Appendix B

B&P TUNNEL PROJECT

Agency Correspondence

U.S. Department of Transportation
Federal Railroad Administration

Maryland Department of Transportation

Correspondence Related to the Initiation of the Environmental Impact Statement

U.S. Department
of Transportation

**Federal Railroad
Administration**

1200 New Jersey Avenue, SE.
Washington, D.C. 20590

JUN 11 2014

Subject: Agency Scoping Invitation
Baltimore and Potomac (B&P) Tunnel Project
Initiation of Environmental Impact Statement

Dear Agency Representative:

The Federal Railroad Administration (FRA), in coordination with the Maryland Department of Transportation (MDOT), is initiating development of an Environmental Impact Statement (EIS) for the B&P Tunnel Project pursuant to the National Environmental Policy Act (NEPA). As part of the development of the EIS, FRA is seeking your input to assist in determining and clarifying issues that are relevant to the scope of the study.

The B&P Tunnel is located between the West Baltimore MARC Station and Baltimore Pennsylvania Station along Amtrak's Northeast Corridor (NEC) (see attached map). This section of the NEC is used by Amtrak and MARC passenger trains, as well as Norfolk Southern freight trains. Opened in 1873, the tunnel is approaching the end of its useful service life. The intent of the study is to address tunnel deficiencies which hamper rail movement and create a low-speed bottleneck on a high-traffic section of the NEC. Note that the B&P Tunnel is not CSX Transportation's Howard Street Tunnel, which serves freight trains exclusively.

In compliance with NEPA, Section 106 of the National Historic Preservation Act of 1966 and other environmental laws and regulations, the study will consider potential impacts to surrounding communities and the environment and culminate in the development of the EIS. Various alternatives addressing study needs will be developed and evaluated, including the No Action Alternative as well as Build Alternatives, such as rehabilitation of the existing tunnel and a new tunnel on new alignment.

Any comments and suggestions your agency may have regarding factors that should be considered in the EIS would be appreciated. There are several ways your agency can participate in the scoping process:

1) Your agency may provide written comments via mail to:

   B&P Tunnel Project
   81 W. Mosher Street
   Baltimore, MD 21217

2) Your agency may provide comments via email to info@bptunnel.com.

3) If your agency would like to request an individual scoping meeting, please contact Michelle Fishburne by July 30, 2014 (contact information below).

A representative of your agency may attend the MDOT Interagency Review Meeting scheduled for **June 18, 2014 at 9:55 am** in the training rooms at the Maryland State Highway Administration's headquarters, 707 North Calvert Street in Baltimore. To attend this meeting, you should RSVP to Michelle Fishburne by June 17, 2014.

A public involvement program will take place throughout the NEPA planning process. The project will be presented to the public during an open house on **June 19, 2014**, as detailed on the B&P Tunnel Project's Web site (www.bptunnel.com).

Please provide any comments from your agency by **July 30, 2014**. If you have questions or need additional information, please contact Michelle Fishburne, FRA Environmental Protection Specialist, at (202) 493-0398 or michelle.fishburne@dot.gov. Thank you for your agency's time and participation in this project.

Sincerely,

David Valenstein
Chief, Environment and Systems Planning Division
Federal Railroad Administration

Enclosure: Map

Marco Turra – Director
CSX Transportation
500 Water Street, J315
Jacksonville, FL 32202
Office (904) 359-1099
Marco_Turra@csx.com

May 28, 2014

MDOT
JUN 06 2014
Freight Logistics

Harry Romano
Maryland Department of Transportation
Office of Freight and Multimodalism
7201 Corporate Center Drive
Hanover MD 21076

Dear Mr. Romano,

We understand that Maryland DOT and the Federal Railroad Administration are working on the preliminary engineering and preparation of environmental impact statements for replacing the Baltimore and Potomac (B&P) Tunnel. CSXT has trackage rights on the NEC between Washington and New York, including the B&P Tunnel, where CSX can operate four trains per day.

CSXT would welcome the opportunity to be included in the study. We believe that a joint study for the replacement of the B&P Tunnel would yield significant additional public benefit because new infrastructure could enable the movement of double stack freight trains on the I95 Corridor. To this end, CSXT would like to be included in the planning of the new or improved B&P Tunnel.

Thanks for the consideration and we look forward hearing back from you.

Sincerely,

Marco Turra

Cc: Jay Westbrook – CSXT AVP Passenger Operations
Dale Ophardt – CSXT AVP Engineering
Bob Gutman – CSXT AVP Network Planning

Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510
Phone: 757-629-2838
Fax: 757-533-4884
Email: john.edwards@nscorp.com

John V. Edwards
General Director
Passenger Policy

July 24, 2014

Ms. Michelle W. Fishburne
Environmental Protection Specialist
USDOT FRA, Office of Program Delivery
1200 New Jersey Avenue SE., MS-20
Washington, DC 20590

Sent electronically to info@bptunnel.com

Re: Scoping for the Environmental Impact Statement (EIS) for the Baltimore & Potomac (B&P) Tunnel Project

Dear Ms. Fishburne:

On June 9, 2014, the Federal Railroad Administration (FRA) published its Notice of Intent to Prepare an Environmental Impact Statement (EIS) related to the Baltimore & Potomac (B&P) Tunnel Project along the Amtrak Northeast Corridor (NEC) in Baltimore, MD. Norfolk Southern appreciates the opportunity to provide these brief comments on the scope of the EIS for this important project.

Norfolk Southern operates freight trains on the NEC alongside Amtrak. The agricultural and consumer goods, metals and forest products it moves along the NEC help to fuel the economies of states from the mid-Atlantic to the Northeast and beyond. Much of the traffic it delivers to customers along the NEC originates in the Midwest and Western United States. Much of the traffic originating along the NEC is delivered to businesses, manufacturers, and wholesalers throughout the United States.

The NEC between Washington DC and Boston is a vital national asset for the transportation of goods in both domestic and international commerce, as well as for passenger transportation. Norfolk Southern welcomes the opportunity to work with the Federal Railroad Administration, the Maryland Department of Transportation (MDOT), and Amtrak to ensure that this portion of the NEC, which dates from 1873, is brought into the 21st century. It is important to eliminate a significant chokepoint in this high traffic section of the Northeast freight and passenger rail corridor.

In all cases and at all locations within the study area, impacts to freight rail must be considered on all segments of the proposed route. Just as the current infrastructure constrains passenger

operations, so has that infrastructure constrained current and potential freight operations, to the detriment of the people and economies of the NEC-served states. Adequate infrastructure is needed to prevent rail conflicts and ensure fluid operations for both passenger and freight operations. The potential for clearing the B&P Tunnel for high and wide loads (including those involving intermodal double stack), and the potential to replace or supplement the US Department of Defense Strategic Rail Corridor Network (STRACNET) route now utilizing the Howard Street Tunnel should be incorporated into the EIS.

Again, Norfolk Southern appreciates the forum for making comments to the scope of the B&P Tunnel EIS. We look forward to remaining involved in this process. We hope to help MDOT and FRA realize their vision for improved transportation options in Maryland and along the NEC.

Sincerely,

John V. Edwards

Maryland Department of Transportation
The Secretary's Office

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

James T. Smith, Jr.
Secretary

October 10, 2014

Mr. Joseph C. Szabo
Administrator
Federal Railroad Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington DC 20590

Dear Administrator Szabo:

As your partner on the $60 million High-Speed Intercity Passenger Rail (HSIPR) grant for preliminary engineering (PE) and National Environmental Policy Act (NEPA) work on Amtrak's Baltimore and Potomac (B&P) Tunnel in Baltimore City, I wanted to make you aware of a recent discussion I had with Amtrak President Joseph Boardman and Federal Railroad Administration (FRA) staff regarding this regionally significant project.

