. This will enable the affected municipalities and Amtrak to jointly apply to FRA, which would make a determination on the appropriateness of the Quiet Zone designations, thus mitigating train horn noise. There are eight grade crossings north of MP 48.43 (Phase 3B) that will need to be addressed when Phase 3B funding becomes available to double track this portion of the project and increase passenger service these eight grade crossings will be either improved or closed as described in Table 4-34 of the EA/EIE to allow them to be designated as Quiet Zones. Other options for horn noise mitigation may include wayside horns, barriers, or insulation.
Topography and Geology	None
Floodplains and Stream Channel Encroachment Lines	Mitigation will be provided through coordination with CTDEEP and compliance with all federal requirements.
Critical Environmental Areas and Threatened and Endangered Species	Impacts will be avoided and/or mitigated through further design and coordination with CTDEEP.
Water Resources and Water Quality	Coordinate with CTDEEP and FRA, including appropriate mitigation and comply with all federal and state requirements.
Wetlands	Impacts to be reduced by minimizing expansion of ROW and mitigated through CTDEEP and USACE permitting process and appropriate compensatory mitigation.
Wild and Scenic Rivers, Navigable Waterways, and Coastal Resources	None
Prime Farmlands and Farmlands of Statewide Importance	Mitigation through application of the Farmland Conversion Impact Rating Form, and compensatory mitigation.
Land Use and Zoning	None
Consistency with State, Regional and Local Plans	Continue to consult with Towns of Wallingford and Windsor Locks
Property Acquisitions and Displacements	Uniform Relocation Act will apply to any property acquisition or taking.
Socio-economics	None
Community Resources and Neighborhood Character	Horn noise will be mitigated by establishing Quiet Zones where practical and feasible. Traffic congestion at grade crossings will be mitigated with traffic signal and intersection improvements.
Visual Resources and Quality	Impacts to be minimized and mitigated through ongoing community coordination and design reviews.

Cultural Resources	Mitigation will be as stipulated in Programmatic Agreement.
Section 4(f)	Mitigation to be determined by FRA in Consultation with SHPO
Section 6(f) Resources	None
Transportation	Traffic congestion at grade crossings and intersections will be mitigated with traffic signal and intersection improvements.
Public Utilities and Energy Requirements	Coordinate with utilities to eliminate or minimize disruption.
Hazardous Materials	Investigation during final design. Develop and comply with Waste Management Plan.
Safety and Security	Grade crossings will be improved with supplemental safety devices.
Environmental Justice	Traffic congestion at grade crossings and intersections will be mitigated with traffic signal and intersection improvements.
Secondary and Cumulative Impacts	Traffic congestion at grade crossings and intersections will be mitigated with traffic signal and intersection improvements.
Construction Impacts	Mitigation incorporating Best Management Practices, maintenance of traffic, and compliance with permits.
Irreversible and Irrecoverable Commitment of Resources	None

## **2. PURPOSE FOR THE PROJECT**

The purpose of the Project is to increase the safety, quality, frequency, reliability, 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. This Project also will fulfill Connecticut's goal of providing additional commuting options along the corridor by increasing the number of daily trains through several communities along the corridor.

Currently, passenger service consists of no more than the six to eight daily round-trip passenger trains between New Haven and Springfield (with one continuing to Washington, D.C.) and a single daily round trip between Washington, D.C., via New Haven and Springfield, and St. Albans, Vermont. At New Haven, the corridor connects with Amtrak trains to New York and Boston, as well as commuter rail service operated by Metro-North Railroad to New York City and Connecticut Shore Line East service, operated by Amtrak, to New London, Connecticut. The Project comprises significantly enhanced passenger rail service in the existing NHHS Rail Corridor, with up to 25 daily round-trip trains (up to 50 one-way trips per day) by 2030, an increase of up to 19 trips per day. Related operational improvements include an increase in the capacity of the line to accommodate additional trains, an increase in train speed from a maximum of 80 miles per hour (mph) to a maximum of 110 mph, service to several new regional train stations, and a reduction in scheduled travel times.

## **3. NEED FOR THE PROJECT**

The current rail infrastructure between New Haven, Connecticut, and Springfield, Massachusetts is insufficient to handle the growth expected in the Northeast market. The need for the Project is to address the congestion, capacity constraints, and population and expected ridership growth in the Project area. The Northeast market for intercity travel is 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.

#### **4. ALTERNATIVES EVALUATION**

Two alternatives were considered for the proposed Project, the No-build Alternative and the proposed Action (Build Alternative). There are no other reasonable alternatives to the proposed action and the build alternative involves little right of way (ROW) acquisition, and does not involve significant social, economic, or environmental impacts.

##### *No-Build Alternative*

The No-Build Alternative assumes that passenger rail infrastructure in the NHHS Rail Corridor would be maintained in a state of good repair, potentially including any necessary safety and state-of-good repair improvements to the Connecticut River Bridge and the Hartford Viaduct. The No-Build Alternative also includes standard maintenance of up to 46 bridges and 115 culverts throughout the corridor that are not included in the Project. No restoration, improvement or new construction of passenger rail infrastructure would be undertaken in the corridor except as required by Amtrak to maintain safe rail operations. The No-Build does not meet the Project's Purpose and Need of improving safety of the existing rail service, providing greater mobility by increasing train speeds, and improving access by increasing the number of daily trains.

##### *Build Alternative*

The Build Alternative includes the following operational improvements to the rail infrastructure improvements:

**Double Tracking:** Replacement or restoration of approximately 35 miles of second track. The new or restored track will be aligned to support speeds of up to 110 mph. There are five sections of new double track:

- North Haven to Meriden (MP 7.1 to MP 17)
- Meriden to Newington (MP 20.3 to MP 31.1) (Phase 1 CE, App. 1)
- Hartford (MP 31.1 to MP 35.1)
- Hartford to Windsor (MP 37.2 to MP 43.0) (Phase 3A CE, App. 1)
- Windsor to Enfield (MP 46.7 to MP 49.0 and MP 50.4 to MP 54.8)

Amtrak also plans to widen the distance between the two tracks by two feet (to 15 feet between track centers) where feasible, to enhance ride quality and simplify track maintenance.

