U.S. Department of Transportation

Federal Railroad Administration

FINDING OF NO SIGNIFICANT IMPACT

New York – Vermont Bi-State Intercity Passenger Rail Study

Rutland and Bennington Counties, Vermont
Schenectady, Saratoga, Washington, Rensselaer, and Albany Counties, New York

Introduction

The Vermont Agency of Transportation (VTrans) proposes to implement the New York-Vermont Bi-State Intercity Passenger Rail Study (the Project), which consists of various track, crossing, and bridge improvements, as well as construction of three new stations, along portions of Vermont Railway, Pan Am Railway, and CSX active rail lines. The project would allow for a new intercity passenger rail service between Rutland, VT and Albany, NY via Mechanicville, NY, North Bennington, VT, and Manchester, VT.

VTrans prepared a Tier I Environmental Assessment (EA) to evaluate and document whether the Project would have significant effects on the quality of the human environment. The EA provides a corridor-level analysis; subsequent Tier II analyses will examine site-specific impacts once detailed design plans have been developed and the footprints of construction and ground-disturbing activities have been identified.

FRA must comply with the National Environmental Policy Act (NEPA) of 1969 (42 USC § 4321) as the Federal agency providing grant funding to VTrans for the Project. FRA makes this Finding of No Significant Impact (FONSI) based on the information in the EA to comply with NEPA, FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 6, 1999), and other related laws.

Purpose and Need for the Project

The identification of the purpose and need is essential in a NEPA analysis because it determines the reasonable range of alternatives for the Project. The purpose states clearly why the Project is being proposed and identifies potential anticipated outcomes. The need defines the key problems to be addressed and explains their underlying causes.

Purpose: The purpose of this Project is to study and identify an efficient intercity passenger rail-based transportation link that will benefit unserved and underserved communities in southwestern Vermont and eastern central New York.

Need: Southwestern Vermont and eastern central New York have limited transportation options. Communities within the Project study area have no direct access to the interstate highway system or to a major airport, limited intercity passenger rail service, and limited intercity bus service. This condition has been, and continues to be, a hardship for residents and an impediment to economic development in the region.

The Capital District of New York is a geographic region in upstate New York that is the gateway to the project study area from the south, both for highway as well as passenger rail access. Albany-Rensselaer Station provides connections to other services in the northeast and beyond. Schenectady is the secondary rail hub from which passenger rail service extends north with the Adirondack and Ethan Allen Express services and west via the Lake Shore Limited. Schenectady is also the highway hub with Interstate 88 (I-88) and I-90 providing access westward and I-890 linking Schenectady and Albany. Access from these regional centers to the eastern portion of the project study area (the Western Corridor of Vermont) is lacking.

I-87 provides north-south access to the communities in the New York State portion of the study area, connecting Glen Falls, Fort Edward, and Saratoga Springs with Albany and Schenectady. The Western Corridor of Vermont – comprising the eastern half of the project study area – has no equivalent highway access to these regional centers. US Route 7 – a roadway that has limited four-lane segments but is mostly a two-lane unlimited access roadway – is the only major north-south connection for those living in the Western Corridor.

Passenger rail access to the project study area is provided by the Ethan Allen and Adirondack Amtrak services. The Ethan Allen service terminates in Rutland, VT, but the balance of the Western Corridor of Vermont has no passenger rail service, nor does Mechanicville, NY.

The lack of adequate access to the eastern half of the project study area not only hinders its residents from being able to travel within the Vermont portion of the project study area easily, it is also an impediment to

attracting travelers. This is a significant need because tourism plays a major role in the regional economy. Approximately four million residents in the New York City metropolitan area do not own a personal automobile and rely heavily on intercity passenger rail to travel the region. A rail connection to the Vermont portion of the project study area could provide an extremely attractive option, based on both cost and travel time, for these potential travelers. Connecting the entire study area to this type of buying power could stimulate significant economic development.

Intercity passenger rail improvements are needed within the project study area for the following reasons:

- Improved access to the eastern portion of the project study area from the south beyond the project study area is essential to support the tourism industry, a key economic engine;
- Access from the eastern portion of the project study area to/from commercial centers, educational, medical, and cultural facilities in the project study area is currently not an option by rail; and
- Highway access within the eastern portion of study area is limited to a single roadway that operates as a local road for substantial portions of its length.

Study Area

The Project study area covers 137 miles along sections of Vermont Railways, Pan Am Railways, and CSX rail lines, through Rutland and Bennington Counties in Vermont, and Schenectady, Saratoga, Washington, Rensselaer, and Albany Counties in New York (combined population of approximately 1,000,000 as of 2010). Rutland, VT serves as the north terminus and Albany, NY serves as the south terminus of the Project study area.

The EA examined existing rail corridors within the Project study area for potential intercity passenger rail service options, including:

- Vermont Railway lines that extend between Rutland and Bennington, VT, and continue to Hoosick Junction, NY;
- Pan Am Railways' southern main line between Hoosick Junction and Mechanicville, NY;
- Canadian Pacific Rail lines between Albany and Mechanicville, Mechanicville and Schenectady, and Schenectady and Whitehall, NY;
- CSX rail lines between Albany and Schenectady, NY; and
- Clarendon and Pittsford rail lines between Whitehall, NY and Rutland, VT.