The discussion focused on freight capacity within the new or rehabilitated B&P Tunnel. Both Norfolk Southern (NS) and CSX Transportation, Inc. (CSX) hold rights to move freight on the Northeast Corridor, including the B&P Tunnel, and have expressed interest in addressing freight needs in the new or rehabilitated tunnel. With NS and CSX cooperation, current and future goods movement may significantly benefit from the ability of a new or rehabilitated B&P Tunnel to support double-stack intermodal and over-dimensional cargo to and from the Port of Baltimore. During our conversation, Amtrak indicated their willingness to work with the Maryland Department of Transportation (MDOT) on an analysis to support a future B&P Tunnel that could also accommodate double-stack intermodal freight.

Amtrak and MDOT discussed the need to evaluate the connecting rail network to determine what additional clearances may be required before NS and CSX could operate double-stack intermodal freight into/out of the Port of Baltimore. Because of the constraints associated with the federal grant and project limits, MDOT will convene a working group, separate from the B&P Tunnel HSIPR study, to advance these investigations. MDOT anticipates the working group will include representatives from FRA, MDOT, Amtrak, and the two freight railroads.

My telephone number is 410-865-1000
Toll Free Number 1-888-713-1414 TTY Users Call Via MD Relay
7201 Corporate Center Drive, Hanover, Maryland 21076

We look forward to working with you and your staff as MDOT advances these efforts. If you have any questions or concerns, please do not hesitate to contact Mr. Leif A. Dormsjo, MDOT Deputy Secretary for Planning and Project Management, at 410-865-1002 or by email at ldormsjo@mdot.state.md.us. Deputy Assistant Dormsjo will be happy to assist you. Of course, you should feel free to contact me directly.

Sincerely,

James T. Smith, Jr.
Secretary

cc: Mr. Joseph H. Boardman, President, Amtrak
Mr. Leif A. Dormsjo, Deputy Secretary for Planning and Project Management, MDOT
Mr. Paul Nissenbaum, Associate Administrator for Railroad Policy and Development, FRA

Correspondence Related to the Preliminary Alternatives Screening Report

Zimbra **brolf@rkk.com**

Fwd: B&P Tunnel-Draft Preliminary Alternatives Screening Report

From: "Alaina McCurdy" <McCurdy.Alaina@epa.gov>
To: "michelle fishburne" <michelle.fishburne@dot.gov>, "Eric Almquist" <ealmquist@rkk.com>
Sent: Monday, November 10, 2014 10:07:27 AM
Subject: B&P Tunnel-Draft Preliminary Alternatives Screening Report

Hi Michelle and Eric,

Thank you for coordinating with EPA on the B&P Tunnel Draft Preliminary Alternatives Screening Report. We appreciate your efforts to keep us engaged in this project and for allowing us the opportunity to provide you with comments for your consideration. If possible, please forward this message to the appropriate MDOT contact for this project.

Below are some comments for your consideration on the report. Overall, the alternatives examined were clearly explained as were the various screening criteria. Of the 15 alternatives considered, four are recommended to be advanced for further study in the EIS. These include the no build alternative, restore/rehabilitate the existing tunnel, and two new location alternatives. While it was largely apparent why many of the alternatives considered were recommended to be dropped from further consideration, it was not always clear how each of the alternatives measured up against each of the identified screening criteria. We did see the screening criteria laid out for each alternative in Table 1, which we found very useful. We'd suggest including this information more explicitly in the narrative analysis and recommendation sections for each alternative in order to make it more clear throughout the document how alternatives 3-15 met each of the identified screening criteria. Currently for alternatives 3-7, the analysis sections only present reviewed and summarized information from the 2011 Baltimore's Railroad Network: Analysis and Recommendations report as opposed to focusing on how the alternatives were evaluated against the criteria. Again, we suggest including a more clear presentation of how the alternatives were evaluated against each of the screening criteria in

order to further improve the report.

One of the new location alternatives that was evaluated and recommended to be carried forward was Alternative 11: Robert Street South. The description of this alternative states that it would be a combination of underground tunnel, an aerial structure and at-grade sections. The map provided of this alternative currently shows the alignment and portal locations. If possible, we'd recommend noting the locations of the aerial structures and at-grade sections on the existing map, or adding a new map to show these areas. While we understand the provided discussion and rationale for retaining this alternative, if it hasn't already been considered, we'd recommend that FRA and MDOT consider evaluating a slightly modified Alternative 11 against the identified screening criteria. We're suggesting a modified Alternative 11 in addition to the other alternatives in an effort to think ahead about potential impacts to the community surrounding the south portal location. If possible, we'd suggest, that if it hasn't already been evaluated already, taking a closer look at potential slight alignment shifts or modifications to the south portal location and connection to the existing Amtrak corridor of Alt 11 to the north by a few blocks. It appears that if some modification were possible, the portal location could have potentially fewer adverse impacts to the community as well as reducing the length of track between the portal and existing track. EPA encourages FRA and MDOT to consider if efforts can be made to evaluate the south portal location in closer detail either further into the design of Alt 11, or evaluating at this stage a slightly modified Alt 11 in order to reduce adverse community impacts.

I also had a few questions in order to try to better understand Alternative 12: Robert Street North. I understand this alternative has some portion of cut and cover, however could you clarify the length, extent, and location of the cut and cover operation that would be required for this alternative? I was also interested in finding out where or for what length of this alternative would not meet the minimum tunnel separation between the existing MTA Metro rail line and proposed tunnel. Has any evaluation been conducted to investigate if realigning or slightly modifying the southern portal to the north would allow for greater tunnel separation and maintenance of operations through the existing tunnel?

The screening report considers environmental justice throughout the document. We encourage FRA and MDOT to conduct robust community outreach for this project, as it appears at this preliminary stage that many of the potential adverse impacts associated with the project could be to the community. We are aware that there are a number of large, influential churches in the vicinity of the southern portal locations, as well as community organizations, and suggest that project outreach include these organizations to the extent possible.

Again, thank you for coordinating with EPA on this project. If you have any questions or would like to discuss EPA's comments on the Preliminary Alternatives Screening Report, please feel free to contact me. We would certianly welcome the opportunity to discuss our comments with you in greater detail.

Sincerely,

Alaina

Alaina McCurdy
Office of Environmental Programs
U.S. EPA Region 3
1650 Arch Street
Philadelphia, PA 19103
phone: (215)814-2741
fax: (215)814-2783

Correspondence Related to
Cultural Resources (includes additional consulting parties)

Maryland Department of Planning
Maryland Historical Trust

Sustainable Attainable

August 4, 2014

David Valenstein
Chief, Environment and Systems Planning Division
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac (B&P) Tunnel Project
Agency Scoping/Initiation of Section 106 Review
Baltimore City, Maryland

Dear Mr. Valenstein,

The Maryland Historical Trust (Trust), a division of the Maryland Department of Planning, received the Federal Railroad Administration's (FRA) initiation of the Environmental Impact Statement and Section 106 review process for the above-referenced project. We look forward to working with your agency and other involved parties to successfully complete the preservation requirements for the proposed undertaking.

The FRA will soon need to initiate detailed cultural resources studies so that significant historic properties within the project area are fully considered during the project planning process. We encourage early and frequent coordination with our office to ensure that the investigations are commensurate with the scale of the undertaking and consistent with our standards and guidelines. Considerable information already exists regarding identified historic and archeological resources in the project vicinity, as a result of multiple prior investigations for various projects. For example, the Baltimore & Potomac Railroad / Philadelphia, Baltimore & Washington Railroad (MIHP No. B-5164) has already been determined eligible for listing in the National Register of Historic Places. This evaluation was conducted in 2012 and includes the Baltimore & Potomac Tunnel. A copy of the determination of eligibility (DOE) form is included as an attachment to this letter. Our inventory also includes numerous individual structures, bridges and historic districts within the project area for the Baltimore & Potomac Tunnel project. Please consult the Trust's library and staff as part of the detailed investigations to obtain the existing survey documentation. We look forward to working with the project team to ensure a reasonable and appropriate level of effort is performed for the current project.

We suggest that the FRA continue to identify opportunities to involve the general public and any other interested parties throughout the project planning process. Trust staff can provide assistance in identifying consulting parties. Thank you for initiating consultation with the Trust early in project planning for this undertaking. If you have questions or require any assistance, please contact me (for the historic built environment) at tim.tamburrino@maryland.gov \ 410-514-7637 or Beth Cole (for archeology) at beth.cole@maryland.gov \ 410-514-7631.

