US Department of Transportation

Federal Railroad Administration

FINDING OF NO SIGNIFICANT IMPACT

Baltimore/Washington International (BWI) Airport Rail Station Improvements and Fourth Track Project

Anne Arundel and Baltimore Counties, Maryland

Introduction

The Federal Railroad Administration (FRA) in conjunction with the Maryland Transit Administration (MTA), a modal agency of the Maryland Department of Transportation (MDOT), is studying improvements to the Baltimore/Washington International Thurgood Marshall Airport (BWI) Rail Station and the mainline of the Northeast Corridor (NEC) centered on the station. The NEC rail system serves as a major business and commuter route along the eastern seaboard of the United States from Boston to Washington, D.C. The BWI Rail Station Improvements and Fourth Track Project would benefit Amtrak service along the entire NEC, in addition to the Washington, D.C. – Baltimore, Maryland segment.

FRA, the federal lead agency, and MTA, the local project sponsor, jointly prepared an Environmental Assessment (EA) and draft Section 4(f) Evaluation in April 2015 to determine potential environmental impacts of the fourth track and station improvements. The EA analyzes a nine-mile study corridor and the BWI Rail Station. FRA and MTA prepared the EA to comply with the National Environmental Policy Act (NEPA) of 1969 (42 USC § 4321). FRA makes this Finding of No Significant Impact (FONSI) based on the information in the EA in compliance with NEPA, FRA's Procedures for Considering Environmental Impacts (64 FR 28545, May 26, 1999), FRA's Update to NEPA Implementing Procedures (78 FR 2713, January 14, 2013), and other related laws.

FRA signed the attached EA on April 21, 2015, and made the document, and associated technical reports available for public comment and review on April 27, 2015. MTA distributed copies of the EA to local libraries, federal and state agencies, and local governments. MTA posted the EA to the project webpage at http://mta.maryland.gov/bwi-amtrak-rail-improvement. The public comment period for the EA closed on June 3, 2015. FRA and MTA received no requests for a public hearing. FRA and MTA incorporated comments received on the EA into this FONSI as applicable.

Purpose and Need for the Project

Purpose:

The purpose of the project is to alleviate the current operational constraints posed by the existing track, interlockings, and station infrastructure along the nine-mile section of the NEC between the Grove Interlocking and Winans Interlocking, generally centered on the BWI Rail

Station. The project would also reduce current and future rail congestion by accommodating the substantial intercity passenger rail ridership increases predicted in the project corridor over the next 20 years.

Needs:

Constrained Rail Infrastructure Harms Reliability and Reduces On-Time Performance

The BWI Rail Station consists of three tracks, one northbound platform, and one southbound platform. This creates the need for trains to cross over to the proper track to access a platform at the station. There is a large difference between Amtrak intercity and Maryland Area Regional Commuter (MARC) train speeds, which makes operations at the station very sensitive to schedule aberrations and leaves little room for schedule recovery in the event of delayed trains. Overall system reliability is very difficult to maintain considering the complexity involved with accommodating 13,600 Amtrak and 19,000 MARC daily passengers using and passing through the BWI Rail Station, and the tight scheduling of MARC trains and Amtrak Acela, Regional, and Intercity train movements on the track network.

Station Building Inadequacies

The BWI Rail Station began service in 1980 and served primarily as a MARC commuter station, also accommodating a few Amtrak trains. Today, the station is the thirteenth busiest on Amtrak's network and the eighth busiest station on the NEC. Amtrak and MARC trains stop at the BWI Rail Station up to 148 times daily. The station has received external updates such as two seven- level parking structures, expanded platforms, and electronic train status boards. The interior of the station has received minor updates including adding a third ticket window, a small snack bar-coffee area, and soft drink and snack machines. These interior improvements have reduced an already limited passenger waiting area, which often exceeds capacity. The station building is at, or near, functional obsolescence and will be unable to satisfy anticipated growth in passenger service.

Inadequate Infrastructure to Meet Future Demand

The *Northeast Corridor Infrastructure Master Plan* (*NEC Master Plan*, Amtrak, 2010) and the *MARC Plan Update* (MTA, 2013) both call for a substantial increase in the number of Amtrak and MARC trains by 2030. With the realization of these future goals, a combined total of 245 trains per day (148 existing) of Amtrak and MARC trains would operate in 2030 between Grove Interlocking and Winans Interlocking (passing through or stopping at BWI Rail Station) – an increase of 97 trains or 65 percent over current levels.