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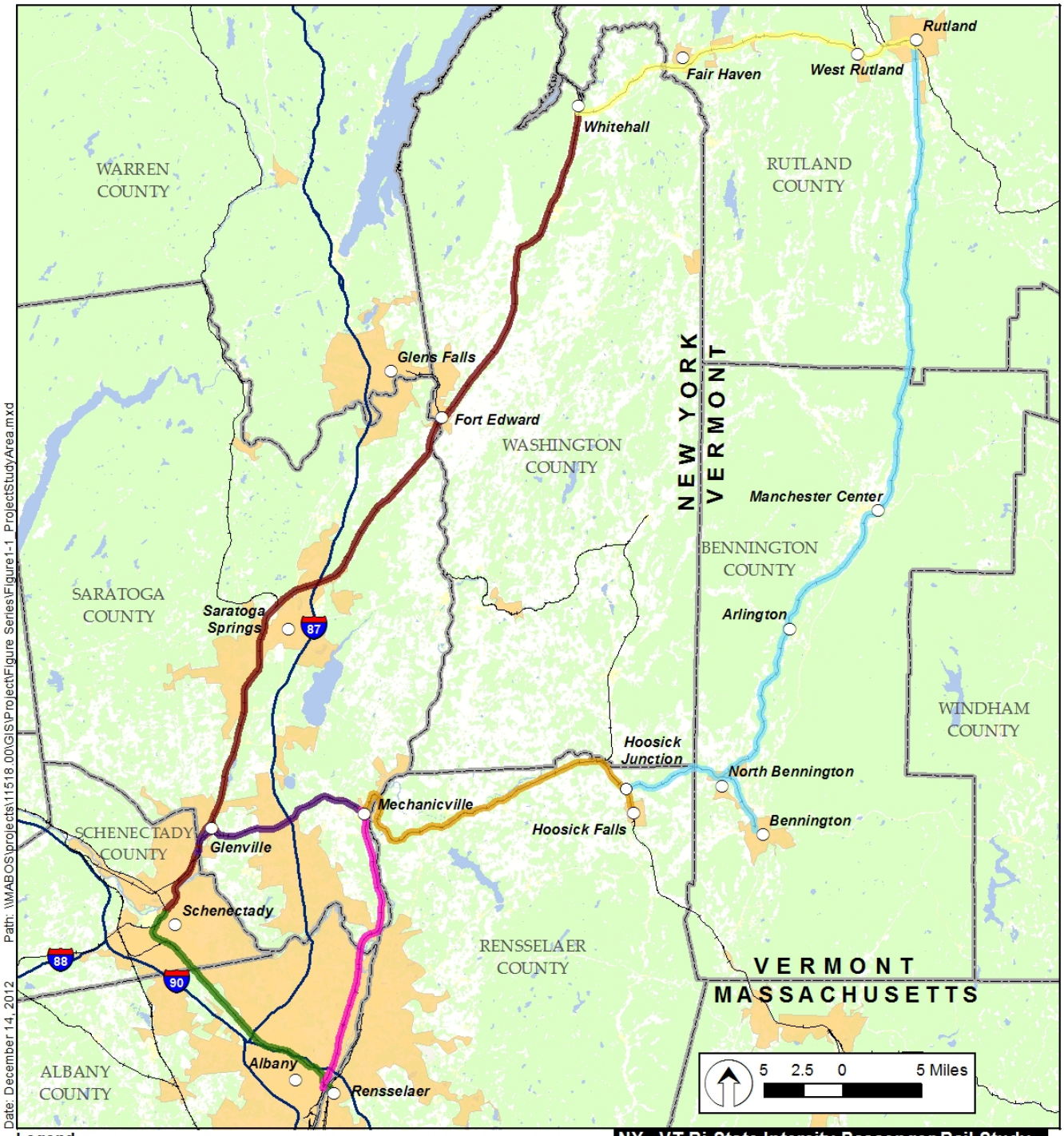

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Legend

Potential Host Railroads

- Canadian Pacific Rail Albany to Mechanicville (Colonie Subdivision)
- CSX Albany to Schenectady (Hudson Subdivision)
- Canadian Pacific Rail Mechanicville to Schenectady (Freight Subdivision)
- Canadian Pacific Rail Schenectady to Whitehall (Canadian Subdivision)
- Pan Am Southern line Hoosick Jct. to Mechanicville (Freight Main Line)
- Clarendon & Pittsford Whitehall to Rutland (CLP Main Line)
- Vermont Railway Rutland to Bennington/Hoosick Jct. (B&R Subdivision)

- Other Railroad
- County Boundary
- Urbanized Area
- City/Town
- Interstate Highway