**Existing Intercity Stations:** The existing train stations at New Haven, Wallingford, Meriden, Berlin, Hartford, Windsor, Windsor Locks, and Springfield will continue to provide Amtrak intercity rail service; however, improvements to some of those stations are planned, as follows:

**Wallingford Station:** The existing station location is not compatible with addition of high-level platforms, which would block local streets. Three alternative sites were considered for relocation of this station: 1) just north of the existing station on North Cherry Street; 2) further north near the intersection of Parker and North Colony Streets, with split parking accessed from both North Cherry and North Colony Streets; and 3) south of the existing station on Ward Street, adjacent to Judd Square. The North Cherry Street location was dismissed from further consideration because roadway traffic across downtown Wallingford would experience unreasonable delays when at-grade crossing gates are deployed while the train is stopped for passengers. Moving the station to Parker Street or Judd Square would reduce (but not eliminate) delays in the center of Wallingford related to gate closures. A station at the Judd Square site would be co-located with high-density housing and could incorporate more transit-oriented design



elements, but would require a parking structure. The Parker Street site offers vehicle access to both platforms and would not need a parking structure. During the public comment period the Town of Wallingford made a clear recommendation that their preferred alternative was the Parker Street/North Colony Street site for a new station. CTDOT concurs with this recommendation. A copy of the Town of Wallingford's letter is included in Appendix B.

Meriden Station: High-level platforms and a parking structure will be added to support use of the existing station.

Berlin Station: High-level platforms will be constructed near the existing station building, which will be renovated by the Town of Berlin as part of a separate project.

Hartford Union Station: At this existing station, the single 500-foot-long platform will be retrofitted or elevated to provide high-level boarding to trains.

Windsor Station: High-level platforms will be constructed near the existing station on Mechanic Street. Additional parking will be added on the east side of the tracks.

Windsor Locks Station: Two alternative station site options, each including improvements to support a bus shuttle connection to Bradley International Airport, were considered for this station: 1) the existing station location on South Main Street (Route 159) adjacent to the Connecticut River, near Interchange 42 of Interstate 91 and approximately 1 mile south of the Town's central business district; and 2) north of the town's central business district, as part of a proposed renovation and expansion of the Windsor Locks Commons development, and adjacent to an existing historic station structure. The CTDOT supports the Town's goal of Transit oriented development (TOD) and revitalization. Insofar as Phase 3B (which includes the Windsor Locks station) is not currently funded, future funding sources would need to be identified in order to construct any station improvements in Windsor Locks.

Springfield Union Station: High-level platforms will be constructed for one or more of the platforms served by passenger trains at the existing Amtrak Springfield Union Station.

**Layover and Light Maintenance Facility:** The Project includes construction of a train layover and light maintenance facility in the Springfield, MA vicinity. The facility, required to support the planned 2030 service level, will be used for overnight storage, cleaning, and light maintenance of three regional trains. Three sites are being considered for the Springfield layover and maintenance activities: Armory Street site the Amtrak Sweeney Yard Site south of Springfield Union Station, and a site along the tracks within Springfield Union Station. Prior to the release of construction funding for this facility, CTDOT will undertake additional site-specific NEPA evaluations in consultation with FRA.

**Sidings:** Construction of two new railroad passing sidings is included in the Project. The sidings will run parallel to the main line tracks and will be used to hold freight trains to avoid delays to passenger trains. For the sidings, sufficient analysis has been completed in the EA/EIE to meet the requirements of a Tier-2 site-specific (or Project) environmental review, so no further analysis will be conducted. The sidings will be located as follows:

Berlin Siding (MP 26.6-27.8): This siding will reduce train conflicts south of Hartford for Connecticut Southern Railroad (CSO) trains serving local area shippers.

Hartford Yard Siding (MP 37.2-38.8): This siding will be located within the existing Hartford Railroad Yard and provide storage for freight trains operating to and from the yard and adjoining branch lines and turning passenger trains.

A third siding will be addressed as part of a site-specific (Tier-2) NEPA evaluation. This proposed siding would be located as follows:

Armory Street Siding (MP 62.3-62.9): This siding, consisting of construction of a parallel track, will provide access to the proposed Springfield layover and light maintenance facility, described above. This siding will be constructed only if the Armory Street site is selected as the location for the permanent layover and light maintenance facility.

**Bridges and Culverts:** The Project includes construction or repair of 42 structures under the tracks called “under-grade bridges,” four overhead bridges and 61 culverts on the NHHS Rail Corridor.

## **5. PUBLIC INVOLVEMENT AND AGENCY AND RAILROAD COORDINATION**

Agency coordination and public involvement for the Project were conducted in accordance with NEPA and CEPA. On May 8, 2012, CTDOT posted the May 2012 EA/EIE on its web site and at select physical locations, and requested all comments be received via e-mail or post marked by June 22, 2012. Additionally, a Notice of Availability for the EA/EIE with the comment due date was posted in the Connecticut Environmental Monitor and published in several newspapers. The EA/EIE was also sent via mail to federal, state, and local agencies, as well as, municipal and regional planning agencies located along the Rail Corridor. One federal and three state agencies submitted written comments on the EA/EIE. The MPO and five municipalities submitted written comments on the EA. About 135 organizations and individuals provided written or oral comments on the EA/EIE. Agency and individual concerns included such topics as:

- Strong support for the project recognizing the beneficial potential for TOD and a desire to expand rail service to locations outside of the scope of the project.
- A preference to construct the rail project in lieu of the Hartford-New Britain Busway which is a separate project.
- Strong support for relocating the Windsor Locks Station north of the Windsor Locks Central Business District and the Wallingford Station to the Parker Street/North Colony Street site.
- Encouraged continued coordination with the towns during design so that the work will be compatible with their development plans and local funding.
- Encouraged CTDOT to make improvements to railroad infrastructure not required for the project scope.
- Request for clarification or expressing concern regarding impact to environmental resources of noise, property acquisitions, traffic, parking, pedestrian/bike access, train schedules, energy savings, safety and security, future electrification, and equipment to be used.
- Corrections to mapping and other technical issues included in the EA.
- Request for information on the project cost, benefit, and economic impact.