Legislative Mandate

To comply with Section 212 (d) of the Passenger Rail Investment and Improvement Act of 2008 (Public Law 110-432, October 16, 2008) (PRIIA), Amtrak issued a report entitled *An Interim Assessment of Achieving Improved Trip Times on the Northeast Corridor* (October 21, 2009). The report cited the reduction of track congestion on the existing two- and three-track network

between Washington, D.C. and Newark, DE, and the need for a center platform at BWI Rail Station as necessary improvements to accomplish these trip time goals. The report also addresses the need to meet the congressionally-mandated trip time goals between Washington, D.C. and New York City of 2 hours and 30 minutes by 2023, and 2 hours and 15 minutes by 2030.

Study Area

The project corridor begins at the southern terminus of Grove Interlocking (a mile north of the Odenton MARC Station) in Anne Arundel County, MD, and continues north to Winans Interlocking (approximately one-third of a mile south of the Halethorpe MARC Station) in Baltimore County, MD (Figure 1).

Alternatives

No Build: The No-Build Alternative would maintain the existing three tracks between Grove Interlocking and Winans Interlocking and two platforms at the BWI Rail Station, with no improvements to passenger accommodation, patron amenities, or congested pedestrian circulation at the existing station.

Build Alternative: The project comprises a new fourth track and improvements at the BWI Rail Station including an additional station platform and a replacement station building.

The project has three major components:

1. Nine miles of a new fourth track (new Track A) between Grove Interlocking and Winans Interlocking to facilitate train operations and minimize delays along this segment of the NEC
2. An additional platform to better serve the BWI Rail Station and meet the ADA requirements
3. A new BWI Rail Station building to address current constraints on operational capacity and circulation and meet ADA requirements

The Build Alternative would also upgrade the signal and communication system, including the reconfiguration of Grove Interlocking and removal of Winans Interlocking. The new Track A would require a new overhead catenary system, including modification and/or replacement of existing catenary structures, where required.

Four railroad structures would require major modifications or additions to accommodate a fourth track: Herbert Run Bridge, Patapsco River Bridge, Furnace Road Bridge, and the pedestrian underpass at milepost (MP) 110.12. A new overpass bridge for Reece Road would also be required to accommodate the addition of the fourth track.

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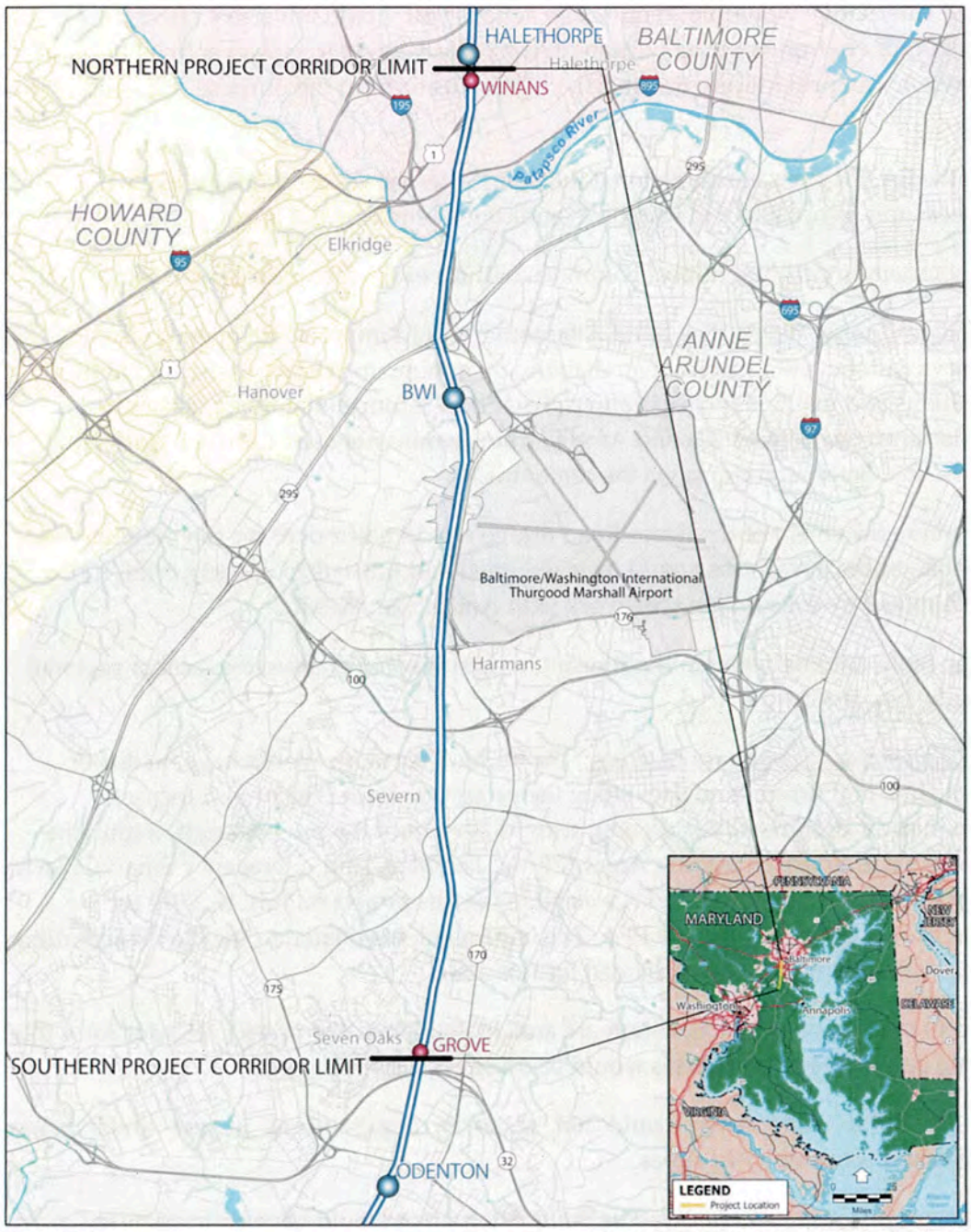
Figure 1: Project Study Area