Sincerely,

Tim Tamburrino
Preservation Officer

TJT / 20140
Attachment
cc: Michelle Fishburne (FRA) via email
B&P Tunnel Project Office

MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes ___ no ___

Property Name: Baltimore & Potomac RR/Phil., Baltimore & Wash. RR Inventory Number: B-5164

Address: Between Baltimore City/County Line & Penn Station (includes the Baltimore & Potomac Tunnel) Historic district: ___ yes X no

City: Baltimore Zip Code: see below County: Baltimore City

USGS Quadrangle(s): Baltimore West

Property Owner: National Railroad Tax Account ID Number: N/A

Tax Map Parcel Number(s): ___ Tax Map Number: ___

Project: West Baltimore MARC Station Project Agency: Maryland Transit Administration

Agency Prepared By: RK&K, LLP

Preparer's Name: Christeen Taniguchi Date Prepared: 5/1/2012

Documentation is presented in: Enoch Pratt Library--Maryland Room, Maryland Historical Society, ProQuest Historical Newspapers Database, Sanborn Fire Insurance Maps

Preparer's Eligibility Recommendation: X Eligibility recommended ___ Eligibility not recommended

Criteria: X A ___ B X C ___ D Considerations: ___ A ___ B ___ C ___ D ___ E ___ F ___ G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: ___

Inventory Number: ___ Eligible: ___ yes Listed: ___ yes

Site visit by MHT Staff ___ yes X no Name: ___ Date: ___

Description of Property and Justification: *(Please attach map and photo)*

~~Architectural Description~~

This documentation expands upon a Determination of Eligibility (DOE) Form and an Addendum completed for the following sections of the Philadelphia, Wilmington & Baltimore (PW&B) Railroad in Baltimore City:

DOE Form -- Between Boston and O'Donnell streets, west of S. Haven Street, running southwest (eligibility concurred by the Maryland Historical Trust [MHT] on October 6, 2008)

Addendum -- Between O'Donnell Street and the Bayview Yard (eligibility concurred by MHT on June 9, 2010)

This DOE Form evaluates the National Register of Historic Places (NRHP) eligibility of the Baltimore & Potomac (B&P) Railroad/Philadelphia, Baltimore & Washington (PB&W) Railroad segment between the Baltimore City/Baltimore County line (in the community of Violetville) at the southwest to Baltimore's NRHP-listed Pennsylvania Station (B-3727) at the northeast. The

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended X **Eligibility not recommended** ___

Criteria: X A ___ B X C ___ D **Considerations:** ___ A ___ B ___ C ___ D ___ E ___ F ___ G

MHT Comments:

[signature] 9/11/12
Reviewer, Office of Preservation Services **Date**

[signature] 9/11/12
Reviewer, National Register Program **Date**

station was not part of this evaluation. The evaluated alignment was originally built in 1872 as the B&P Railroad, merging with the PW&B Railroad to create the PB&W Railroad in 1902. Please note that the zip codes this railroad alignment runs through are the following (from southwest to northeast): 21229, 21223, 21216, 21217, and 21201.

The evaluated alignment includes the following building and structures:

•The Baltimore & Potomac Tunnel is a brick-round arch 7,499-foot-long tunnel with rough-cut stone retaining walls, beginning at N. Gilmor Avenue and Winchester Street in west Baltimore, continuing northeast and emerging just south of W. North Avenue near Interstate 83. The two track tunnel includes two round arch bridges, one carrying N. Fulton Avenue and the second carrying N. Vincent Street, leading up to the tunnel entrance at the southwest end. A builder's stone with the build date, the B&P name, and the president, vice-president, and directors names, is apparently mounted on a retaining wall adjacent to one of the tunnel entrance (completed in 1873)

•Four railroad tracks at the southwest portion of the segment until about W. Lafayette Avenue, and double tracks continuing northeast and into the B&P Tunnel, consisting of track beds with ballast and siding along some segments (widened to three and four tracks in the early 1930s; tracks likely replaced over the years)

•Overhead catenary lines along the alignment with what appears to be a traction power substation located at the northern end of the evaluated segment (circa 1935)

•Railroad bridges (listed from southwest to northeast):
1) one reinforced concrete arch bridge with metal railing over Gwynns Falls Park, Western Maryland Railroad, and W. Baltimore Street (built in 1914)
2) two steel-plate viaducts with concrete retaining walls over N. Franklintown Road and N. Warwick Avenue (built in the circa 1920s)
3) one reinforced concrete bridge, with Art Deco details and a cast-in-place image of the Pennsylvania Railroad's keystone symbol on either side, located over W. Mulberry Street (built in the circa 1920s)
4) one steel and concrete bridge with rough-cut stone retaining walls, located over W. Franklin Street (the steel bridge supports appear to date to the nineteenth century, with a concrete circa 1980s West Baltimore MARC Station platform above)

•Two-story brick Gwynn Junction Tower located on the northwest side of the 1914 bridge's southwest end. The building rests on a masonry base and is sheltered by a pyramidal hipped roof clad with asphalt shingles and a red brick chimney. The building has remnants of wood window sashes and frames. It is currently not being used, likely due to there no longer being interlocking tracks at this location, and in poor condition (built in the circa early twentieth century)

•The West Baltimore MARC Station is an open platform located west of N. Smallwood Street between W. Mulberry and W. Franklin streets (built in the circa 1980s)

•Various ancillary buildings including sheds located along the tracks at the northern end of the evaluated segment (appear to be mostly modern)

Note that Amtrak prohibited access to of the alignment; all observations and photographs were made from public rights-of-way due to this legal restriction.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

Historic Context

The evaluated segment of the Philadelphia, Baltimore & Wilmington (PB&W) Railroad was originally part of the Baltimore & Potomac (B&P) Railroad alignment completed in 1872 that travelled southwest from Baltimore, Maryland, to Washington, D.C. The B&P Railroad Company was chartered on May 6, 1853, after significant lobbying headed by Colonel William D. Bowie of Prince George's County. During an era when the railroad was quickly expanding and replacing ferry transportation, southern Maryland farmers and plantation owners saw rail as a necessary means to transport their agricultural goods and stay connected to the rest of the east coast. Railroad planning was delayed, however, until December 1858 when a board of directors and corporate officers were put into place. A survey of the proposed alignment was conducted in the following year. Pope's Creek at the Potomac River in Charles County was selected as the southern terminus, about 75 miles south of Baltimore. A ferry was planned to link Pope's Creek to Richmond, Virginia, via the Richmond, Fredericksburg & Potomac Railroad terminal in Aquia Creek, Virginia.

B&P Railroad construction began in 1861, and was slow due to limited capital and the Civil War's interference. After the war, Oden Bowie, son of William Bowie and president of the B&P Railroad Company, approached the Baltimore & Ohio (B&O) Railroad for funding assistance, but was denied. Instead, the big push for construction began when the Pennsylvania Railroad (PRR) and Northern Central Railway (NCR) acquired B&P Railroad in 1867. The PRR had earlier purchased NCR in their desire for growth southward that ultimately connected their tracks to Baltimore. Further growth linking Baltimore to Washington, D.C., however, was not immediately possible. Due to a relationship between the B&O Railroad and the Maryland state legislature since the mid-1830s, the B&O had a monopoly over rail connections between Baltimore and the nation's capital. The B&P Railroad's company charter allowed for lateral branches up to 20 miles long, a provision originally put into place to appease nearby towns afraid of being bypassed by the main alignment. The PRR saw this as their opportunity to circumvent the B&O and state, and establish their rail connection from Baltimore to Washington, D.C. The alignment would go from Baltimore to Huntington (today Bowie), Maryland, with its main alignment ending at Pope's Creek. The line would also connect to Washington, D.C. Via a "branch" called the Washington City or Magruder Branch. Oden Bowie used his position in the Maryland legislature to push this railroad construction through the legislature. Governor of Maryland from 1869 to 1872, Bowie would remain president of the B&P Railroad Company until his death in 1904.