All comments are included in Appendix A along with CTDOT responses. Agency coordination and public involvement for the Project were conducted in accordance with NEPA and CEPA.

## **6. ENVIRONMENTAL CONSEQUENCES AND MITIGATION**

A summary of environmental consequences and mitigation as further discussed in the EA/EIE follows:

## A. PHYSICAL ENVIRONMENT

**Air Quality:** The Project will not result in any local or regional short-term or long-term adverse air quality impacts. As the proposed Project will comply with current control measures and will be consistent with emissions budgets, it is determined to be in conformity with the Clean Air Act, as amended, pursuant to all applicable U.S. Environmental Protection Agency (EPA) regulations.

**Noise and Vibration:** There are 49 existing at-grade crossings on the NHHS Rail Corridor. At each of these locations, trains will be sounding their horns as a safety warning to alert people near the railroad right-of-way of an oncoming train. To assess noise impacts, CTDOT used the FRA Horn Noise model. Additional noise analysis will be required when the permanent layover/maintenance facility is advanced to Tier 2 environmental documentation to support the 2030 level of train service, as there are residences within 250 feet of the preferred alternatives proposed facilities and tracks. However, the presumption is that train horn noise will result in moderate to severe noise impacts when the Project is operating at the year 2030 level. As the Project advances to final design, mitigation options will be evaluated to determine their appropriateness and feasibility. CTDOT will evaluate potential vibration-sensitive receptors on a case-by-case basis and determine the impact and the need for mitigation, based on the proposed Project's track configuration determined during the final design phase or Project development.

As part of the proposed Project, Amtrak will add supplemental safety devices at all public crossings along the NHHS Rail Corridor, as necessary, to meet Quiet Zone requirements and to provide additional safety protection to prevent motorists from attempting to drive around the gates. This would enable the affected municipalities and Amtrak to jointly apply to FRA, which would make a determination on the appropriateness of the Quiet Zone designations. Other options for horn noise mitigation include wayside horns, barriers, or insulation. CTDOT is committed to assisting the local communities in applying for Quiet Zone designation which would be used to mitigate severe train-horn noise impacts.

**Topography and Geology:** The topography, geology, seismicity, and soils within the study corridor are stable and suitable for the Project, which would not result in impact to topography or geology. During the final design phase of the Project, more detailed geotechnical analyses will be performed, including test borings along the corridor to enable the final design to accommodate all of the conditions encountered at specific locations of construction. Details of this analysis are provided in the Environmental Resource Analysis reference document which is part of the EA/EIE.

**Floodplains and Stream Channel Encroachment Lines:** Relative to Executive Order 11988 on floodplain management, every effort will be made to avoid Project-related impacts to floodplains. Impact avoidance, minimization, and mitigation measures will be investigated and implemented, as appropriate, in conformance with Federal Emergency Management Agency (FEMA) and State of Connecticut regulations.

Impacts to 100-year floodplains will total approximately 10.7 acres of encroachment. Most of this acreage will be associated with improvements at existing stations and construction of new stations. Other impacts will result from restoration of double track and construction of the Berlin Siding (MP26.6-27.8). Some of the station work in floodplains will be for surface parking lots, which will be constructed to match existing grades, to the extent possible, thereby minimizing fill volumes in the floodplain, which could otherwise cause adjacent flooding effects. Proposed parking garages and overpass structures at the stations could also reduce the flood storage capacity of the floodplains. Additional encroachment impacts will affect approximately 1.0 acre of floodways and approximately 2.1 acres of SCELs due to the restoration of double track and construction of the new rail siding.

CTDOT will be required to secure a Flood Management Certification from the CT DEEP for all work involving impacts to the 100-year floodplain or floodways in Connecticut. In addition, a SCEL permit will be required from the CT DEEP. For any locations where flood storage volumes and/or flooding are projected to be adversely affected, compensatory mitigation will be required. This may involve creation of new flood storage capacity to offset lost flood storage, provided either at or immediately adjacent to the site of the impact.

## **B. NATURAL ENVIRONMENT**

***Critical Environmental Areas and Threatened and Endangered (T&E) Species:*** A variety of T&E species and/or their habitats occur near many of the Project's improvements in Connecticut. No species or habitats of concern were identified near the proposed Armory Street site being considered for a layover/maintenance yard in Springfield. The other layover/maintenance sites under consideration (Springfield Union Station and the Sweeny site) would require virtually no improvements. Therefore, no impacts to T&E species and/or their habitats will result from the Massachusetts portion of the Project.

Many of the 18 Connecticut-listed species are located in the vicinity of several regional rail station sites and double-tracking segments in Connecticut. Therefore, potential impacts could occur along the corridor. As the Project design advances, additional coordination with the CT DEEP will be required to determine whether the species and habitats of interest actually occur at the specific improvement sites and to identify the need for field surveys and avoidance and/or protective measures for the particular location(s).