NY - VT Bi-State Intercity Passenger Rail Study

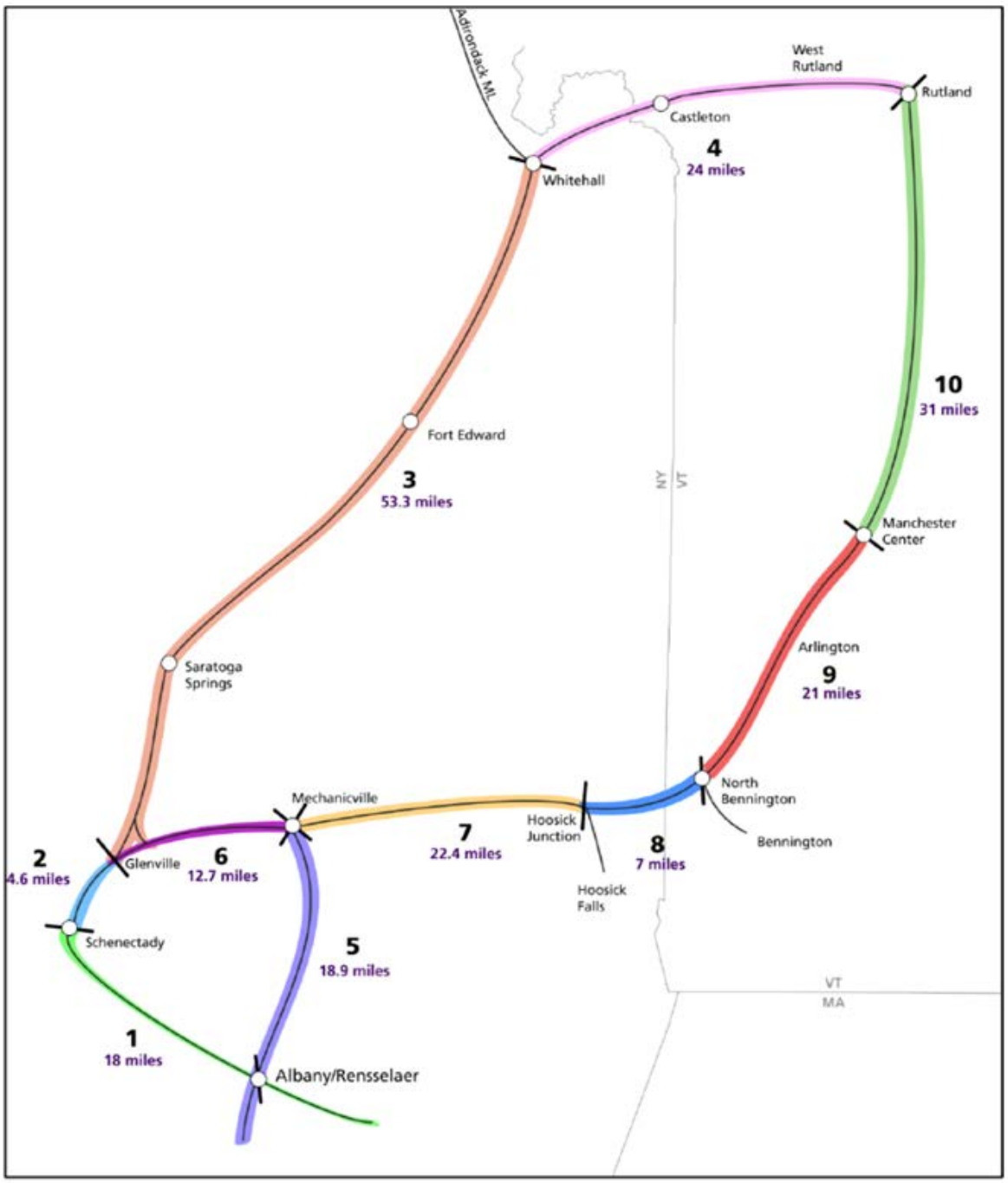
Figure 1-1

Project Study Area

Source: New York State GIS Clearinghouse (NYGIS); Vermont Center for Geographic Information (VCGI); The United States Geological Survey National Map; and Environmental Systems Research Institute (ESRI) Data

VTrans NYSDOT VHB Vanasse Hangen Brustlin, Inc.

The study area was segmented by rail subdivision in order to develop cost-estimates and examine environmental impacts for different alignments, as shown in the figure below. There are a total of nine segments (Segment 5 was eliminated).



Alternatives

VTrans undertook a two-phase alternatives evaluation in the EA to identify and screen service alternatives to address the purpose of and need for the proposed NY-VT Bi-State Intercity Passenger Rail service.

Phase One: VTrans developed six alternatives to address mobility and transportation needs in the project study area through a review of previous studies and planning as well as a collaborative workshop. The initial alternatives were broadly defined to ensure that as many potentially feasible alternatives as possible were considered and evaluated. All six of the alternatives use existing, active rail lines within the project study area. These rail lines are primarily used for the movement of freight. VTrans selected two route alternatives from the Phase One Screening to continue into the Phase Two Screening and the next steps of project development for the reasons explained below.

The six alternatives evaluated in Phase One included:

1. Alternative 1, No-Build Alternative;
2. Alternative 2, Loop Service;
3. Alternative 3, New Service to Manchester, VT;
4. Alternative 4, New Service to Rutland, VT;
5. Alternative 5, Re-routed Ethan Allen Service; and
6. Alternative 6, Split Shuttle Service.

The Phase One Screening process included a determination of the basic feasibility of each alternative, and considered the four categories of project goals:

1. Rail access and mobility;
2. Transportation efficiencies;
3. Economic/sustainable development; and
4. Environmental quality.

The following table illustrates the major positive and negative impacts for each of the Phase One alternatives.

Phase One Evaluation Summary

Criterion	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Rail Access and Mobility						
Improve regional mobility	❍	■	■	●	■	●
Travel time savings	❍	❍	■	●	■	●
Attractive frequency of service	❍	❍	■	●	■	●
Transportation Efficiency						
Viable intermodal connections	❍	■	■	●	●	●
Cost efficient	●	❍	●	■	●	❍
Maximize use of existing infrastructure	■	●	●	●	●	●
Minimize impacts on existing operations post-construction	■	❍	●	●	●	❍
Minimize impacts on existing operations during construction	■	■	■	■	■	■
Economic/Sustainable Development						
Support Smart Growth and Economic Development	❍	❍	■	●	■	●
Environmental Quality						
Minimize potential impacts	■	■	■	■	■	■
Result in positive impacts	■	■	■	■	■	■

● = positive; ❍ = potential negative impact; ■ = no/neutral impact

From the initial set of alternatives, VTrans recommended advancing Alternatives 4 and 5 to the Phase Two Screening process.

VTrans selected these two alternatives for the Phase Two analysis because they exhibit the greatest potential to satisfy the project Purpose and Need. The No-Build Alternative would not meet the project Purpose and Need; however, it was advanced to serve as a baseline against which to evaluate the build alternatives.

Phase Two: The purpose of the Phase Two screening process was to identify the Preferred Alternative for the Project. For the Phase Two evaluation, VTrans defined the Build Alternatives to a greater level of detail. VTrans analyzed the following for the No-Build Alternative and the two Phase Two Build Alternatives:

- Capital costs;
- Operations and maintenance costs;
- Ridership estimates;
- Operational analysis/operating plans; and
- Review of environmental impacts.

Based on the compiled data and analyses, VTrans performed a detailed assessment of each alternative as part of the Phase Two screening. VTrans evaluated the alternatives against each of the 25 criteria

described below and scored them on a scale of +2 (alternative is expected to have a highly favorable impact) to -2 (alternative is expected to have a highly unfavorable impact) in each category. A brief description of why the alternatives scored as they did is included. The scores for each of the criteria are then summarized to produce a composite score for each goal and a best fit alternative is identified for each goal. The alternatives advanced into Phase Two were:

- The No-Build Alternative;
- Alternative 1: New Service to Rutland, VT (Alternative 4 in Phase One); and
- Alternative 2: Rerouted Ethan Allen Service (Alternative 5 in Phase One).