LEGEND

- Rail Station
- Interlocking
- MARC/Amtrak Rail Line
- BWI Property

BWI Rail Station Improvements and Fourth Track Project

0 1.25 Mile

Project Study Area
(Grove Interlocking to Winans Interlocking)

Environmental Consequences

The No-Build Alternative would not require any actions that would adversely affect the existing social, economic, or environmental conditions in the project corridor. However, the No-Build Alternative would not provide any transportation benefits or meet the purpose and need of this project.

Based upon the EA, FRA has concluded that the Build Alternative, including proposed mitigation measures, is not likely to result in significant environmental impacts.

The potential for environmental impact is summarized for each resource category below.

Regional and Local Transportation: The Build Alternative would improve rail operations and passenger service in the NEC, improving reliability by minimizing delays associated with service deviations and maintenance operations. By adding a fourth mainline track and an additional platform, the faster Acela and Amtrak trains would not need to switch tracks to access the BWI Rail Station platform via the center tracks.

Demolition and replacement of the Reece Road Bridge would occur over the rail mainline, but local automobile traffic operations would be maintained and impacts to passenger rail trains would be minimized by coordinating the work with Amtrak and MARC.

FRA finds the Build Alternative would not result in significant impacts to the local or regional roadways, railways, or transit.

Land Use, Neighborhoods, Community Facilities: The Build Alternative would have no direct impacts on existing and future land uses along the project corridor. The project focuses development in areas designated for growth, with 93 percent of the project length within the Maryland-designated Priority Funding Areas (PFAs). The Maryland Interagency Smart Growth Coordinating Committee approved a PFA exception for this project on July 18, 2012 for the portion of the project not currently in a PFA. The improvements related to the BWI Rail Station are consistent with land use plans envisioned for this area.

Minimal slivers of right-of-way acquisition are anticipated along the project corridor for a total of 11 acres. No residences or businesses would be displaced by the project.

FRA finds the Build Alternative would not result in a significant impact to land use, neighborhoods and community facilities.

Socioeconomics and Environmental Justice: The Build Alternative would have no impacts to population growth and demographic trends, or children's environmental health and safety risks. Low-income and minority populations have been identified along the project corridor. However, since the project would be constructed primarily within the existing right-of-way, the anticipated human and environmental adverse effects of the project would not be disproportionately borne by minority or low-income populations.

FRA finds there would be no significant impact to any populations in the project corridor, including Environmental Justice (EJ) populations.

Air Quality: Construction activities for the Build Alternative would generate criteria air pollutant emissions well below the general conformity *de minimis* thresholds. Construction of the project would be consistent with the State Implementation Plan (SIP) (SIP Revision 03-14, SIP Number: 07-04, and SIP Number: 08-04). The project would have no substantial long-term, adverse operational impacts on air quality.

FRA finds the Build Alternative would not result in significant impacts to air quality.

Noise and Vibration: MTA completed long-term and short-term monitoring to determine existing and future noise and vibration conditions for nearby sensitive noise receptors and vibration-sensitive fragile buildings. Based on this analysis, the Build Alternative would have no significant increases in noise or vibration levels at nearby sensitive receptors and buildings. Nor would project-related construction activities adversely impact nearby noise-sensitive receptors or vibration-sensitive fragile buildings along the project corridor.

FRA finds the Build Alternative would not result in a significant noise or vibration impact on properties along the project corridor.