***Water Resources and Water Quality:*** No impacts to groundwater are anticipated with the Project. Some potential exists for adverse impacts to surface waters from changes in stormwater flows from impervious surfaces and erosion and sedimentation during the period of active construction. There may be temporary impacts to some surface waters during construction, particularly during repairs and/or replacement of culverts and bridges. The installation of the new Berlin siding has the potential to affect Piper Brook near the Newington/New Britain Town Line. This siding is being deferred to a later stage of funding so it is being evaluated only to the Tier 1 level. During final design the track length, track centers, and track bed will be adjusted to minimize impact to this waterway and its tributary. In order to avoid or substantially reduce potential water quality impacts associated with the Project, design details will be developed to avoid adverse impact. Final designs will be coordinated and permitted with the CT DEEP and Massachusetts Department of Environmental Protection (MADEP) and other resource agencies.

***Wetlands:*** Forty (40) wetland systems have been identified within the study corridor from Hamden, Connecticut, to Longmeadow, Massachusetts. Restoration of double-tracking and construction of rail sidings would directly impact approximately 3.9 acres of wetlands along the NHHS Rail Corridor in Connecticut; .6 acre due to sidings and .7 acre due to double track in the EA/EIA and 2.6 acres due to double track in the CEs for Phases 1 and 3A. Potential indirect impacts to off-site wetlands, particularly from stormwater runoff, will be negligible due to application of pertinent design and construction standards during later design phases of the Project. Wetland impacts are also anticipated from culvert and bridge repairs or replacements. As the Project's design progresses, any direct wetland impact that cannot be avoided will be minimized through design measures, to the greatest extent practicable. CTDOT will mitigate all wetland impacts in coordination with the ACOE and the CT DEEP and following the guidelines set forth in the ACOE *New England District Compensatory Mitigation Guidance* (July 20, 2010).

***Wild and Scenic Rivers, Navigable Waterways, and Coastal Resources:*** No watercourses within the study corridor are included in the National Wild and Scenic Rivers System or are currently under consideration for such a designation. Navigable waterways that cross the study corridor include major

ivers, tidal waters and tributaries to the river's head or upper limit of tide and include the Mill, Quinnipiac and Connecticut rivers. Only portions of the City of New Haven and Towns of Hamden and North Haven in the NHHS Rail Corridor lie within Connecticut's designated coastal zone. However, tidal influences along the Connecticut River extend as far north as South Windsor. Most of the NHHS Rail Corridor within Connecticut's coastal boundary is already double-tracked with the exception of a small, single-track segment in North Haven. Restoration of the second track would occur within the existing railroad track bed and consistent with the transportation use of the existing facility. Accordingly, no impact to coastal resources is anticipated with the Project. Any potential impacts to navigable waterways and coastal resources will be further assessed to determine avoidance/minimization measures. This assessment will occur during Project design and permitting. Restoration of double track through Windsor Locks between the existing track and the Connecticut River will be completed in coordination with the U.S. Coast Guard, ACOE and the CT DEEP; final track design will locate the track improvements to avoid encroaching on the Connecticut River, designated a National Heritage River. The Project includes no improvements to the Connecticut River Bridge.

***Prime Farmlands and Farmlands of Statewide Importance:*** The Project will have no impacts to prime and statewide important farmland soils as a result of construction of the Springfield layover area or station improvements. There are potential impacts due to the restoration of double track and new sidings. Restoration of double track and new sidings could impact up to 4.0 acres of prime and statewide important farmland soils in the event track centers and track bed shoulders are widened. Once the direct impacts are quantified, a Farmland Conversion Impact Rating Form (Form AD-1006) will be completed in coordination with the Natural Resources Conservation Service (NRCS). The NRCS will evaluate the information using a land evaluation and site assessment (LESA) system to establish a farmland conversion impact rating score and determine mitigation requirements.

## C. HUMAN ENVIRONMENT

***Land Use and Zoning:*** The Project will result in no direct or indirect land use impacts associated with non-station area improvements. No direct impacts will result from the proposed improvements at six of the 12 station locations. At six stations, direct impacts will be either neutral or positive and could include complementing TOD plans and other improvements planned by others for the station areas, while increased activity at the stations could result in direct impacts to access surrounding land uses. The local municipalities and CTDOT agreed upon the following ongoing considerations for final station design to ensure the compatibility of rail station design with local future land use plans:

- The Meriden station parking will be located to integrate into the TOD plan for the area.
- Parking for the Berlin station will be designed to be integrated into the TOD plan for the area.
- There will be ongoing coordination with the City of Hartford to respond to parking demand for rail patrons as City redevelopment plans for the area take shape.
- CTDOT will work with the Town of Enfield and Bigelow Commons' ownership to co-locate a portion of the Enfield Station parking within the Bigelow Commons development; minimize use of riverfront access for parking; and, at the same time, work to minimize adverse effects to access or parking for Bigelow Commons residents.

***Consistency with State, Regional and Local Plans:*** Based on a review of local, regional, and state planning documents, the implementation of new and improved passenger rail service would be consistent with the stated goals, objectives, policies and actions of the state, regional and all but two local plans. Two station location options for both the Towns of Wallingford and Windsor Locks were included in the EA/BIE. During the public process period the Town of Wallingford selected the Parker Street/North

Colony Street site as the preferred alternative and the Town of Windsor Locks expressed its preference to relocate the station north of the Town's Central Business District.

**Property Acquisitions and Displacement:** Property impacts range from temporary easements for construction and mobilization to full property acquisitions and building demolition for station and parking facilities. The Project will result in acquisition of approximately nine properties (13.4 acres), including eight full property acquisitions and one partial property acquisition that are required for improvements to existing stations and to construct new stations. Additional minor property acquisitions could be required for track, at-grade crossing, and bridge and culvert improvements. The Uniform Relocation Act will apply to any property acquisition. Mitigation will consist of monetary and other relocation assistance to displaced property owners.

**Socioeconomics:** Project impacts on socioeconomic conditions will be beneficial. Beneficial regional and national economic impacts will result due to job creation. In addition, near regional rail stations in the NHHS Rail Corridor, beneficial economic impacts will result from Project-related induced development opportunities. The Project will not result in any adverse socioeconomic impacts.