Phase Two Summary of Evaluation Scores

	No-Build	Alternative 1	Alternative2
Goal 1: Extend Intercity Passenger Rail Access and Improve Mobility			
Directness to Key Regional Destinations	0	+2	+1
Transfers Required	0	+2	+1
Cumulative Travel Time	0	0	0
Availability of Intermodal Connections	0	+2	+1
Frequency/Ridership /Population	0	+2	+1
Goal 1 Total:	*0*	*+8*	*+4*
Best Fit Alternative:		X	
Goal 2: Support Economic Development and Sustainable Development			
Accessibility/Connections	0	+2	+2
Smart Growth	0	+2	+1
Goal 2 Total:	*0*	*+4*	*+3*
Best Fit Alternative:		X	
Goal 3: Maximize Transportation Efficiencies			
Cost Evaluation	0	-2	+2
Construction Impacts on Operations	0	-1	-1
Sustainability/Funding Opportunities	0	-1	0
Additional Capacity	0	+2	+1
Reliability/Flexibility	0	+2	+1
Impacts to Rail and Bus Operations	0	+2	+1
Goal 3 Total:	*0*	*+2*	*+4*
Best Fit Alternative:			X
Goal 4: Protect Environmental Quality			
Environmental Impacts	0	-1	-1
Goal 4 Total:	*0*	*-1*	*-1*
Best Fit Alternative:		X	X
TOTAL:	0	+13	+10
Preferred Alternative:		X	

Selected Alternative

Based on the Phase Two evaluation, VTrans recommended Alternative 1 as the Preferred Alternative for further development, and FRA agreed with this recommendation. The Preferred Alternative entails one new round trip per day. It provides the greatest transportation benefit by adding new service along the Western Corridor without eliminating or reducing service on other routes.

The No-Build Alternative was not selected because it would not meet the purpose and need of the Project. Communities in southwestern Vermont and eastern central New York would continue to be unserved or underserved by intercity passenger rail service.

Benefits of the Selected Alternative

Implementation of the Build Alternative would be of immediate benefit to both intercity passenger rail and freight. It provides the greatest transportation benefit by adding new service along the Western Corridor and increasing ridership without eliminating or reducing service on other routes. The Project also provides safety and operational benefits for freight rail by replacing old, jointed rail with new continuously-welded rail, adding side tracks, and rehabilitating and gating public grade crossings.

Environmental Consequences

Based upon the EA, incorporated by reference with its appendices in this FONSI in its entirety, FRA has concluded that the Selected Alternative, including the mitigation measures for unavoidable impacts, would have no foreseeable significant impact on the quality of the human environment. FRA concurs with the recommendation of VTrans, and finds the Selected Alternative is best able to achieve the Project purpose and need without significant environmental impacts and by minimizing Project costs.

The potential of the Project to result in environmental impacts is summarized below.

Transportation: One additional intercity passenger train would be added in the Project study area.

Rail: There are currently three Amtrak regional routes providing intercity passenger service in the project study area:

- Empire Service – Providing daily service between New York City, NY and Buffalo, NY with continuing service to Niagara Falls, NY and Toronto, Canada with stops in Albany-Rensselaer and Schenectady, NY in the project study area.
- Adirondack Service – Providing daily service between New York City, NY and Montreal, Canada via Albany with stops in Schenectady, Saratoga Springs, Fort Edward-Glens Falls and Whitehall, NY in the project study area.
- Ethan Allen Express – Providing daily service between New York City, NY and Rutland, VT via Albany, NY with stops in Schenectady, Saratoga Springs, Fort Edward-Glens Falls, NY and Castleton, VT in the project study area.

The Project would facilitate an increase in ridership over time that would in turn increase intercity passenger rail viability as ridership revenue is directly tied to operating subsidies. The Project would also provide safety and operational benefits for freight rail by replacing old, jointed rail with new continuously-welded rail, the addition of side tracks, and rehabilitation and gating of public grade crossings.

FRA finds that the proposed Project's rail infrastructure improvements would accommodate the proposed additional round trip of passenger service and minimize freight delays throughout the project study area. The proposed infrastructure improvements would not impact the existing rail transportation systems along any of the segments.

Motor Vehicles: The intersections adjacent to the stations within the project study area would experience relatively minor traffic impacts, which could be mitigated by signal optimization. Capacity improvements such as lane widening and turning lanes would be unnecessary.

The Project is expected to have a positive safety impact on motor vehicles, bicyclists, and pedestrians through the gating of public grade crossings.

FRA finds that the Project would not result in significant impacts to motor vehicle traffic and would result in beneficial effects due to safety measures implemented at at-grade crossings.

Air Quality: The air quality study included a mesoscale analysis that estimates the area-wide emissions of Volatile Organic Compounds (VOCs), Nitrogen Oxides (NO_X), Particulate Matter (PM), and Carbone Monoxide (CO) emissions. The mesoscale analysis evaluated the changes in emissions based upon changes

in the average daily traffic volumes, roadway lengths, and vehicle emission rates. To demonstrate compliance with U.S. Environmental Protection Agency (EPA) criteria, the air quality study must show the proposed project's change in daily (24-hour period) VOC and NO_X emissions. Using EPA recommended air quality modeling techniques, VTrans calculated the total pollutant emissions for the difference between No-Build and the Proposed Action Alternative. The mesoscale analysis calculated the 2030 mobile source emissions for the estimated Vehicle Miles Traveled (VMT) reduction.

The air quality study demonstrated that the Selected Alternative would result in a reduction in VOC, NO_X, PM, and CO emissions, as compared to the No-Build Alternative. The Selective Alternative is anticipated to provide an overall benefit to air quality through the improved operability of freight and passenger rail service and by offering an alternative to motor vehicle travel.

FRA finds that the Project would not result in significant impacts to air quality.

Noise: There is a potential for noise impacts in Segments 6, 7, 8, 9, and 10. Noise impacts arise from the increase in passenger rail frequency, and include locomotive noise, grade crossing noise, siding tracks, and station use. The potential for noise impacts is the greatest in Segments 8, 9, and 10. Several segments would not have the potential for moderate or severe noise impacts along main line sections because there are no grade crossings, new special track work, or new stations proposed.

Future Tier II analysis would identify specific locations for and types of noise mitigation measures and would consider noise mitigation depending on the need, feasibility, reasonableness, and effectiveness of potential options.

FRA finds that the Project would not result in significant impacts to noise, and appropriate mitigation strategies identified during Tier II analysis would be employed to minimize these impacts.

Vibration: There is a potential for vibration impacts in all segments both during and after construction of the rail improvements. For mainline segments, there would be potential vibration impact up to 94 feet from the near track for Category 2 land uses and up to 66 feet for Category 3 land uses. At new station locations there may be vibration impacts up to 20 feet from the near track for Category 2 land uses and up to 29 feet from the near track for Category 3 land uses. At locations where new special track work is

introduced, vibration impacts may extend up to 200 feet from the near track for Category 2 land uses and up to 183 feet for Category 3 land uses.