Energy: Overall, the Build Alternative may result in a slight increase in energy usage during construction and a slight increase in energy usage from the larger BWI Rail Station. The project, when completed, would increase Amtrak and MARC train efficiency by reducing boarding times, increasing operational flexibility, creating a bypass track, reducing delays, and increasing reliability. This increased efficiency would result in an overall reduction in energy consumption, balancing out the increase. Additionally, there may be energy savings through reduction in automobile trips if the increased efficiency of Amtrak and MARC trains attracts more riders. Implementation of the fourth track of the project would require no additional transmission assets. The larger BWI Rail Station could result in a slight increase in energy usage for lighting and climate control due to the larger facility, but use of the proposed Leadership in Energy and Environmental Design (LEED) elements would offset the increase with energy efficiencies.

FRA finds the Build Alternative would not result in a significant impact to energy usage.

Surface Water, Waterbodies, and Drainage Basins: Widening the existing rail embankment, existing bridges, and culverts for the Build Alternative would impact surface waters. The Build Alternative would displace approximately 4,647 linear feet of streams, the largest single impact being approximately 1,155 linear feet of Stony Run. FRA and MTA have incorporated into the preliminary design a number of avoidance and minimization measures, including 23 retaining walls, totaling approximately 13,410 linear feet. Nine of these retaining walls, totaling approximately 7,740 linear feet, would minimize impacts to delineated watercourses. For any unavoidable stream relocations, the relocated stream would be designed using natural stream design techniques. The Phase I Conceptual Mitigation Plan (June 2014) identified potential

locations for mitigation within the Lower North Branch Patapsco River and Severn River watersheds. A Phase II Final Mitigation Plan will be developed in compliance with the Federal Mitigation Rule and State mitigation guidelines as part of the Final Design and permitting phase of the project. Compensatory mitigation requirements will be determined as a part of the permitting process with the United States Army Corps of Engineers (USACE) and Maryland Department of the Environment (MDE).

FRA finds there would be no significant impact to surface water, water bodies, and drainage basins with the appropriate mitigation measures to be coordinated with USACE and MDE during final design of the Build Alternative.

Wild and Scenic Rivers: The National Park Service (NPS) identified no designated Wild and Scenic Rivers in the state of Maryland. The project corridor crosses the Severn River watershed, an officially designated "Scenic" river by the Maryland General Assembly. The project would not alter the landscape or viewshed, and the use of Best Management Practices (BMPs) will preserve the ecological resources within the local watersheds.

FRA finds the Build Alternative would not result in a significant impact to wild and scenic rivers.

Stormwater Runoff/Water Quality: The Build Alternative would have 7.6 acres of new impervious areas that could affect stormwater runoff. However, FRA and MTA used preliminary Environmental Site Design (ESD) techniques, including wet swales and grass swales, to satisfy stormwater management requirements along the track, and added underground filtration and storage to the design of the BWI Rail Station. FRA and MTA also incorporated erosion and sediment control measures, including sediment traps and basins, super silt fence, and other construction BMPs, to the project design consistent with the *Maryland Erosion & Sediment Control Guidelines for State and Federal Projects* (January 1990, revised January 2004).

During construction, the future project proponents will follow the Use I and Use IV in-stream work prohibition time-of-year restrictions and use sediment and erosion control measures, and other BMPs. These measures will adequately protect fish species from any impacts.

FRA finds the Build Alternative would not result in a significant impact to water quality due to the use of erosion and sediment control and other BMPs measures during construction, as well as long-term ESD measured to control and treat stormwater runoff.

Groundwater/Aquifers/Wells: The project corridor contains no major groundwater supplies, sole-source or confined aquifers, or sensitive wells. New contaminant sources are not anticipated from the project and potential introduction of existing pollutants to groundwater resources from surface runoff would be minimized through stormwater BMP's.

FRA finds the Build Alternative would not result in a significant impact to groundwater, aquifers or wells.

Wetlands: The Build Alternative would impact approximately 6.98 acres of wetlands, of which 1.52 acres are Maryland Wetlands of Special State Concern (WSSC). An estimated 10.28 acres of wetland mitigation would be required with 3.22 acres of that being mitigation for WSSC.

Compensation for unavoidable and necessary wetland and stream impacts will be provided, as required. The Phase I Conceptual Mitigation Plan (June 2014) has been prepared and coordinated with the regulatory and resource agencies and mitigation planning is ongoing. Final compensation acreages and locations will be determined as a part of the permitting process with USACE and MDE.

FRA finds the Build Alternative would not result in a significant impact to wetland resources with the implementation of appropriate mitigation.

Floodplains: The Build Alternative would impact approximately 19.6 acres within the mapped 100-year floodplain. The project would fill floodplain areas associated with Stony Run and its tributaries (15.3 acres), Herbert Run (0.5 acre), and the Patapsco River (3.4 acres). Lesser impacts would occur within Severn Run (0.3 acre) and Beaver Creek (0.1 acre) floodplains. Retaining walls will minimize floodplain impacts. Design of floodplain crossings will minimize floodplain encroachments and possible flood level increases, to the extent practicable.