B&P Railroad construction went into full force during the spring of 1868, with 35 miles of line graded by the end of the year. The B&P Railroad "branch" between Baltimore and Washington, D.C., opened on July 2, 1872, and the main alignment to Pope's Creek opened on January 1, 1873. The railroad cost nearly $10 million. Although technically a branch, the alignment to the more heavily populated and larger city was obviously the primary route for the B&P Railroad. This is evident when comparing the lavish masonry Victorian Gothic Revival train station (now demolished) originally built on the National Mall at the Washington, D.C. terminus, with the small and modest wood station at Pope's Creek.

A significant engineering achievement of the alignment was the double-track brick B&P Tunnel, located to the west of Baltimore's Pennsylvania Station. A tunnel became the solution since condemnation proceedings for the right-of-way required for double-tracking would be too expensive in this heavily developed part of the city. Constructed between 1871 and mid-1873, this 7,499-foot long tunnel was built primarily using the cut-and-cover method, along with some drilling. Constructed on a significant grade, the tunnel was a challenge during the steam engine era. Smoke-blowing machinery was installed in the upper portion of the portal and a 160-foot smoke jack (demolished in 1969) was built on Eutaw Place to deal with this problem.

B&P's first Baltimore station was the Italianate Revival style Pennsylvania Avenue Station, built over an open cut within the tunnel route. When the B&P Railroad line was first completed, passengers in Baltimore needed to transfer via coach to continue north. The original Union Tunnel (an adjacent tunnel later built in 1933) and first Union Station (no longer extant), however, were

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

completed soon thereafter, allowing for continued travel to the east on Union Railroad tracks to the Bayview junction where connections could be made with the Philadelphia, Wilmington & Baltimore (PW&B) Railroad. Access to these connections meant a continuous PRR link, including New York, Philadelphia, Baltimore, and Washington, D.C. P&B would soon utilize Baltimore's Union Station, with a second, larger Union Station replacing the original completed in 1886. The B&P Railroad merged with the PW&B Railroad in 1902 to create the PB&W Railroad, the new name also given to the evaluated alignment. The second Union Station building was replaced in 1911 by the Classical Revival building standing today, renamed Pennsylvania Station in 1928. The Edmondson Avenue Station was built in 1919, located at the intersection of the alignment with Edmondson Avenue. The ultimately underutilized station served local trains; the brick building still stands, although today it houses a restaurant. Junction towers were constructed in the circa early twentieth century, including one that still stands today (although abandoned) called the Gwynn Junction Tower at Gwynns Falls Park. The B&P Junction Tower built near Pennsylvania Station closed in 1987 and appears to no longer exist. Plans were announced in 1928 to electrify the PW&B Railroad and commence with an improvement project that included the elimination of grade crossings, widening the main line to three and four tracks, and new B&P and Union tunnels. The evaluated line was electrified by 1935. Thanks to financial assistance from the Public Works Administration, PW&B eliminated the grade crossings, widened the main line, and built the new Union Tunnel. A new B&P Tunnel, however, proved to be too expensive.

The PRR absorbed the New York Central Railroad, creating the Penn Central Transportation Company in 1968, and continued to own and operate the evaluated alignment. Although Penn Central declared bankruptcy two years later, it continued to operate the PB&W Railroad until Amtrak bought most of the railroad assets, including the evaluated alignment, in 1976. Today the alignment is an active part of Amtrak's Northeast Corridor. The MARC commuter trains, serving the Baltimore-Washington metropolitan area, have utilized the alignment since 1983; the West Baltimore MARC Station is located at 400 N. Smallwood Street. Norfolk Southern freight trains also have trackage rights to the alignment.

Significance Evaluation

The B&P Railroad/PB&W Railroad alignment, between the Baltimore City and County line to the west and Penn Station to the east, was evaluated for significance under National Register of Historic Places (NRHP) Criteria A, B, and C, using the guidelines set forth in the National Register Bulletin "How to Apply the National Register Criteria for Evaluation." The property was not evaluated for eligibility under Criterion D as part of this assessment.

The evaluated segment is a critical component of the B&P Railroad (later the PB&W Railroad) alignment that established a reliable connection between Baltimore and Washington, D.C., and ultimately to Philadelphia and New York, for the Pennsylvania Railroad. The segment was built during an era when the railroad became critical for both passenger and freight service, contributing to the continued growth and prominence of industrial cities like Baltimore. This link also connected to rural southern Maryland where people could now have better access to efficient transportation, and their agricultural products could be easily transported to major commercial markets like Washington, D.C, Baltimore and beyond. The railroad alignment has seen some modifications, most notably bridge replacements and catenary line additions during the first decades of the twentieth century; however, these changes do not diminish the railroad alignment's association with this historic context, and instead enhances it, because the importance of this railroad alignment to the social, economic, commercial, industrial and agricultural development of Baltimore and southern Maryland continued well into the twentieth century. Therefore, the B&P Railroad/PB&W Railroad is eligible under Criterion A.

Research has not shown that the alignment is associated with the lives of individuals significant in the past. Therefore, this segment of the B&P Railroad/PB&W Railroad is not eligible under Criterion B.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

This B&P Railroad/PB&W Railroad segment opened in 1872. Although its tracks have likely been replaced over time, and related structures such as the smoke jack for the B&P tunnel have been demolished, the line retains many character-defining features, including its historic alignment, tunnel, early twentieth century railroad bridges, viaducts and junction tower, and circa 1935 catenary lines. In particular, the 1873 tunnel is a significant product of engineering that is 7,499-foot long, extending from west Baltimore to Pennsylvania Station. This tunnel is largely unchanged, retaining its original masonry construction, including its round arched openings, and its dual track alignment. Other features, such as the bridges at Gwynns Falls Park and Mulberry Street are also intact from their original construction. The bridge over the park is a sizeable reinforced concrete arch structure spanning the Western Maryland Railroad and W. Baltimore Street. Also made of reinforced concrete, the Mulberry Street bridge not only has Art Deco style details, but also carries imprints of the Pennsylvania Railroad's keystone logo. This railroad alignment is distinctive enough to be considered a true representative of railroad construction. Therefore, the B&P Railroad/PB&W Railroad is eligible under Criterion C.

Based on the evaluated criteria, this segment of the B&P Railroad/PB&W Railroad is eligible for listing in the NRHP under Criteria A and C. The period of significance is 1872 (when this alignment of the B&P Railroad first opened) to 1976 (last year the PB&W Railroad operated). The boundaries are limited to the railroad right-of-way. Except for the West Baltimore MARC Station and the ancillary buildings at the northeast end of the segment (likely modern buildings, although not confirmed due to limited access), all structures are contributors to this alignment.

Works Consulted

Baltimore, Maryland Quadrangle. USGS Topographic Map: 1890, 1892, 1899, and 1904.

Gunnarsson, Robert L. The Story of the Northern Central Railway: From Baltimore to Lake Ontario. Sykesville, Maryland: Greenberg Publishing Company, Inc., c1991.

Latrobe, Benjamin, Jr. Baltimore, Industrial Gateway on the Chesapeake Bay. Edited by Dennis M. Zembala. Baltimore, Maryland: Baltimore Museum of Industry, c1995.

Wearmouth, John M. Baltimore and Potomac Railroad: The Pope's Creek Branch. Baltimore, Maryland and Washington, D.C.: The Baltimore Chapter and The Washington D.C. Chapter, National Railway Historical Society, Inc., 1986.

Wrabel, Frank A. "Terminals, Tunnels and Turmoil: The History of Pennsylvania Station – Baltimore." The Keystone vol. 28, no. 1 (Spring 1995): 11-62.