**Community Resources and Neighborhood Character:** The improved Rail Corridor will result in a substantial increase in the number of trains along the rail line, creating potential for a mix of adverse and beneficial impacts to some study area neighborhoods. Potential impacts include changes in motor vehicle access, access to services and other businesses, noise, and neighborhood visual and physical cohesiveness where closure of at-grade crossings may become more frequent and opportunities to cross the tracks may be reduced. Potential adverse impacts will be mitigated through ongoing coordination with the affected communities and representative neighborhood organizations during final design to offset those impacts to the extent feasible and practicable.

**Visual Resources and Quality:** The NHHS Rail Corridor has served as an active rail line for over 160 years. The NHHS Rail Project will add new railroad platforms, a pedestrian overpass and new parking facilities at existing and proposed new train stations. These same amenities exist at nearly all of the existing rail stations in Connecticut along the Northeast Corridor rail line. However, addition of these improvements has the potential for adverse impacts to the visual environment in the vicinity of the existing and proposed NHHS rail stations at Wallingford, Berlin, Newington, and Windsor. Any impacts will be mitigated to the extent possible through landscaping and use of building construction materials, colors and architectural styles consistent with station sites' surroundings.

**Cultural Resources:** The NHHS Rail Corridor runs through an area of southern New England rich in pre-Colonial archaeological sites, historic-period archaeological sites, historic districts, and individual historic properties. The exact nature of all impacts to cultural resources has not yet been identified or fully evaluated at this time because some of the Project's infrastructure improvements have been only conceptually designed. A Programmatic Agreement (PA; Appendix C) among the FRA, FTA, CTDOT, Connecticut State Historic Preservation Office (CTSHPO), Massachusetts State Historic Preservation Office (MASHPO), and other section 106 consulting parties (Amtrak and the Mohegan tribe) has been developed in accordance with 36 CFR § 800.4(b)2. The PA implements a procedural process for further consultation among FRA, CTDOT, CTSHPO, MASHPO, and other interested parties including Native American Tribes; identification of historic properties that may be affected by individual elements of the Project; and resolution of all adverse effects to historic properties that may result from the Project.

The Project may require physical alteration or demolition of historic resources that are individually eligible for listing in the NRHP or contribute to the significance of the National Register-eligible linear historic district. Further evaluation of the potential impacts of the individual Projects will be completed under the terms of the PA in accordance with Section 106 of the National Historic Preservation Act. In

addition, potential mitigation measures will be identified and developed under the terms of the PA in consultation with FRA and the CTSHPO.

**Section 4(f) Resources:** Under Section 4(f) of the Department of Transportation Act of 1966, (now codified at 49 U.S.C. § 303), FRA may not approve the use of a Section 4(f) property, unless it determines that there is no feasible and prudent alternative to avoid the use of the property and the action includes all possible planning to minimize harm resulting from such use *or* the Project has a *de minimis* impact consistent with the requirements of 49 U.S.C. § 303(d). Section 4(f) properties are publicly owned parks, recreation areas, or wildlife and waterfowl refuges or properties of a historical site of national, state, or local significance as determined by the federal, state, regional, or local officials having jurisdiction over the resource.

No publicly owned parks, recreational areas, wildlife or waterfowl refuges will be used by the proposed Project. However, the NHHS Rail Corridor contains historic districts and individual historic properties that are either eligible for or listed on the NRHP. Potential Impacts include physical alteration or demolition of some historic resources. The exact nature of those impacts has not yet been identified because some of the Project's infrastructure improvements have been only conceptually designed or have not yet advanced to that stage. Final determinations of Section 4(f) applicability and use will be made by the FRA. FRA will undertake further section 4(f) analysis as a part of the Tier 2 environmental reviews. These analyses will be completed following the identification of National Register listed or eligible historic properties that would be impacted by the Project and, therefore, are Section 4(f) properties. Any Section 4(f) evaluation(s) will be incorporated into a decision document(s), which will be issued by the FRA.

**Section 6(f) Resource:** Section 6(f) resources are municipal parks or open space properties that have either been purchased, maintained or enhanced with funding from the 1965 LWCF. There are no Section 6(f) properties located with the Project area.

**Transportation:** Increased rail service associated with the Project will provide increased mobility and accessibility for pedestrian and bicycle traffic as well as afford intermodal opportunities with public transit. Increased ridership may adversely impact roadway Levels of Service (LOS) adjacent to station areas; however the major roadways within the study area will have an overall reduction in Vehicle-Miles Traveled (VMT).

**Railroad:** A detailed NHHS operations modeling simulation was performed to determine the projected performance of the future freight and passenger service, compared to the existing service. As the frequency of passenger rail service grows, freight service tonnage will also likely grow at 1.5 to 2 percent (1.75 percent average) compounded annually. Passenger train speed limits will be increased to a maximum of 110 mph at selected locations. During final design, the schedules for the future passenger and freight service will be optimized and an overall robustness study of the operating infrastructure will be completed for the corridor to validate infrastructure location. As the launch of service approaches, CTDOT and Amtrak will perform additional modeling to determine the ability of the schedule to react to random unforeseen delays. Based on this modeling the train schedules will be refined so that the service is more robust, meaning that a delay to one train does not cause a cascading effect that delays subsequent trains in the schedule.

**Traffic:** The Project may cause adverse traffic impacts at station access driveways, intersections near stations and at several grade crossings. Mitigation to address traffic congestion at grade crossings and intersections will include signal timing, intersection improvements, and changes in railroad pre-emption operation.