FRA finds there would be no significant impact to floodplains due to the Build Alternative with appropriate mitigation and construction permitting in accordance with Executive Order 11988 and adherence to Floodplain Management permitting procedures and guidelines.

Vegetation, Wildlife, Rare, Threatened, and Endangered Species: The project corridor contains no federally listed rare or endangered species. Although the project occurs in the range of the threatened Northern long-eared bat (*Myotis septentrionalis*), on July 30, 2015, the US Fish and Wildlife Service determined the project is not likely to have an adverse effect to the recently listed bat. The Build Alternative would displace approximately 1,102 square feet of giant cane, a State-listed species. This impact represents approximately 0.5 percent of the total 4.56-acre area of giant cane identified within the study limits.

FRA finds the Build Alternative would not result in a significant impact to giant cane with ongoing coordination with Maryland Department of Natural Resources (DNR) Wildlife and Heritage Service (WHS) throughout the later design and permitting phases to determine specific mitigation measures.

Forest Stands: The Build Alternative would impact approximately 17.3 acres of mapped forest stands. DNR approved the *Forest Stand Delineation Survey Report* on February 2, 2012. Approximately 20 acres of reforestation will be required based on preliminary calculations. During final design, MTA would investigate opportunities for reforestation areas within the Limits of Disturbance (LOD) and undisturbed portions of the right-of-way. However, if MTA cannot satisfy mitigation requirements wholly or partially on-site, it will expand the search for a mitigation site (or sites) to areas within the project's watersheds and/or into the affected counties.

FRA finds the Build Alternative would not result in a significant impact to forest stands with the appropriate avoidance, minimization, and mitigation as stated in the final Forest Conservation Plan (FCP). FRA and MTA will develop the final FCP in coordination with DNR during final design.

Coastal Zone Management and Chesapeake Bay Critical Area (CBCA): Maryland's Coastal Zone Management Plan (CZMP) is based on existing laws and authorities and the consistency determination is incorporated within other permit processes. The Coastal Zone Consistency determination will be issued as part of the state's wetlands authorization. The Build Alternative will likely involve unavoidable impacts to the Critical Area, and MTA would take all practicable measures to avoid and minimize impacts. MTA will coordinate with CBCA Commission to define project-specific mitigation.

FRA finds the Build Alternative would not result in a significant impact to coastal zones and critical area with mitigation as coordinated with CBCA Commission.

Invasive Species: Invasive species are those that aggressively establish themselves into an ecosystem in which they are introduced. Several invasive species could exist in the project area including a variety of insects, viruses, aquatic and terrestrial plants, and other organisms.

FRA finds there would be no significant impact due to invasive species as final design specifications for the Build Alternative will promote native re-vegetation to minimize invasive establishment in disturbed areas.

Parklands and Recreational Facilities: Patapsco Valley State Park property is adjacent to both the east and west sides of the existing rail corridor near the rail bridge crossing of the Patapsco River. The Build Alternative would require three narrow strips of park property totaling approximately 0.65 acre. DNR currently uses the area as vegetative buffer for Patapsco Valley State Park with no planned development.

FRA finds the Build Alternative would not result in a significant impact to parklands and recreational facilities. DNR concurred on February 6, 2012 that the project would not adversely affect the activities, features and attributes of the Patapsco Valley State Park.

Visual and Aesthetics: The Build Alternative would not change the overall landscape. The experience of visual resources and the general aesthetic conditions of the area would also remain unchanged.

FRA finds the Build Alternative would not result in a significant impact to visual and aesthetic conditions.

Cultural Resources: Four archeological sites are located in the revised LOD. The Build Alternative will have an adverse effect from ground disturbing construction activities on the Harmans Site (Site 18AN29B), the Telegraph Dorsey Prehistoric Site (Site 18AN1478), and the O'Keefe Site East (Site 18AN1482). The project will have a no adverse effect on the proposed Higgins Site (Site 18AN489) since the design incorporates measures to avoid the undisturbed areas of this

historic property. The Selby Grist Mill-Mill Dam Site (Site 18AN1209) is located outside of the LOD, no adverse effect is expected due to protective fencing and field orientation for construction personnel, which is warranted because of its proximity to project construction.

Three previously recorded NRHP-eligible architectural properties are located in the Area of Potential Effect (APE). The project would have an adverse effect on one resource, Bridge No. 0207500 (Reece Road Bridge), due to demolition. The project would have no adverse effects to Bridge No. 3011 or the Harmans Post Office.