Zeoli, Vanessa. "Union Railroad," Maryland Historical Trust Determination of Eligibility Form, 17 November 2010.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** ____

Criteria: ___A ___B ___C ___D **Considerations:** ___A ___B ___C ___D ___E ___F ___G

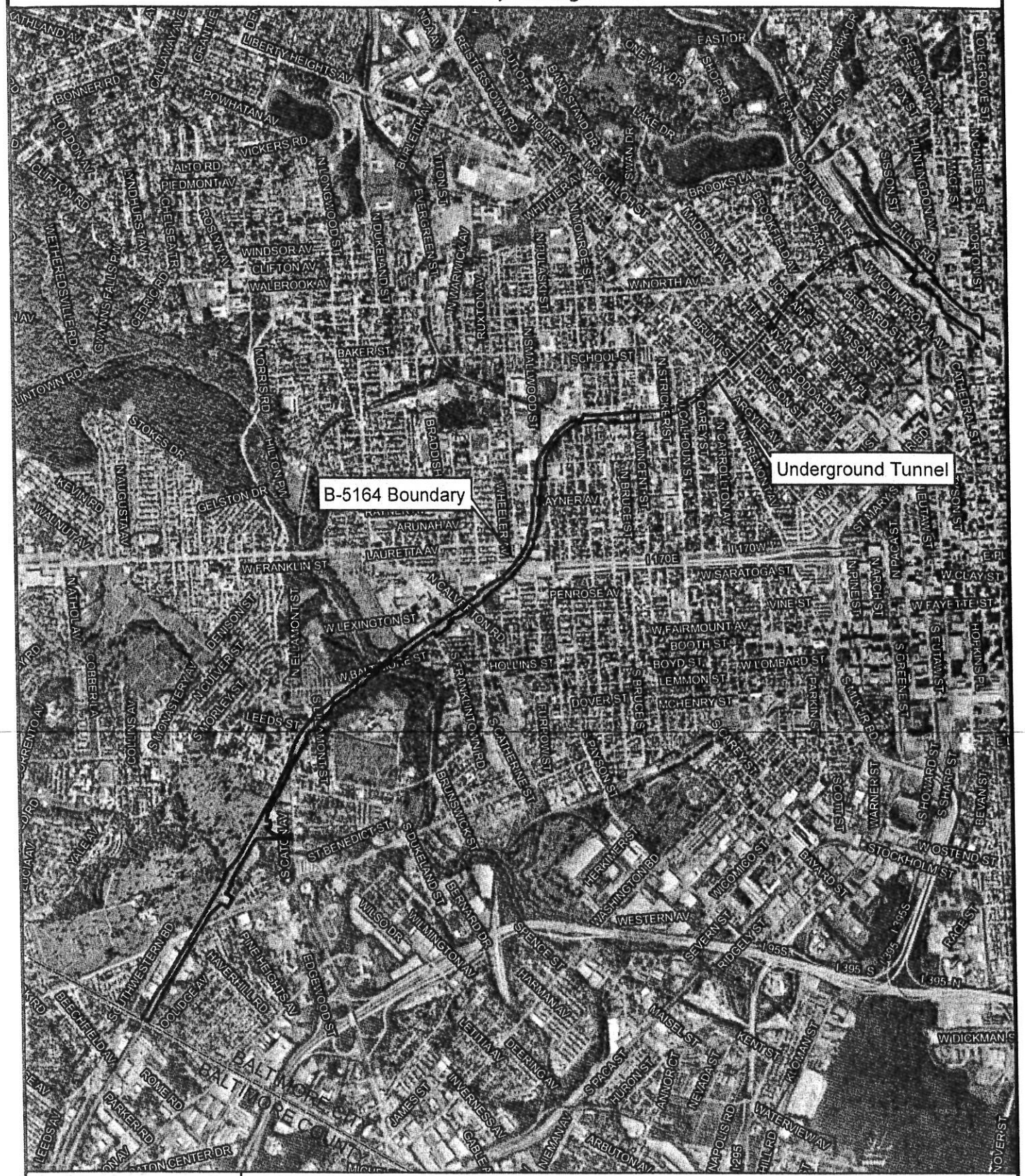
MHT Comments:

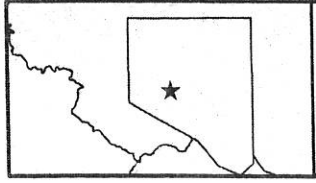
Reviewer, Office of Preservation Services **Date**

Reviewer, National Register Program **Date**

Baltimore & Potomac Railroad/Philadelphia, Baltimore & Washington Railroad (B-5164)

Baltimore, Maryland





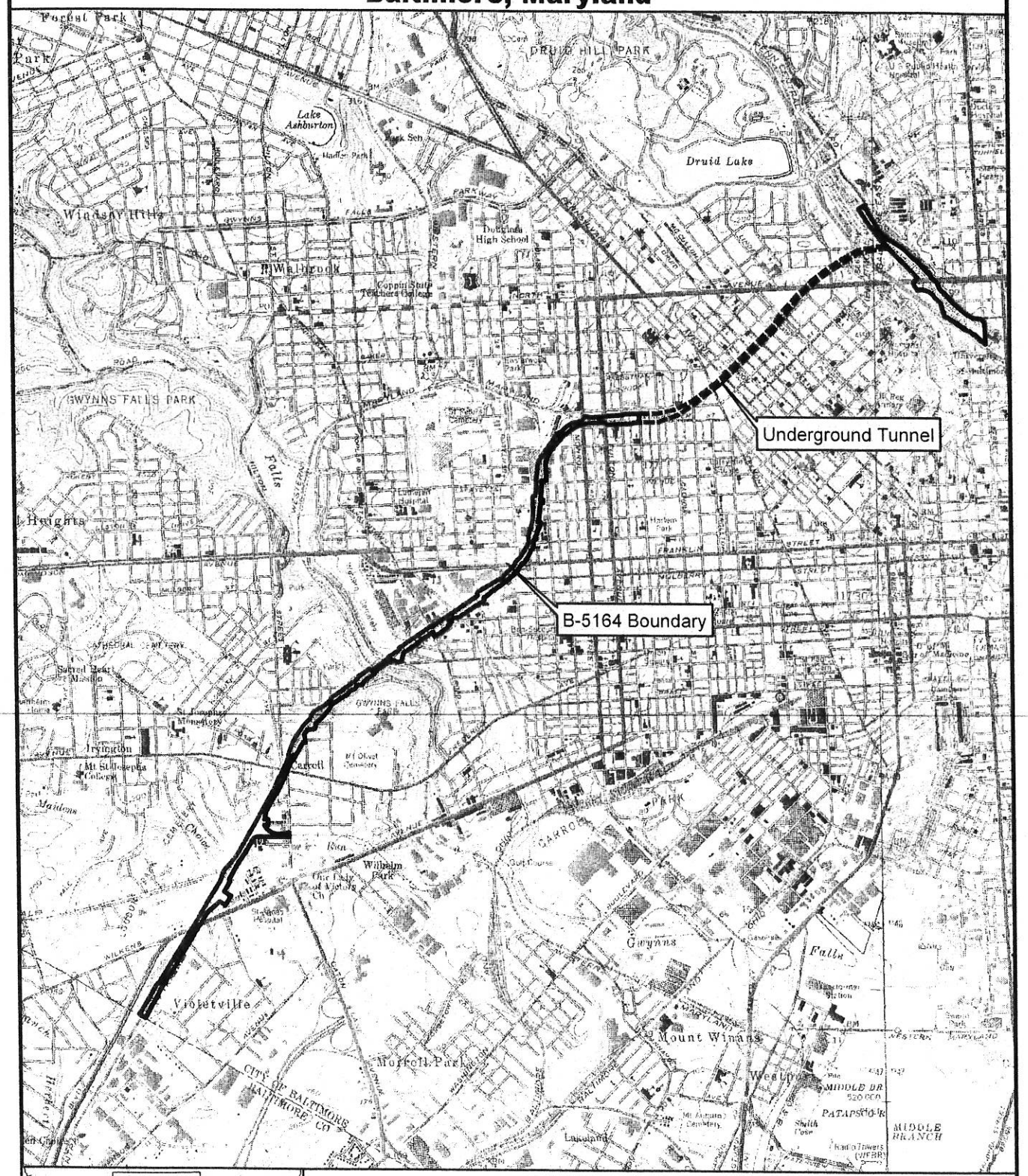
Site Plan

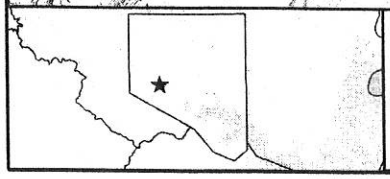
0 1,500 3,000 6,000 Feet

May 2012

Baltimore & Potomac Railroad/Philadelphia, Baltimore & Washington Railroad (B-5164)

Baltimore, Maryland





Location Map

0 1,500 3,000 6,000 Feet

May 2012

Source: Baltimore West and East USGS 7.5' DRGs

From: Steve Howard [mailto:pres@boltonhill.org]
Sent: Thursday, April 23, 2015 08:48 AM
To: Fishburne, Michelle (FRA)
Subject: Re: Baltimore and Potomac Tunnel Project

Ms. Fishburne,

I am in receipt of your invitation to participate in the consulting party for the BP Tunnel project. I would like to participate.