**Transit, Parking, and Pedestrian Access:** The increase in train service will increase the number of passengers arriving and departing at each station and, in turn, increase the need for timed connectivity with local transit, as well as with commuter and Amtrak trains at New Haven connecting to points south/west and north/east. Parking at existing stations is not adequate to support the projected ridership. Project related enhancements include increased connections to and from local bus transit by providing two to four bus stalls at each rail station, with two additional stalls at the Windsor Locks Station to provide an express shuttle to Bradley International Airport. Bus stalls for private services at the current rail stations will be maintained. Access to the New Britain – Hartford Busway buses will be integrated into the station designs at Newington and West Hartford. Parking will be increased at all stations except New Haven Union, New Haven State Street, Hartford Union and Springfield Union. At these stations, parking will continue to be provided by the local parking authority.

All stations that are reconstructed, relocated, or newly constructed with the proposed Project will be provided with Americans with Disabilities Act (ADA)-accessible routes from the existing sidewalks at the edge of the respective station to the boarding platforms. High-level platforms, connected by an aerial pedestrian overpass, will provide safe, faster, and more integrated access to the platforms and the trains. All stations will receive high-level platforms and pedestrian overpasses except Springfield, Hartford, (which will receive high-level platforms only) and New Haven (where they already exist). The sites will be designed to provide access by bicycle on the station drives and bicycle storage.

**Public Utilities and Energy:** Construction of the Project will involve site work that will result in utility relocation during Project construction and utility disruptions for nearby customers. It is anticipated that all utility work can be planned and scheduled with no significant disruptions. Overhead utilities at the Newington and North Haven stations may have to be raised to clear the proposed pedestrian crossover. Level 3 fiber optic cables running within and along the NHHS Rail Corridor will have to be replaced. In addition, Amtrak intends to install new power, signal, and communications cables along the west side of the corridor. CTDOT and MASSDOT have met with utility owners along the corridor to advise them of the Project and to seek as-built and other design plans to help identify the location of utility crossings and their depth. As design advances, CTDOT will work with the utility owners to optimize the scheduling of utility relocations.

The Project will have a positive impact on energy requirements as increased regional rail ridership will result in a reduction in personal automobile usage and reduced fossil fuel consumption with increased regional rail ridership, particularly during peak hours of travel. The resulting reduction in regional consumption of fossil fuels will reduce greenhouse gas emissions. Utility service disruptions during construction will be minimized through close coordination of construction activities, scheduling with utility providers, and advanced notice of any anticipated outages to nearby customers.

**Hazardous Materials:** Hazardous waste sites within the Project area were identified using the EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) GIS coverage for towns located in the NHHS Rail Corridor in Connecticut and Massachusetts. The EPA's Brownfield Mapping, CT DEEP GIS coverage, Landfill Leachate and Wastewater Discharges, and MassGIS (MassDEP) were used to augment the CERCLIS information obtained for the study area. Potential impacts from environmental risk sites and hazardous materials were evaluated based on the proximity of the Project site(s) to the mapped CERCLIS-listed sites and other potential hazardous risk sites. Potential hazardous materials sites located within 250 feet of the Project footprint were identified as potential risk/impact areas.

Based on the analysis, the NHHS Rail Corridor contains no CERCLIS-listed sites within 250 feet of the Project footprint. Twenty-four leachate, waste water, or potential hazardous material sites were identified.



There is also a high risk for encountering contaminated soils or debris in the existing railroad track bed during Project construction. In the vicinity of the Springfield Layover site, there is a strong probability for encountering contamination during Project construction. Springfield Layover work would be addressed in future Tier 2 environmental documents. Older building structures in the NHHS Rail Corridor requiring demolition can contain lead and asbestos. There is a potential hazardous waste source on the site of the proposed North Haven Station consisting of treated industrial discharge from a chemical company. The property at 17-35 Bartholomew Avenue in Hartford, which is listed as a brownfields site and is near a proposed section of double tracking to be restored, has a probability of the presence of oil and hazardous materials OHMs.

For identified potential environmental risk and hazardous material sites in Connecticut, State of Connecticut regulatory requirements will be followed by CTDOT through its environmental compliance process as the Project progresses to final design and construction. All Massachusetts work involving potential hazardous materials or sites will be further assessed in future Tier 2 environmental documents.

**Safety and Security:** The Project will not appreciably impact public health, safety and security in the NHHS Rail Corridor because the rail line is currently active and operational with safety measures such as crossing gates in place. While greater frequency of trains may increase the frequency of opportunities for conflict between trains and vehicles or people, safety improvements at crossings and improved communications among emergency responders will be a beneficial impact, serving to minimize potential conflicts and their consequences. Implementation of the Project will conform to all applicable safety requirements, regulations, standards and certifications. The NHHS Rail Project will conform to all applicable FRA, FTA, Occupational Safety and Health Administration (OSHA), Amtrak and state safety and security requirements, regulations, standards, and certifications. These measures will be incorporated into a comprehensive NHHS System Safety Program (SSP) that ensures the development and coordination of responsibilities for implementing key safety and security policies.

**Environmental Justice:** Concentrations of Environmental Justice (EJ) populations (minority and/or low-income) exist throughout the NHHS Rail Corridor study area, notably in the larger cities of New Haven, Hartford and Springfield, MA. The NHHS Rail Corridor service enhancements will have a beneficial impact on EJ populations in the vicinity of improved existing stations and relocated and proposed new stations. The Project will provide new or improved access to regional rail transit services with station locations nearer to some EJ populations, thereby improving mobility options for those who are transit-dependent for work-related and other travel. With increases to frequency of service, there may be adverse effects to EJ populations along the tracks such as a change in traffic patterns, access across the tracks, or increased noise levels. Adverse impacts due to traffic and noise that would affect EJ populations will be mitigated in the form of intersection improvements, possible Quiet Zones, and noise insulation of some homes. Consistent with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, FRA has determined that the Project will not have disproportionately high and adverse human health or environmental effects on minority populations or low-income populations.