Future Tier II analysis would identify specific locations for and types of vibration mitigation measures in accordance with FTA guidance. Vibration mitigation would minimize adverse effects from the Project at sensitive locations. The effectiveness of specific vibration mitigation measures is dependent on several factors such as the component design, installation techniques, axle loads of the trains, and frequencies of concern.

FRA finds that the Project would not result in significant vibration impacts, and appropriate mitigation strategies identified during Tier II analysis would be employed to minimize these impacts.

Water Resources: VTrans considered impacts to surface water and groundwater resources only for those areas where project actions could have a direct impact through alteration of drainage patterns or could cause discharges to water resources. The Project is not expected to increase the impervious area footprint or alter the terrain in a significant manner; no indirect impacts to water quality are expected.
Rail improvements may require that certain segments of track and their associated culvert and bridge crossing(s) be modified. Crossings with potential upgrades would need to be evaluated on case-by-case basis and, at a minimum, the work would need to comply with all state and/or federal permit requirements and recommendations regarding hydraulic capacity, aquatic organism passage, and water quality.

There is a negligible potential for impacts to surface water or groundwater resources in any of the segments because either no infrastructure improvements are planned or the planned infrastructure improvements would be within the existing right-of-way (ROW) and would not permanently impact these resources.
A future Tier II project sponsor would minimize any impacts from in-stream bank work and construction activity through the use and enforcement of National Pollutant Discharge Elimination System (NPDES) permits.

Permanent Best Management Practices (BMPs) installed following construction (e.g., permanent seeding and use of native vegetation) would further reduce impacts to water resources. The Project would not have any impact on groundwater resources, such as existing wells or borings.

FRA finds the construction and operation of the Project would not adversely impact water resources as long as appropriate BMPs are implemented and applicable state and federal permitting requirements are fulfilled.

Wetlands: The Project is unlikely to impact wetlands extending into or adjacent to Segments 1, 3, and 4 because no infrastructure improvements are planned in those areas. The Project is unlikely to impact wetlands extending in or adjacent to Segments 2, 6, 7, 8, 9, and 10 unless infrastructure improvements extend outside of the existing rail ROW or surface water crossings are modified in such a way as to change the hydraulic opening. Future Tier II analysis would identify mitigation measures and necessary permitting where infrastructure improvements would extend outside of the existing ROW and into adjacent wetlands and/or modifications to surface water crossings would change the hydraulic opening. A subsequent Tier II NEPA analysis would address these potential impacts to wetlands once project plans are more fully developed.

FRA finds that the Project would not result in significant impacts to wetlands as long as any necessary mitigation measures and permits identified during Tier II analysis are followed

Floodplains: Each segment is within or adjacent to numerous mapped 100-year and 500-year floodplains in many towns and cities within the project study area. Electronic floodplain data is not available for several towns; it would be necessary to review hard copies of Federal Emergency Management Agency floodplain maps for these towns to determine the extent of any floodplains located within the segments comprising the selected alternative.

At the current level of design, the Project is in compliance with Executive Order (EO) 11998, Floodplain Management. Future Tier II analysis would re-evaluate potential impacts to and from floodplains once the project design identifies specific rail improvements and locations. No significant impacts to floodplains are expected, and any impacts would be mitigated in accordance with National Flood Insurance Program criteria and the EO for development within flood prone areas.

Ecological Systems: Wildlife habitat is known to occur within 250 feet of Segments 1, 9, and 10 within the project study area, and wildlife corridors were identified along Segments 3, 4, 9, and 10. VTrans identified one Vermont Rare and Irreplaceable Natural Area (RINA), Emerald Lake near Segment 10.

The Project may impact wildlife habitat and corridors and the Vermont RINA if work is required outside the existing rail footprint to modify existing tracks or construct new tracks or stream or road crossings. Work within the existing ROW is unlikely to impact these wildlife habitats and corridors. A field investigation would occur during Tier II analysis if any work is proposed outside the ROW and habitat or corridors are proximate to the ROW, to identify any potential impacts and, if necessary, design appropriate impact avoidance or minimization measures.

FRA finds that the Project would not result in significant impacts to ecological systems.

Threatened and Endangered Species: Federal- or state-protected species and habitat have been recorded within 250 feet of each segment within the project study area. Project work within the existing ROW is unlikely to impact threatened or endangered species or their habitat for all segments except Segment 10. One federally listed species (Indiana bat) and thirteen state-listed species (ten unspecified plants and three unspecified animals) have been recorded near the rail bed in Segment 10. During future Tier II analysis, the project sponsor would coordinate with the Vermont Nongame and Natural Heritage Program to confirm the protected species type and habitat requirements. A field investigation may be conducted during preliminary or final design to identify any potential impacts and, if necessary, design appropriate impact avoidance or minimization measures.

Future Tier II analysis would confirm records of federal- or state- listed species and their habitat along each segment of the Selected Alternative with the U.S Fish & Wildlife Service (USFWS) or National Marine Fisheries service (NMFS) and the New York Department of Environmental Conservation (NYDEC) and the Vermont Agency of Natural Resources (ANR) to determine if listed species or designated critical habitat are actually present within the rail corridor. If present, coordination with the agencies will be required to identify potential impacts and appropriate avoidance measures

FRA finds the Project would not result in significant impacts to threatened and endangered species.

Land Use: There would be no change to land use along the alignment of the Selected Alternative, because all infrastructure improvements would occur within the existing ROW. Land use in the vicinity of the new stations could change if property acquired for new parking lots is outside of the existing ROW and the acquired property is currently used for some purpose other than parking. The planned parking lots are

small, comprised of 50 spaces each, and each may require approximately 20,000 square feet (less than ½ acre) of land acquisition. Detailed consideration of land use and development potential in the vicinity of the proposed new stations would be prepared, as necessary, as part of future Project Level Tier II analyses of the proposed new stations.

FRA finds the Project would not result in significant impacts to land use.