Consistent with Section 106 of the National Historic Preservation Act (NHPA), FRA and MTA consulted with the Maryland State Historic Preservation Officer (SHPO), Maryland State Highway Administration (SHA) (owner of Bridge No. 0207500), interested tribes, and others, and executed a Memorandum of Agreement (MOA) with the SHPO and SHA. The signed MOA sets forth the mitigation measures and consultation MTA and FRA will undertake to resolve adverse effects and concludes the Section 106 process under NHPA.

Accordingly, FRA finds the Build Alternative would not result in a significant impact to cultural resources, as defined under NEPA.

Geology, Soils and Farmland: Construction of the Build Alternative would have short-term impacts on soils. Sediment and erosion control plans will be prepared in accordance with the Maryland Department of the Environment's *Standards and Specifications for Soil Erosion and Sediment Control* (2011). There would be no long-term effects on geology and topography.

As the project is located within an area identified as an Urbanized Area (UA) on United States Census Bureau mapping, there is no impact on prime farmland soils as defined by the Farmland Protection Policy Act's definition of prime farmland.

FRA finds the Build Alternative would not result in a significant impact on geology, soils, and farmland.

Hazardous Materials: Three recorded hazardous material sites are within 0.2-mile of the project right-of-way. No additional right-of-way would be required from these properties for the Build Alternative. Amtrak is not aware of any contamination within the Amtrak right-of-way within the project corridor. A Phase I and/or Phase II Environmental Site Assessment (ESA) will be required for additional right-of-way.

FRA finds the Build Alternative would not result in a significant impact to hazardous materials.

Indirect and Cumulative Effects: Prior to constructing the Build Alternative, the MTA is proposing, with funding from the Federal Transit Administration, interim improvements to the existing station. The improvements consist of an addition to the existing building to accommodate Americans with Disabilities Act-compliant bathrooms and addition of a pedestrian bridge between the parking garages and the bridge over the NEC.

Beneficial cumulative effects of the Build Alternative include improved mobility and accessibility for residents, commuters, and intercity rail and air passengers who travel to Washington, D.C., Baltimore, and the communities in between. This project would also support development in the areas designated by local jurisdictions. Due to minimization and mitigation efforts to protect resources directly impacted by the Build Alternative (wetlands, streams, floodplains, cultural resources, forests, and public parkland), the Build Alternative would have little, or no, indirect impacts. FRA finds the Build Alternative would not result in a significant negative indirect impact or cumulative effect due to the Build Alternative.

The NEC FUTURE Program is FRA's comprehensive planning effort to define, evaluate, and prioritize future investments in the NEC, from Washington, DC, to Boston. Through the NEC FUTURE Program, FRA will determine a long-term vision and investment program for the NEC that addresses current and future rail passenger service needs and considers the appropriate role of passenger rail within the larger transportation system of the region. Outcomes of NEC FUTURE include the release, in 2016, of a Tier 1 EIS and Service Development Plan to support the selected vision. FRA considered the corridor-wide service requirements of NEC FUTURE alternatives for the BWI Station Project. As a preferred alternative has not yet been identified for NEC FUTURE and the plan is a long-range, unfunded program, FRA has not included it in the cumulative impact assessment for the BWI Project.

Safety and Security: Amtrak has current safety-related programs and policies for the safety of its passengers and employees. The Build Alternative would upgrade the existing physical conditions of this portion of the NEC, which would result in improved infrastructure, a higher level of maintenance, and enhanced safety. Improvements at the BWI Rail Station would improve safe pedestrian flows by providing more area for pedestrian circulation, and expected reductions in potential pedestrian and vehicular conflicts.

FRA finds the Build Alternative would not result in a significant negative impact to safety and security along the NEC and at the BWI Rail Station due to the Build Alternative.

Section 4(f): The Build Alternative would require the use of Section 4(f) property, the Patapsco Valley State Park and Reece Road Bridge. The EA included a draft Section 4(f) Evaluation that has been prepared pursuant to Section 4(f) of the United States Department of Transportation Act of 1966 (49 USC 303) (USDOT Act).

MTA received written concurrence for the Patapsco Valley State Park from DNR, the officials with jurisdiction, that the use of the property by the Build Alternative will not adversely affect the activities and features of the park. FRA issued a *de minimis* finding for the use of this Section 4(f) property.