#### **D. SECONDARY AND CUMULATIVE IMPACTS**

**Secondary Impacts:** Secondary impacts are those that are caused by the Project and are later in time or farther removed in distance than are direct impacts, but are still reasonably foreseeable. Secondary impacts associated with the Project's improvements to existing passenger rail stations and introduction of new regional rail stations are expected to be generally beneficial and occur primarily from induced development. Increased human activity (such as pedestrian circulation) associated with a rail station can create a positive economic climate within which businesses want to locate. Such development and

redevelopment can be expected to be stimulated in the vicinity of new or significantly upgraded station locations. Secondary impacts of the Project are anticipated to be mostly beneficial effects resulting from:

- Improved access and connectivity within the NHHS Rail Corridor, the New England region and its communities;
- Improved air quality from reduced traffic volumes;
- More employment opportunities due to increased access to jobs and the creation of new jobs associated with induced development; and
- Stimulation of TOD and community sustainability.

**Cumulative Impacts:** Cumulative impacts are impacts upon the environment that result from the incremental effect of the project when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Overall cumulative effects of the development of the projects can be expected where new development emerges consistent with smart growth principles advocated by the State of Connecticut, Commonwealth of Massachusetts, and State of Vermont. These include concentrating new development in designated growth areas, preserving neighborhood character as development occurs, and locating new growth where supportive infrastructure, including all modes of transportation, is available.

Regional cumulative impacts due to the station improvements generally will occur when the impacts of new local development or redevelopment new or improved station locations are added together. All proposed stations locations occur in existing well-developed communities where growth or change in land use patterns is ongoing. Adverse cumulative impacts for the station locations are not expected to be substantial, because changes in land use (development and redevelopment) are assumed to be managed consistent with local land use policies and regulations.

Potential mitigation of cumulative impacts include traffic signal and intersection improvements to mitigate potential traffic congestion where station development increases.

## **E. CONSTRUCTION IMPACTS**

**Construction Period Impacts:** Construction of the Project will result in some temporary construction period impacts, which would be minimized or mitigated through design- and construction-related measures and controls and implementation of plans developed in compliance with applicable state and federal requirements. Potential impacts would include fugitive-dust emissions; light pollution during any nighttime construction activity; erosion and sedimentation of wetlands, waterways and reduced quality of surface and ground waters; contaminated materials exposure; business disruptions; and localized increases in traffic volumes, parking relocation and detours to typical traffic patterns. Overall, the Project is anticipated to take approximately 60 months but may take longer based on funding availability. Track and signal work for comparable stretches of rail line often can be completed within a matter of weeks. Bridge and culvert repairs may be seasonally limited; the duration of work depends on both Project scope and the availability of track outages. Station improvements are expected to take approximately 18 months each.

CTDOT has committed to a highly proactive communications program that relies on providing impacted parties detailed information about the Project and Project activities through the Project website, Facebook, Twitter, newsletters, press releases, public meetings and other written materials and

correspondence. CTDOT and MASSDOT will work with all entities involved in the planning and implementation of construction work – including Amtrak and contractor forces – to maximize communications with the public and coordinate notifications in advance of work activities, track outages, and any schedule changes in train service.

During final design and construction, Best Management Practices (BMPs) will be followed for track restoration, construction of rail siding, bridge and culvert repair and replacement and station improvements. These BMPs include design features to properly manage storm water during and after construction, as well as temporary measures to minimize direct and indirect impacts during construction.

All design and construction activities will be conducted in conjunction with CTDOT's Standard Specifications for Roads, Bridges, and Incidental Construction (Form 816); CTDOT's Drainage Manual and the FEMA National Flood Insurance Program (NFIP) so that site runoff does not cause adverse flooding or indirect scour effects on adjacent or downstream lands; CT DEEP Connecticut Storm water Quality Manual (2004); any applicable Massachusetts' requirements, and FEMA NFIP requirements to reduce the potential for offsite flooding impacts associated with drainage and storm water runoff.

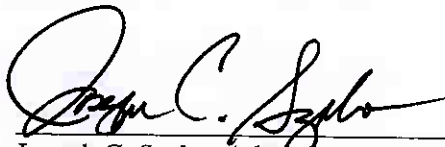
Low-impact development and other innovative techniques, such as the use of pervious pavements and rain gardens, will be considered by designers during final design to minimize potential storm water and flooding impacts.

With respect to potentially contaminate media, design plans will include measures to mitigate potential impacts from construction waste activities (spoils, debris, etc.) in compliance with federal and state environmental regulations.

***Irreversible and Irrecoverable Commitment of Resources:*** Construction of the Project will result in an irretrievable and irreversible use of energy, construction materials, and human labor. It will also require a commitment of federal and state funds that are not retrievable for construction and future maintenance over the life of the facility. Labor, energy and natural resources will also be used in the fabrication and preparation of construction materials. However, none of these resources are in short supply and their use will not have an adverse effect upon the continued availability of these resources.

## 7. CONCLUSION

FRA finds that the New Haven-Hartford-Springfield Line High-Speed Intercity Passenger Rail Project, as assessed in the attached May 2012 Environmental Assessment/Environmental Impact Evaluation, satisfies the requirements of FRA's Procedures for Considering Environmental Impacts and has determined that this Project will have no foreseeable significant impact on the quality of the human or natural environment. This Finding of No Significant Impact is based on the EA, which was independently reviewed by FRA and determined to adequately discuss the need, environmental issues impacts of the proposed Project and appropriate mitigation measures. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.



Joseph C. Szabo, Administrator  
Federal Railroad Administration

8/9/12  
Date

This document has been prepared in accordance with FRA's Procedures for Considering Environmental Impacts by the Office of Railroad Policy and Development, with assistance from the Office of the Chief Counsel. This document was prepared in July, 2012. For further information regarding this document, contact: Colleen E. Vaughn, Environmental Protection Specialist, 1200 New Jersey Avenue, SE Washington, DC 20590

**Appendix A:  
Comment Letters and Responses on the EA/EIE  
(On cd)**

**Appendix B:  
Errata to the EA/EIE**

Page ES-7 **West Hartford Station**; revise the second line to delete the word “unused”.