Socio-Economic: The Selected Alternative is consistent with Bennington and Rutland Counties' regional planning policies aimed at achieving economic growth. Specifically, Rutland County's *Rutland Regional Plan* cites "infrastructure gaps" as unmet. The *Rutland Regional Plan* identifies the upgrade and expansion of railway services (in addition to airport services) as a main driver of economic growth. This policy is a continuation of the policy promoting rail network improvements outlined in the *Rutland Region Economic Development Strategy*.

Though the *Bennington County Regional Plan* does not cite the importance of improving rail service as a means of achieving economic development, it does state the importance of the region's ability to provide the critical infrastructure and amenities that will support businesses. The 2008 *Bennington County Regional Transportation Plan Update*, however, closely relates to the project and includes reference to a 1998 Position Statement that "…it is both feasible and appropriate to undertake the improvements necessary to restore effective passenger and freight rail service to the region" and references the 2006 *Vermont State Rail and Policy Plan* Goals, including "Foster economic development and benefit local industry." The *Bennington County Regional Transportation Plan Update* also specifically indicates that stops Manchester and North Bennington are considered "ideal" in the provision of passenger service to the Bennington region. The Project is anticipated to support these regional policies concerning socioeconomic conditions.

The Project is intended, in part, to promote socioeconomic development within the project study area. Some temporary direct impacts would result during the construction phase in the form of jobs and resultant economic activity in local communities. This would be a temporary effect for the construction period only and is not likely to substantively affect the local or regional economy.

No significant and adverse impacts to socioeconomic conditions are expected to result from the Project. The Project is expected to support regional planning initiatives, particularly the goal in the *Rutland Regional Plan* to enhance rail service throughout the region as a means of supporting economic development.

FRA finds the Project would not result in significant socio-economic impacts.

Environmental Justice (EJ): VTrans identified EJ communities adjacent to the rail ROW in Segments 1 and 2, none of which are located near the proposed new stations. Additional EJ communities are present in the counties comprising the project study area, but are not proximate to the rail corridors. The EJ communities identified are expected to benefit from the Project as a result of increased access to goods, services, employment, and transportation.

The new station proposed in Manchester, VT is least likely of the three proposed stations to provide a benefit to EJ communities, as no EJ communities are located nearby. However, the proposed new station in North Bennington, VT may be of benefit to EJ communities identified in the nearby towns of Woodford, VT, Glastenbury, VT, and Searsburg, VT by providing new rail access to the Capital District.

Based on the current level of project design, VTrans and FRA do not anticipate any direct adverse effects to EJ communities. A future Tier II analysis would evaluate all segments, particularly with regard to potential effects on the physical environment (such as noise), and potential effects associated with acquisition and relocation, community cohesion, and potential temporary or construction-related effects. In addition, socio-economic data may be available at the Census Tract level when Tier II site-specific evaluations of the three proposed new stations are performed, allowing the inventory of EJ communities identified during Tier I to be updated. The Tier II efforts would include an appropriate public outreach component. Should impacts to EJ communities be identified in future Tier II analysis, particularly impacts associated with changes to the physical environment (e.g., air quality and noise), FRA and VTrans anticipate that such impacts could be avoided or mitigated , thereby eliminating the potential for disproportionately high and adverse direct impacts to EJ communities.

FRA finds the Project would not result in significant impacts to EJ communities.

Public Health and Safety: Under the Selected Alternative, the Project would upgrade tracks in Segments 2, 6, 7, 8, 9, and 10 to FRA Class 3 (at a minimum), allowing for an operating speed of up to 59 mph where geometry and operating rules allow. There would be no changes to tracks in Segments 1, 3, or 4. There would be no new at-grade crossings. No closures of at-grade crossings are planned, and existing crossings would be upgraded where necessary to meet applicable FRA standards. Although train speeds may increase on the upgraded tracks, the grade crossing improvements are expected to maintain or improve public health and safety along these rail lines by reducing the potential for vehicle/train collisions.

The three proposed new stations (Manchester, VT, North Bennington, VT, and Mechanicville, NY) would be designed to Americans with Disability Act (ADA) standards and include safety features to protect the public from vehicle traffic and unauthorized access to the tracks.

FRA finds the Project would not result in significant impacts to public health and safety.

Cultural Resources/Historic Properties: Eighteen individual properties or districts listed in the National Register of Historic Places (NRHP) are located within or adjacent to the project study area. Ten are historic districts, concentrated primarily in municipal centers that developed as major depots along the railroad lines during the 19th century. Individually listed properties vary considerably, and include residential properties, cultural landscapes, municipal buildings, canals, and industrial structures. All of the historic properties known along Segments 1, 2, 3, 4, 6, 7, 8, 9, and 10 are outside the ROW, and are therefore unlikely to be impacted by the project.

There is a relatively low potential for intact archaeological resources within the disturbed railroad ROW. The potential presence of such resources is greater for any aspect of the project study area outside of the ROW, including locations where stations would be expanded or new passenger platforms and connections constructed, and at construction staging areas. Segments located along major waterways and historic canals are expected to have a high level of archaeological sensitivity associated with prehistoric and historic period activities.

The return of or increase in rail traffic along the corridor, and any associated rehabilitation of former railroad depots and stations, is expected to have a net positive effect on cultural resources. The location of

the project within existing rail corridors limits the potential to disturb underground archaeological resources. Potential direct impacts to cultural and archaeological resources would be minimal because the rail line passes through previously disturbed areas and physical intersection with such resources would be largely avoided. Future Tier II analysis would include a more extensive assessment of potential impacts to archaeological resources and the built environment once project plans are more fully developed, including analysis of components such as station improvements, passenger platform construction, and staging areas that fall outside of the railroad ROW. Tier II analysis would include consultation, as necessary, with the New York and Vermont State Historic Preservation Officers (SHPOS) in accordance with Section 106 of the National Historic Preservation Act to identify historic properties and address any adverse impacts.

FRA finds the Project would not result in significant impacts to cultural resources.

Section 4(f) and Section 6(f) Resources: Eighteen Section 4(f)-protected properties are located within the project study area, of which twelve are designated recreational uses and six are wildlife refuges (designated as preserves, wildlife management areas, or similar). Recreational activities or wildlife functions at nearby Section 4(f) properties would not be affected by the project and changes in noise levels that may result from the project are not anticipated to conflict with active recreational use. There would be no direct or constructive use of recreational Section 4(f) or Section 6(f) resources associated with improvements to the existing track infrastructure.