The impacts of the project on the Reece Road Bridge by the Build Alternative demonstrates that there are unique problems or unusual factors involved in the use of alternatives that avoid this Section 4(f) property and that the cost, social, economic, and environmental impacts, or community disruption resulting for this alternative reach extraordinary magnitudes. Based upon the above conclusions, there is no feasible or prudent alternative to the use of the Reece

Road Bridge and the Build Alternative includes all possible planning to minimize harm to this Section 4(f) property resulting from such use. To mitigate the impact to the Reece Road Bridge as stipulated in the MOA, FRA and MTA will complete and provide an updated Maryland Inventory of Historic Properties (MIHP) form to the Maryland State Historic Preservation Office (MD SHPO) for bridge. FRA and MTA will also coordinate with the Maryland State Highway Administration (SHA), the owners of the bridge, to provide copies of bridge plans for completion of the MIHP form.

FRA finds the Build Alternative would not result in a significant impact to Section 4(f) resources. The Department of the Interior (DOI) concurred on June 19, 2015 there is no feasible or prudent avoidance alternative for the project for the use of Reece Road Bridge. The DOI also concurs that this will be a *de minimis* impact, in that it will not adversely affect the activities, features, or attributes of Patapsco Valley State Park (see attached letter).

Commitments and Mitigation Measures

The Build Alternative has the potential to adversely impact resources in the Project Corridor primarily due to construction. To mitigate these impacts, the following measures are required (see the Environmental Mitigation matrix in Appendix C):

Land Use and Acquisitions: All land acquisitions will be completed according to the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended; Title 49, Part 24 of the Code of Federal Regulations (49 CFR Part 24); and all applicable Maryland regulations and policies.

Air Quality: Construction of the Build Alternative would be consistent with the SIP. However, the MTA would consider reasonable short-term construction mitigation measures.

Wetlands and Waters of the United States and Floodplains: MTA will prepare a Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland permit application during final design. This application will comply with both Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

MTA will coordinate, again, with the United States Coast Guard (USCG) regarding the potential need for a Bridge Permit under Section 9 of the Rivers and Harbors Act of 1899 if the project is not constructed within five years.

Mitigation measures employed to compensate for unavoidable project effects to Waters of the U.S., including wetlands, will follow federal and state mitigation regulations and guidelines, as well as other recommendations from federal and state resource agencies.

MTA would mitigate for permanent impacts to streams at a ratio determined in coordination with USACE and MDE to provide functional replacement of impacted streams. A replacement ratio of 1:1 linear feet of stream improvement is anticipated; however, the resource agencies

may adjust this ratio as exact ratios can only be determined during final design of a selected mitigation site.

MTA would comply with mitigation requirements under the Clean Water Act Section 404 to determine the ratio of wetland acres replaced to wetland acres lost to achieve functional replacement of impacted wetlands. Mitigation for emergent wetlands typically occur on a 1:1 replacement basis, while mitigation of forested and scrub-shrub wetlands typically occur on a 2:1 replacement basis, although these ratios may be adjusted during final mitigation site selection and design. WSSC are typically mitigated on a 3:1 replacement basis; however, this also could increase during development of the final mitigation plan. The regulatory agencies will determine the final replacement ratio for WSSC based on the functional replacement of impacted resources.

A Phase II Final Mitigation Plan will be developed in compliance with the Federal Mitigation Rule and state mitigation guidelines as part of the final design and permitting phase of the project.

The MTA would install wetland protection fencing to protect wetlands and wetland buffers during construction. All construction occurring within the Federal Emergency Management Agency (FEMA) designated 100-year floodplain will comply with FEMA approved local floodplain construction requirements.

Stormwater Runoff and Water Quality: Sediment and erosion control plans will be prepared in accordance with the Maryland Department of the Environment's *Standards and Specifications for Soil Erosion and Sediment Control* (2011).

MTA would design stormwater management facilities required to address water quality and quantity requirements consistent with environmental site design (ESD) criteria to the maximum extent practicable in accordance with the requirements under the Stormwater Management Act of 2007, and guidance by MDE in 2010 and 2011 on the technical procedures and calculations for ESD requirements.

MTA would address potential effects through the MDE stormwater and sediment and erosion control permitting process as required under Maryland's Erosion and Sediment Control (E&SC) (COMAR 26.17.01) and Stormwater Management regulations (COMAR 26.17.02).

Ecological Resources: Aquatic species will be protected with the Use I and Use IV in-stream work prohibition time-of-year restrictions, through sediment and erosion control measures, and through other BMPs. Coordination with DNR-WHS during final design will determine specific mitigation measures for impacts to the giant cane, as State-listed species.

Forest Conservation Plans will be prepared during final design and would detail additional impact avoidance and minimization techniques to be applied during construction. MTA will submit Forest Conservation Plans to DNR for review and approval during final design.

During final design, MTA will identify forest mitigation sites in cooperation with DNR within the LOD, and identify undisturbed portions of the right-of-way. If mitigation requirements cannot take place wholly or partially on-site, the MTA would expand the search for a mitigation site (or sites) to areas within the project's watersheds or into the affected counties.