Thank you.

Steve Howard
President, Mount Royal Improvement Association

From: Carl Young [mailto:carl.m.young@gmail.com]
Sent: Sunday, April 26, 2015 9:22 PM
To: Fishburne, Michelle (FRA)
Cc: Carl Young; Jason Stover
Subject: Re: Baltimore and Potomac Tunnel Project

Dear Ms. Fishburne -

The Historic Mount Royal Terrace Association [HMRTA] accepts the invitation to participate in the B&P Tunnel project as a consulting party. HMRTA is the neighborhood association that represents homeowners of the Mount Royal Terrace Historic District, which is Site Number B-4251 of the Maryland Inventory of Historic Properties. As such our district meets substantially all of the requirements for listing of historic districts in the National Register of Historic Places.

Please continue to send email correspondence to our Association email address - historicmountroyal@gmail.com

Thank you for contacting us.

Sincerely,
Carl Young
board member, HMRTA
m: 410-456-3415

From: Kim Jumper [mailto:kim.jumper@shawnee-tribe.com]
Sent: Tuesday, April 28, 2015 10:54 AM
To: Fishburne, Michelle (FRA)
Subject: RE: Baltimore and Potomac Tunnel Project

The Shawnee Tribe is interested in consulting on this project.

Kim Jumper
Shawnee Tribe THPO

PRESERVATION
MARYLAND

April 29, 2015

Ms. Michelle Fishburne
Environmental Protection Specialist
Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac Tunnel Project

Dear Ms. Fishburne:

Preservation Maryland is pleased to serve as a Section 106 Consulting Party for the Baltimore and Potomac Tunnel Project in Baltimore, Maryland.

Thank you for the invitation and I look forward to hearing more from you about this project.

Sincerely,

Margaret De Arcangelis

Margaret De Arcangelis
Preservation Services Director

THE SOCIETY FOR THE PRESERVATION OF MARYLAND ANTIQUITIES, INC.
3600 Clipper Mill Road • Suite 248 • Baltimore, Maryland 21211 • 410-685-2886 • FAX 410-539-2182 • *www.PreservationMaryland.org*

From: Holcomb, Eric [mailto:Eric.Holcomb@baltimorecity.gov]
Sent: Wednesday, April 29, 2015 12:50 PM
To: Fishburne, Michelle (FRA)
Subject: Section 106 Consulting Party Invitation Baltimore and Potomac Tunnel Project

Dear Ms. Fishburne

Please include the Commission for Historical and Architectural Preservation as a consulting party on this project.

Thank you,

Eric Holcomb

Executive Director

Commission For Historical And Architectural Preservation Division

Baltimore City Department of Planning

8th Floor, 417 E Fayette St

Baltimore MD 21202-3416

t 443-984-2728 f 410-396-5662

e-mail: eholcomb@baltimorecity.gov

MISSION

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For more information, contact our website at www.baltimorecity.gov/government/planning/index.html

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From: Johns Hopkins [mailto:hopkins@baltimoreheritage.org]
Sent: Thursday, April 30, 2015 9:48 AM
To: Fishburne, Michelle (FRA)
Cc: Cole, Beth
Subject: B&P Tunnel Section 106 Consulting Party

Ms. Fishburne - Thank you for your letter inviting us to be a Section 106 consulting party on the Baltimore and Potomac Railroad Tunnel project. We indeed would like to do so and look forward to the first meeting whenever that is scheduled.

Thank you again and we look forward to participating. Johns

Johns Hopkins, Executive Director
Baltimore Heritage
11 ½ West Chase Street, Baltimore, MD 21201
office 410.332.9992

From: Ngongang, Theo [mailto:Theo.Ngongang@baltimorecity.gov]
Sent: Thursday, April 30, 2015 2:32 PM
To: Fishburne, Michelle (FRA)
Cc: Stosur, Tom
Subject: Baltimore and Potomac Tunnel Project

Dear Michelle,
On behalf of Director Tom Stosur, I'm writing you in response to your email/letter to him dated April 23rd.
I'll be the point of contact for the Planning Department, so please add me to your list.
I look forward to participating in the consultation.
Thank you,
T

N. Theo Ngongang | Assistant Director | ***Baltimore City Department of Planning***
417 E. Fayette St. 8th Floor Baltimore, MD 21218 | **Direct: 410.396.8337**

From: Agnes M. Smith -GOCI- [mailto:agnes.smith@maryland.gov]
Sent: Tuesday, May 12, 2015 12:15 PM
To: Fishburne, Michelle (FRA)
Cc: Lisa Savoy; Keith Colston -GOCI-
Subject: Section 106 Consulting Party Invitation

STATE OF MARYLAND
Maryland Commission on Indian Affairs

Larry Hogan
Governor

Boyd K. Rutherford
Lt. Governor

E. Keith Colston
Administrative Director

Commissioners

Chair
Lisa Savoy

Vice Chair
Ashley Minner

Donna Abbott

Virginia Busby

Bob Gajdys

Robert F. Killen

Rico Newman

Rebecca Stone

Leanora E. Winters

May 12, 2015

Greetings Ms. Michelle Fishburne,

On behalf of the Maryland Commission on Indian Affairs, I would like to state comments and concerns of our commissioners.

- What impact will the project have on lower income people who live in the area and/or rely on existing transportation systems in the area?
- How many Native Americans/Indigenous Peoples live in the area will be affected?
- How many Native Americans/Indigenous Peoples use the existing transportation systems?
- Could census data be utilized to supply the appropriate data?
- Have there been any Native American/Indigenous remains found during the construction?
- COMMENT: At a minimum the human impact on the people disrupted by the magnitude and length of a project of this size must be taken into consideration.
- COMMENT: There is a concerned if any native remains are found during the construction. MCIA with assistance from the DNR and MHT were able to place over 180 unidentified remains in appropriate places of repose" back to Mother Earth, but MCIA would need an existing procedure to address this issue with the Maryland Historical Trust. Recommendations were previously provided to MHT to develop new procedures but no action has been taken that we are aware of.
- COMMENT: Commission members strongly agree that MCIA should consult.
- COMMENT: If 106 is being required, MCIA should be listed as "party of interest" that we will be informed if items of native cultural interest are uncovered, and MCIA should comment on any project that could potentially affect our communities

As Chair of the Maryland Commission on Indian Affairs (MCIA), I respectfully share the questions and comments above concerning participation as a consulting party in the Section 106 (36 CFR Part 800.3(f)) process for the Baltimore and Potomac (B&P) Tunnel Project in Baltimore Maryland.