FRA finds the Project would not result in significant impacts to section 4(f) and 6(f) resources.

Energy: The Selected Alternative would minimally change energy consumption patterns. The existing Ethan Allen service runs 73,000 annual train miles. If new service is added between Albany and Rutland, annual train miles would increase to 85,410.

FRA finds the Project would not result in significant impacts to energy resources.

Visual and Aesthetic Resources: The NY-VT Bi-State Intercity Passenger Rail service would use existing active rail lines for its entire length. New construction in certain segments would be limited to sidings to allow trains to pass, new double track, upgraded track, and replaced bridges, all within the existing ROW. New stations would be constructed in Manchester and North Bennington, VT and

Mechanicville, NY. None of these activities are expected to substantively change the visual and aesthetic environment of the Project study area. The existing view shed of the rail corridor from the surrounding land uses would be maintained under the Selected Alternative.

FRA finds the Project would not result in significant impacts to visual and aesthetic resources.

Construction Impacts: Construction impacts could not be fully identified or evaluated at the Tier I stage because detailed engineering design has not been completed. Construction activities may result in localized, short-term impacts to certain resources and would be addressed in future Tier II analyses. The following is a summary of impacts generally expected from construction activities:

- Air quality may be impacted by exhaust emissions from construction equipment and dust generated by earthmoving equipment or wind. Construction contractors would be required to comply with state and local emission control regulations or ordinances for construction equipment, and implement dust control measures (e.g., watering) during construction activities.
- Traffic delays may result from construction activities, in particular where grade crossings (public at-grade or bridge crossings) are being upgraded or replaced. Detours would be used to direct traffic around construction zones.
- Noise would be generated by construction equipment engines, pile drivers or jackhammers, and drilling rigs. Construction contractors would be required to comply with state and local noise management regulations or ordinances for construction activities.
- Vibration would be generated by construction pile drivers, jackhammers, and drilling rigs. Construction contractors would be required to implement vibration management measures during construction activities.
- Water resources may be affected by stormwater runoff from construction sites. Construction contractors would be required to comply with NPDES requirements for stormwater management, including implementation of BMPs to prevent or minimize impacts to water resources.

The FRA finds that the Project's construction impacts would not result in any significant short-term impacts to environmental resources when applicable regulations and ordinances are complied with, appropriate mitigation measures are used, and all required permits are obtained.

Indirect and Cumulative Impacts: Indirect impacts can result from changes in land use and development that would be indirectly supported by changes in accessibility or mobility brought about by improvements in passenger rail service. Indirect impacts differ from those directly associated with the construction and operation of a railroad improvement project itself and are often caused by what is commonly referred to as "induced development." Induced development includes a variety of alterations such as changes in land use, economic vitality, property values and/or population density. The potential for indirect impacts to occur is determined in part by local land use and development-planning objectives and the physical location of the Project.

Indirect: Given the low projected ridership assumed for the Project, it is unlikely that indirect local socioeconomic effects (e.g., new access to goods, services, employment) or changes in land use would be significant. It is possible that new station parking may provide an opportunity for municipalities to harness commuter spending power, and thus lead to possible positive indirect socioeconomic effects; however, the proposed parking lots would accommodate a maximum of 50 cars at a time, thereby limiting such effects. It is reasonable to conclude that such localized effects to surrounding businesses would not be significant.

Cumulative: The recent and reasonably foreseeable future actions will improve the existing rail infrastructure but do not consist of new rail lines that would have a substantial direct effect on the environment. Adding new passenger service to the existing rail lines would also not have a significant direct effect to any resource.

It is not anticipated that the Project will have permanent adverse impacts or cumulative effects to transportation, air quality, socioeconomics, environmental justice communities, public safety, or Section 4(f) or Section 6(f) resources as a result of implementing the Selected Alternative. Any potential adverse impacts to threatened or endangered species; land use; water quality and water resources, including wetlands and floodplains; cultural resources; and visual and aesthetic resources would be identified in future Tier II NEPA analyses and documents. Impacts to these resources are expected to be minimal because many of these resources are protected by federal and state regulations and would require mitigation for any impacts determined to be unavoidable.

Other past, present, and reasonably foreseeable future actions have created a noise and vibration environment that varies considerably through the project study area. The existing rail lines passing through these areas are used at varying levels of intensity and frequency. The frequency of the noise and vibration generated by trains is episodic, occurring only when the trains pass. The addition of one roundtrip (two passes) of passenger trains for the Selected Alternative would not substantively add to the episodes of increased noise and vibration levels. There would be minimal cumulative impacts to noise and vibration levels from the Selected Alternative because only one additional intercity passenger train would travel through the Project study area per day.

There are no current or known reasonably foreseeable future actions that would further affect ecological systems. If elements of the Project would require work outside the existing rail ROW to modify existing or construct new tracks or stream or road crossings, the Project may impact wildlife habitat or corridors within Segments 1, 9, and 10. Additional investigation of ecological systems would be conducted as part of Tier II NEPA analyses during preliminary and final design to identify any potential impacts and, if necessary, design appropriate impact avoidance or minimization measures. Cumulative impacts to ecological systems may result if impacts cannot be avoided.

The Selected Alternative would use slightly more than double the energy than the No Build Alternative due to an additional daily trip from the new service (620 gallons of fuel) but would likely offset energy use associated with motor vehicles due to the mode shift from motor vehicles to passenger rail. The Selected Alternative, in combination with other past, present, and reasonably foreseeable future actions, would not result in a substantive change in cumulative energy use.

Land use in the project study area includes residential, commercial, industrial, transportation, and agricultural properties, as well as undeveloped land. There are no current or known reasonably foreseeable future actions that would further change land use. The EA considered railroad infrastructure improvement projects to be reasonably foreseeable future actions and determined that such projects will not affect land use. The Selected Alternative may directly or indirectly impact land use outside of the ROW depending upon the selected locations for the proposed new stations in Manchester, VT and North Bennington, VT and Mechanicville, NY. Property may need to be acquired to accommodate small parking lots at the new station sites. Additional investigation of changes to land use would be conducted as part of Tier II NEPA analyses during preliminary and final design. The impacts may be beneficial if

abandoned or blighted properties are acquired for the project. As a result, the Selected Alternative, in combination with other past, present, and reasonably foreseeable future actions, may result in beneficial cumulative impacts to land use.