Tree protection fencing will be installed along the outside edge of the limit of disturbance where necessary to prevent access by construction equipment, staging, and stockpiling of materials within forest retention areas.

Chesapeake Bay Critical Area (CBCA): MTA will coordinate with CBCA Commission to define the project-specific mitigation for tree clearing any new impervious area within the Critical Area and/or any planting requirements.

Cultural Resources: Proper safeguards (e.g., protective fencing, field orientation/education for construction personnel, and on-site archeological monitoring will reduce potential effects to the Higgins archeological site. Where impacts to other archeological sites in the LOD are unavoidable, MTA would conduct additional Phase II archeological investigations to evaluate sites for National Register eligibility. As project planning proceeds, FRA and MTA will continue to identify design modifications that could further avoid or minimize potential effects on archeological resources.

MTA will photograph and document the attributes of the Reece Road Bridge in coordination with MHT prior to construction or demolition. MTA will develop provisions for continued coordination and site protection during construction in consultation with MHT and other consulting parties, which are included as commitments in the MOA.

Hazardous Materials: A Phase I and/or Phase II Environmental Site Assessment (ESA) will be required for additional right-of-way areas needed for the project. During final design and construction, if the project encounters contaminated soils, MTA would evaluate off-site remediation, chemical stabilization, or other treatments and disposal options.

Public Involvement

MTA involved the public through the various phases of the project. Public meetings were held in 2011 and 2015. All meetings were an open house format giving the public an opportunity to comment on the project and ask questions of the project team. The meetings were held on:

- February 16, 2011 at Bon Secours Community Center in Baltimore, Maryland
- February 17, 2011 at Meade High School in Fort Meade, Maryland
- May 12, 2015 at Seven Oaks Elementary in Odenton, Maryland

Notifications for the meetings included:

- Advertisements in *Baltimore Sun,* the *Baltimore Afro-American* Odenton-Severn, Elkridge, and Arbutus community *Patch* publications
- Flyers handed out at rail stations
- Posters at community facilities (schools, grocery stores, churches)
- Postcards to property owners within half-mile radius of the NEC in the project corridor
- Email alerts to MARC Penn Line customers registered with the MTA
- Social Media advertisements on MTA's Facebook and Twitter accounts

In addition to notification to the public, MTA sent letters to elected officials with constituents within the project corridor. The first round of letters in 2011 introduced the project, informed the elected officials of the open house schedules, and requested their participation in the environmental and planning processes. MTA mailed letters to elected officials in April 2015 to inform them of the public release of the EA and the public information meeting.

Property owners in the project corridor and those adjacent to the corridor received notifications throughout the history of the project. MTA sent letters to any property owners where MTA would need to perform surveys and/or fieldwork necessary for the studies to support this EA as required by Maryland law.

MTA made the EA available for public review and comment on April 27, 2015. MTA posted the EA to the project webpage (http://mta.maryland.gov/bwi-amtrak-rail-improvement) and distributed to the following libraries:

- Anne Arundel County Public Library – Linthicum Branch
- Anne Arundel County Public Library – Severn Branch
- Anne Arundel County Public Library – Odenton Library
- Baltimore County Public Library – Lansdowne Branch
- Baltimore County Public Library – Arbutus Branch

Approximately 19 members of the public attended the public meeting held on May 12, 2015. Most who attended the meeting voiced their support for the project and the need for increased and faster rail service in the NEC. Questions received during the meeting included the impact of noise and vibration to surrounding communities, and the possibility of a train observation location at the BWI Station. Norfolk Southern Corporation commented on the proposed design of the gauntlet track after the meeting. The public comments received and responses are documented in the attachments.

Agency Comments

The Federal Aviation Administration (FAA) provided comments on the EA on June 11, 2015. The comments asked for additional information to be provided on the impact to BWI Thurgood Marshall Airport. The comments and responses are provided in the attachments.

Findings

FRA finds the BWI Rail Station Improvements and Fourth Track Environmental Assessment 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 finds that 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.

Sarah Feinberg
Administrator
Federal Railroad Administration

1/5/2016
Date

This document has been 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 August 2015. For further information regarding this document contact:

Michelle W. Fishburne, PE
Environmental Protection Specialist
Federal Railroad Administration
1200 New Jersey Avenue SE
Washington, DC 20590
(202) 493-0398

The following organization assisted the Program Office in the preparation of the April 2015 Environmental Assessment:

Maryland Transit Administration
6 St. Paul St.
Baltimore, MD 21202-1614

Attachments

A. Section 106 Concurrence - Memorandum of Agreement
B. Section 4(f) Concurrence from DOI
C. Environmental Mitigation
D. Public Comment and Responses
E. FAA Comments and Responses
F. USFWS Correspondence