Page ES-12 **Air Quality**, third paragraph; revise the first sentence to read: Beginning in **December** 2012, a quantitative...

Page ES-20 **Environmental Justice**, second paragraph; revise the first sentence to delete the word “indirect”.

Page ES-27 **Table ES-1- Summary of Potential Environmental Consequences & Potential Mitigation, 4.4.11 Transportation**; for the Increased Passenger Train Frequency and Speed revise the proposed mitigation to read: Traffic congestion at grade crossings will be mitigated with traffic signal and intersection **improvements**.

Page ES-27 **Table ES-1- Summary of Potential Environmental Consequences & Potential Mitigation, 4.4.11 Transportation**; for the Station Improvements revise the proposed mitigation to read: Proposed Mitigation: Traffic congestion at intersections will be mitigated with traffic signal and **intersection improvements**.

Page 3 **This EA/EIE is organized as follows**; revise the text for the fourth bullet to read,

- **Section 5** summarizes agency and public...

Page 36 **Table 4-1- Summary of Potential Environmental Consequences & Potential Mitigation, 4.4.11 Transportation**; for the Increased Passenger Train Frequency and Speed revise the proposed mitigation to read: Traffic congestion at grade crossings will be mitigated with traffic signal and intersection **improvements**.

Page 36 **Table 4-1- Summary of Potential Environmental Consequences & Potential Mitigation, 4.4.11 Transportation**; for the Station Improvements revise the proposed mitigation to read: Proposed Mitigation: Traffic congestion at intersections will be mitigated with traffic signal and **intersection improvements**.

Page 169 **Table 4-31 Energy Requirements**; revise the heading of the second column to read: Reduction in **VMT**.

Page 169 Delete the **Methodology** paragraph in its entirety and replace with the following:  
**Methodology**

Hazardous waste sites were identified using the EPA’s Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) GIS coverage for those towns located in the New Haven-Hartford-Springfield Rail Corridor in Connecticut and Massachusetts. In addition, the EPA’s Brownfield mapping, CT DEEP GIS coverage, Landfill Leachate and Wastewater Discharges, and MassGIS (MassDEP) were used to augment the CERCLIS information obtained for the study corridor. Potential hazardous materials sites located within 250 feet of the Rail Corridor were identified on Project mapping (included as Section 2.6 of Volume II of this EA/EIE). No field verification or visual inspection of these locations was conducted.

Page 170 Delete the **second paragraph of Existing Conditions** in its entirety and replace with the following:

Based on GIS analysis, the Rail Corridor contains no CERCLIS-listed sites within 250 feet of the rail line. Twenty-one leachate wastewater sites were identified on the CT DEEP Landfill Leachate and Wastewater

Discharges data layer and three Brownfield sites were identified on the EAP mapping. These sites are listed in Table 4-32 and are collectively called environmental risk sites – locations where hazardous materials are known to have been used and/or hazardous waste generated and potentially discharged to the ground or water. Hazardous Materials and Leachate Waste Maps indicating the location of these sites in relation to the Rail Corridor can be found in Section 2.6 of Volume II of this EA/EIE.

Pages 170 and 171 Delete **Table 4-32** in its entirety and replace with the following:

**Table 4-32 -Hazardous Materials Risk Sites within 250 Feet of the Rail Corridor**

Study Area City/Town	Number of Sites	Site Type
New Haven	1	Leachate Wastewater: Combined Sewer Overflow
Hamden	1	Leachate Wastewater: Industrial pit - seepage
	1	Leachate Wastewater: Oil Spill
North Haven	1	Leachate Wastewater: Cooling Water Discharge
	1	Leachate Wastewater: Former salt storage
	1	Leachate Wastewater: Bulky Waste Landfill
Wallingford	1	Leachate Wastewater: Industrial wastewater discharge
Meriden	1	Leachate Wastewater: Industrial pit/lagoons
	1	Hazardous Materials : Brownfields sites
Berlin	1	Leachate Wastewater: Solid waste transfer station
Newington	3	Leachate Wastewater: Industrial Wastewater Discharge
	1	Leachate Wastewater: Cooling Water Discharge
West Hartford	1	Leachate Wastewater: Industrial waste discharge
	1	Leachate Wastewater: Cooling Water Discharge
Hartford	2	Leachate Wastewater: Cooling Water Discharge
	1	Leachate Wastewater: Automobile Junkyard
	1	Leachate Wastewater: Oil Spill
	2	Hazardous Materials : Brownfields sites
Windsor Locks	1	Leachate Wastewater: Industrial Wastewater Discharge
Enfield	1	Leachate Wastewater: Sewage Treatment Plant

Page 171 Delete the **Impacts** paragraph in its entirety and replace with the following:

**Impacts**

Impacts from environmental risk sites and hazardous materials were evaluated based on proximity of the proposed Project site(s) to the potential hazardous risk sites. Those hazardous risk sites with potential to be directly impacted by installation of double-tracking , sidings, or station locations were identified as potential risk/impact areas.

Page 171 Delete the **fifth bullet** under **Proposed Project** in its entirety and replace with the following:

- There are no CERCLIS, leachate wastewater, or other potential hazardous materials sites in the vicinity of the existing and proposed station locations. However, the property located east of the tracks adjacent to the proposed new North Haven station was observed in the field to may have hazardous waste present.



Section 2.6 of Volume II **Delete the Hazardous Materials and Leachate Waste** maps (28 sheets) in their entirety and replace with Appendix B of this FONSI.

**Appendix C:  
Programmatic Agreement**