Sincerely,

Lisa Savoy, Chair MCIA

301 West Preston Street, Suite 1500, Baltimore, Maryland 21201
TELEPHONE: 410-767-7631 • FAX: 410-333-5957 • TTY: 1-800-735-2258
WEBSITE: www.americanindian.maryland.gov

--
Agnes M. Smith
Project Coordinator, Governor's Ethnic Commissions
Governor's Office of Community Initiatives
301 W. Preston Street, Suite 1500
Baltimore MD 21201
410-767-7491 (Office)
410-333-5957 (Fax)
Agnes.Smith@maryland.gov

Delaware Tribe Historic Preservation Representatives
Department of Anthropology
Gladfelter Hall
Temple University
1115 W. Polett Walk
Philadelphia, PA 19122
temple@delawaretribe.org

June 14, 2015

US Department of Transportation
Federal Railroad Administration
Attn: Michelle Fishburne
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac Tunnel Project in Baltimore, Maryland

Dear Michelle Fishburne,

Thank you for informing the Delaware Tribe regarding the above referenced project. The Delaware Tribe is committed to protecting historic sites important to our tribal heritage, culture and religion.

We are interested in learning more about the above project and look forward to receiving the results of the engineering and environmental studies. We would also like to continue as a consulting party on this project. We appreciate your cooperation and look forward to working together on our shared interests in preserving Delaware cultural heritage.

If you have any questions, feel free to contact this office by phone at (609) 220-1047 or by e-mail at temple@delawaretribe.org.

Sincerely,

Blair Fink

Blair Fink
Delaware Tribe Historic Preservation Representatives
Department of Anthropology
Gladfelter Hall
Temple University
1115 W. Polett Walk
Philadelphia, PA 19122

From: Jason Vaughan [mailto:jvaughan@baltimoreheritagearea.org]
Sent: Thursday, June 18, 2015 12:50 PM
To: Christeen Taniguchi
Subject: RE: Baltimore and Potomac Tunnel Project: Invitation and Upcoming Consulting Parties Meeting

Hi Christeen,

Thank you for the invitation. The heritage area is honored to be involved in the process. I have added the 7/16 meeting to my schedule.

Sincerely,

Jason

==========
Jason Vaughan, MHP
Director, Historic Preservation and Interpretation
Baltimore Heritage Area Association, Inc.
100 Light Street, 12th Floor
Baltimore, MD 21202
Office: 410-878-6411 Ext 3 | Cell: 202-320-0283
Visit us online at www.explorebaltimore.org | www.facebook.com/baltimoreheritagearea

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

David R. Craig, Secretary
Wendi W. Peters, Deputy Secretary

Maryland Department of Planning
Maryland Historical Trust

September 8, 2015

Ms. Michelle Fishburne
Environmental Protection Specialist
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac (B&P) Tunnel Project
Section 106 Review of Historic Architectural and Archeological Technical Reports
Baltimore City, Maryland

Dear Ms. Fishburne,

Thank you for providing the Maryland Historical Trust (Trust) with copies of the Federal Railroad Administration's (FRA) technical reports for historic architectural resources and archeology. The reports present a delineation of the historic architectural area of potential effects (APE), identification of historic properties and historic district contributing elements, determinations of eligibility for the National Register of Historic Places, and archeological potential. The Trust has reviewed the materials as part of our ongoing consultation for this undertaking, pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. We offer the following comments and recommendations.

Archeology: Thank you for providing us with a copy of the following draft report, for review and comment: *B&P Tunnel Project, Baltimore, Maryland – Phase IA Archeological Study* (July 2015). The draft presents useful information regarding the project itself, the area's environmental setting and cultural history, previous investigations in the project vicinity, and an assessment of the archeological potential of the study area. We agree that portions of the study area have a high potential for containing National Register eligible archeological resources that have not yet been identified, particularly resources reflecting its varied uses during the historic period. Given the area's urban setting and constraints, we agree with the report's conclusions that Phase I archeological field investigations should be deferred until selection of a Locally Preferred Alternative. We await further consultation as project planning proceeds to determine an appropriate level of effort to identify and evaluate archeological resources that may be impacted by the undertaking.

We ask that you please incorporate the following changes in the final document:

1. The report must contain a title page that clearly identifies the name and mailing address of the author(s) and project sponsor.
2. The report should add a brief section that succinctly states the professional qualifications of the author(s).

Historic Built Environment: Trust staff reviewed the *Architectural Historic Properties Survey* (July 2015) and Determination of Eligibility (DOE) Forms prepared by Dovetail Cultural Resources Group and RK&K. Prior investigations of the project area have generated considerable information regarding historic resources. This current study identified and documented six (6) additional historic architectural resources. The study also identified contributing elements located within the project's APE for the nine (9) historic districts along the project's alignment. Our comments regarding the eligibility of historic properties for listing in the National Register of Historic Places are provided below.

The following properties are **eligible** for listing in the National Register of Historic Places:

1. B&O Railroad Baltimore Belt Line (MIHP No. B-5287);
2. B&O Baltimore Belt Bridge over Jones Falls Valley (MIHP No. B-5288).

The following properties are **not eligible** for listing in the National Register of Historic Places:

1. Baltimore Car Wheel Works, 2001 Winchester Street (MIHP No. B-5291);
2. Baltimore DOT North Avenue Maintenance Yard, 560 W. North Avenue;
3. Baltimore Clay Products Company, 2113 W. Lafayette Avenue;
4. B. Green & Co. Grocery Warehouse, 2200 Winchester Street.

As noted above, there are nine (9) historic districts that are eligible or listed in the National Register of Historic Places within the project's APE. The quality and depth of existing information available for each historic district varies. The existing documentation often does not identify contributing and non-contributing resources within each district. In an effort to refine our knowledge of the historic districts, FRA has undertaken the identification of resources within the project's APE that contribute to the significance of the historic districts.

The Trust has conducted a cursory review of the contributing resources lists. We believe that the majority of buildings within the historic districts contribute to the significance of the districts. They are integral parts of the urban streetscape and are recognizable as historic buildings. Even if the buildings have been altered over time and possess modest amounts of integrity, they sufficiently convey their historic associations within the district's period of significance. We expect that the contributing resources lists include all properties that date to the district's period of significance that have not been radically altered.

We look forward to ongoing consultation with MTA and other involved parties to successfully complete the Section106 review of the Baltimore & Potomac Tunnel project as planning progresses. If you have questions or require any assistance, please contact Tim Tamburrino (for the historic built environment) at tim.tamburrino@maryland.gov \ 410-514-7637 or Beth Cole (for archeology) at beth.cole@maryland.gov \ 410-514-7631. Thank you for providing us this opportunity to comment.

Sincerely,

Elizabeth Hughes
Acting Director/State Historic Preservation Officer

TJT / 201503793
cc: Laura Schick (FRA)
Jacqueline Thorne (MDOT)
Jean-Wolfers-Lawrence (MTA)
Erik Almquist (RK&K)
Johns Hopkins (Baltimore Heritage)
Jason Vaughan (Baltimore National Heritage Area)
Margaret De Arcangelis (Preservation Maryland)
Lauren Schiszik (CHAP)
Kyle Leggs (Baltimore City Department of Planning)
Steve Howard (Mount Royal Improvement Association) – via email

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

David R. Craig, Secretary
Wendi W. Peters, Deputy Secretary

Maryland Department of Planning
Maryland Historical Trust

September 24, 2015

Ms. Michelle Fishburne
Environmental Protection Specialist
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac (B&P) Tunnel Project
Section 106 Review of Historic Architectural and Archeological Technical Reports
Baltimore City, Maryland

Dear Ms. Fishburne,

Thank you for providing the Maryland Historical Trust (Trust) with Federal Railroad Administration's (FRA) addendum to the previous technical report for historic architectural resources. The Trust has reviewed the materials as part of our ongoing consultation for this undertaking, pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

Historic Built Environment: Trust staff reviewed twelve (12) new DOE forms prepared as an addendum to the *Architectural Historic Properties Survey* (July 2015). Our comments regarding the eligibility of these historic properties for listing in the National Register of Historic Places (National Register) are provided below.