There are no current or known reasonably foreseeable future actions that would further alter the socioeconomic environment in the study area. The EA considered railroad infrastructure improvement projects to be reasonably foreseeable future actions and determined that such projects will not adversely affect socioeconomics. The Selected Alternative is expected to indirectly benefit the economy by providing new rail service to southwestern Vermont and east central New York. As a result, the Selected Alternative, in combination with other past, present, and reasonably foreseeable future actions, may result in beneficial cumulative impacts to the socioeconomic environment.

FRA finds that the Project would not result in any significant adverse indirect or cumulative impacts.

Public Involvement: VTrans began coordination efforts in the early stages of the Project and maintained consistent communication (e.g., newspaper notices, email distribution list, public meetings) with residents, public officials, businesses, property owners, stakeholders, and regulatory agencies during the environmental review process. Information about the New York -Vermont Bi-State Intercity Passenger Rail Study was made available on VTrans' website (http://rail.vermont.gov) and the project website (http://ny-vt-passengerrail.org).

A total of five Stakeholder Committee meetings were held with representatives from VTrans, NYSDOT, potentially affected rail operators, regional planning agencies within the project study area, and various advocacy groups between March 2011 and December 2012.

VTrans held the following several public informational meetings, which were advertised in local newspapers serving the project study area, to provide the public an opportunity to learn about and provide comments on the study:

- March 22, 2011 (Bennington, VT) – Project Introduction, Purpose and Need, Screening Criteria
- June 7, 2011 (Mechanicville, NY) – Project Recap, Alternatives, Evaluation Methodology
- June 8, 2011 (Rutland, VT) – Project Recap, Alternatives, Evaluation Methodology
- December 13, 2011 (Bennington, VT)
- December 14, 2011 (Mechanicville, NY)

- December 11, 2012 (Mechanicville, NY)
- December 12, 2012 (Rutland, VT)

Public input received was incorporated into the Tier I environmental analysis.

Commitments and Mitigation Measures: For the purposes of this Tier I analysis, the Build Alternatives have the potential to adversely affect environmental resources during construction activities and operation of the railroads. The following mitigation strategies would be applied as one or more components of the Selected Alternative move forward to design and potential implementation. Additional measures may be identified and included in Tier II environmental documents.

- Water Quality and Water Resources, including Wetlands: During Tier II, coordination would occur, as necessary, with the US Army Corps of Engineers, the NYDEC, and the Vermont Department of Environmental Conservation for permits and approvals prior to any waterway, wetland, or floodplain impacts.
    - Because the Project has the potential to disturb more than one acre, it may be subject to the requirement for a NPDES permit for stormwater discharges from construction sites. Should it be necessary, the appropriate permit coverage would be obtained.
    - A Stormwater Pollution Prevention Plan would be prepared and implemented, if necessary, in accordance with requirements under the NPDES permit(s).
    - Appropriate construction and post-construction BMPs would be followed.
    - Efforts would be made in future phases of work to avoid and/or minimize impacts to wetlands. Avoidance and minimization may be accomplished by narrowing the railroad cross-section with the use of retaining walls, steeper embankments, and bridging critical wetland resources. If necessary, compensatory mitigation measures may be identified during the permit coordination process.
- Threatened and Endangered Species: Additional analysis and agency coordination under applicable state and federal laws (e.g., Endangered Species Act) would occur during Tier II for site-specific construction activities along Segment 10, as well as for any previously unidentified protected species that are identified and could be impacted in areas where Project work is proposed. Any potential impacts to protected species identified during Tier II analyses would be minimized through the use of BMPs and construction timing restrictions.

- Cultural Resources/Historic Properties: Section 106 consultation was initiated during the Tier I analysis. Future Section 106 consultations with the New York and Vermont State Historic Preservation Officers would occur for specific undertakings, as necessary, once detailed design plans are developed, footprints of ground disturbing activities are known, and potential effects to historic properties can be identified.
- Noise: To minimize or eliminate the effect of construction noise on these receptors, time restrictions may be used to limit the period of exposure to construction noise.
- Vibration: Measures would be taken to mitigate vibration impacts by restricting the procedures and time permitted for vibration-intensive activities, and by requiring vibration monitoring to certify compliance with vibration limits.
- Public Health and Safety: Coordination with emergency service providers would occur during the construction phase in order to mitigate any potential impacts due to construction activities. Construction safety measures such as signage and fencing would be used to keep the public out of construction areas.
- Hazardous Materials: Accidental spills of hazardous materials and wastes during construction or operation of the transportation system require special response measures. Such occurrences would be handled in accordance with local government response procedures.
    - Further environmental studies would be conducted if the Project requires excavation, including subsurface utility relocation, and a Preliminary Site Investigation (PSI) would be conducted prior to acquisition of any contaminated parcel, and/or required temporary or permanent easements if required.

Conclusion: FRA finds that the New York-Vermont Bi-State Intercity Passenger Rail Study, as presented and assessed in the attached Tier I EA, satisfies the requirements of NEPA (42 USC § 4321 *et seq.),* the CEQ regulations (40 CFR parts 1500-1508), FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999), and FRA's Update to NEPA Implementing Procedures (78 FR 2713, January 14, 2013), and the Project would have no foreseeable significant impact on the quality of the human or natural environment. This FONSI is based on the EA, which FRA determined adequately and accurately presents the purpose and need, areas of environmental consideration, potential environmental impacts, and mitigation measures.

The EA provides sufficient evidence and analysis for FRA to determine that an environmental impact statement is not required for the Project as presented.

DEC 29 2014

Joseph C. Szabo
Administrator
Federal Railroad Administration

Date

This document was prepared in accordance with FRA's Procedures for Considering Environmental Impacts and NEPA by the FRA's Office of Railroad Policy and Development, with assistance from FRA's Office of Chief Counsel. This document was prepared in December 2014. For information regarding this document contact:

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