1. Ward Baking Company (MIHP No. B-5112-2): It is the Trust's opinion that this property is **individually eligible** for listing in the National Register under Criterion A. The property also contributes to the Midtown Edmondson Historic District;
2. Baltimore & Potomac Railroad, Edmondson Avenue Station (MIHP No. B-5112-3): We agree that this property is **not individually eligible** for listing in the National Register but it does contribute to the Midtown Edmondson Historic District;
3. Fire Department Engine House No. 36 (MIHP No. B-5112-4): We agree that this property is **individually eligible** for listing in the National Register and contributes to the Midtown Edmondson Historic District;
4. Sinclair Filling Station (MIHP No. B-5118-1): We agree that this property is **not individually eligible** for listing in the National Register but it does contribute to the Midtown Edmondson Historic District;
5. Atlas Safe Deposit & Storage Company Warehouse Complex (MIHP No. B-5118-2): It is the Trust's opinion that this property is **individually eligible** for listing in the National Register under Criterion A and C. The property also contributes to the Midtown Edmondson Historic District;
6. Continental Oil Company Gas Station (MIHP No. B-5118-3): We agree that this property is **not individually eligible** for listing in the National Register but it does contribute to the Midtown Edmondson Historic District;
7. West End Motors, Inc. (MIHP No. B-5118-4): We agree that this property is **not individually eligible** for listing in the National Register but it does contribute to the Midtown Edmondson Historic District;
8. Baltimore & Potomac Railroad, West Mulberry Street Bridge (MIHP No. B-5164-1): We agree that this property is **not individually eligible** for listing in the National Register but it does contribute to the Baltimore & Potomac Railroad;
9. Western Maryland Railroad, Owings Mills Division (MIHP No. B-5293): We agree that this property is **eligible** for listing in the National Register under Criteria A and C;

10. Carver Vocational-Technical High School (MIHP No. B-5294): We agree that this property is **eligible** for listing in the National Register under Criteria A and C;
11. Mount Royal Reservoir Pipe Vault (MIHP No. B-5295): We agree that this property is **not eligible** for listing in the National Register;
12. Warehouse at 2020 Mosher Street (MIHP No. B-5296): We agree that this property is **not eligible** for listing in the National Register;

We look forward to ongoing consultation with MTA and other involved parties to successfully complete the Section106 review of the Baltimore & Potomac Tunnel project as planning progresses. If you have questions or require any assistance, please contact Tim Tamburrino (for the historic built environment) at tim.tamburrino@maryland.gov \ 410-514-7637 or Beth Cole (for archeology) at beth.cole@maryland.gov \ 410-514-7631. Thank you for providing us this opportunity to comment.

Sincerely,

Elizabeth Hughes
Acting Director/State Historic Preservation Officer

TJT / 201504062
cc: Laura Schick (FRA)
Jacqueline Thorne (MDOT)
Jean-Wolfers-Lawrence (MTA)
Erik Almquist (RK&K)
Johns Hopkins (Baltimore Heritage)
Jason Vaughan (Baltimore National Heritage Area)
Margaret De Arcangelis (Preservation Maryland)
Lauren Schiszik (CHAP)
Kyle Leggs (Baltimore City Department of Planning)
Steve Howard (Mount Royal Improvement Association) – via email

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

David R. Craig, Secretary
Wendi W. Peters, Deputy Secretary

Maryland Department of Planning
Maryland Historical Trust

November 20, 2015

Ms. Michelle Fishburne
Environmental Protection Specialist
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac (B&P) Tunnel Project
Section 106 Architectural Historic Properties Effects Assessment Report
Baltimore City, Maryland

Dear Ms. Fishburne:

Thank you for providing the Maryland Historical Trust (Trust) with Federal Railroad Administration's (FRA) assessment of effects on historic standing structures for the above-referenced undertaking. FRA's submittal represents ongoing consultation to assess the project's effects on historic properties, pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and the Maryland Historical Trust Act of 1985, as amended, State Finance and Procurement Article §§ 5A-325 and 5A-326 of the Annotated Code of Maryland. We conducted a thorough review of the materials and we are writing to provide our comments and concurrence.

Assessment of Effects: The FRA's efforts to identify and evaluate historic properties within the Area of Potential Effects for the B&P Tunnel Project resulted in the identification eighteen (18) architectural historic properties that are listed or eligible for listing in the National Register of Historic Places (National Register). The Trust completed a thorough review of the information presented in the *Architectural Historic Properties Effects Assessment Report* (FRA and MDOT 2015) and took into consideration the views of the public and the Section 106 Consulting Parties provided at the various project and consulting parties meetings. Based upon the results of the FRA's studies and consultation, the Trust agrees with the FRA's effects assessments. The three alternative alignments remaining under consideration (Alterative 3, Options A, B and C) will have an **adverse effect** on historic properties. Alternative 3, Option A will adversely affect six historic properties, while Alternative 3, Option B will adversely affect eight historic properties. Alternative 3, Option C will adversely affect ten historic properties. The affected properties are listed below:

Architectural historic properties adversely affected under Alternative 3, Option A include:
Baltimore & Ohio Belt Line Railroad (MIHP No. B-5287)
Baltimore & Ohio Belt Line Bridge over Jones Falls Valley (MIHP No. B-5288)
Baltimore & Potomac Railroad (MIHP No. B-5164)
Reservoir Hill Historic District (MIHP No. B-1379)
Midtown Edmondson Historic District
Lafayette Avenue Bridge over Amtrak (MIHP No. B-4553)

Architectural historic properties adversely affected under Alternative 3, Option B include:
Baltimore & Ohio Belt Line Railroad (MIHP No. B-5287)
Baltimore & Ohio Belt Line Bridge over Jones Falls Valley (MIHP No. B-5288)
Baltimore & Potomac Railroad (MIHP No. B-5164)
Reservoir Hill Historic District (MIHP No. B-1379)

Midtown Edmondson Historic District
Lafayette Avenue Bridge over Amtrak (MIHP No. B-4553)
Atlas Safe Deposit and Storage Company Warehouse Complex (MIHP No. B-5188-2)
Greater Rosemont Historic District (MIHP No. B-5112)

Architectural historic properties adversely affected under Alternative 3, Option C include:
Baltimore & Ohio Belt Line Railroad (MIHP No. B-5287)
Baltimore & Ohio Belt Line Bridge over Jones Falls Valley (MIHP No. B-5288)
Baltimore & Potomac Railroad (MIHP No. B-5164)
Reservoir Hill Historic District (MIHP No. B-1379)
Midtown Edmondson Historic District
Lafayette Avenue Bridge over Amtrak (MIHP No. B-4553)
Greater Rosemont Historic District (MIHP No. B-5112)
Edmondson Avenue Historic District (MIHP No. B-5187)
Ward Baking Company (MIHP No. B-5112-2)
Fire Department Engine House No. 36 (MIHP No. B-5112-4)

Continuing Section 106 Consultation: We commend the FRA's exemplary efforts to engage and seek the views of the public and Consulting Parties throughout the project planning process. This vital feedback, along with comments from resource and regulatory agencies, has assisted in the evaluation of project alternatives and will continue to inform the selection process as the FRA endeavors to balance a multitude of project goals and environmental considerations. All of the currently proposed alternatives impact historic properties by varying degrees. As FRA continues to refine the project plans, it should continue to thoroughly explore modifications to further avoid and reduce impacts to historic properties. This ongoing minimization work may assist FRA in the identification of a preferred alternative.

We look forward to further coordination with FRA and the Section 106 Consulting Parties to successfully complete the Section 106 review process, including the execution of an effective agreement document and the completion of archeological investigations once a preferred alignment has been selected.

If you have questions or need further assistance, please contact Beth Cole at 410-514-7631 / beth.cole@maryland.gov or Tim Tamburrino at 410-514-7637 or tim.tamburrino@maryland.gov. Thank you for providing us this opportunity to comment.

Sincerely,

Elizabeth Hughes
Director / State Historic Preservation Officer
Maryland Historical Trust

EH/TJT/EJC
201504398
Distribution List:

Laura Schick (FRA)	Jacqueline Thorne (MDOT)	Jean-Wolfers-Lawrence (MTA)
Erik Almquist (RK&K)	Christine Taniguchi (RK&K)	Johns Hopkins (Baltimore Heritage)
Lauren Schiszik (CHAP)	Nicholas Redding (Preservation Maryland)	Kyle Leggs (Baltimore City Department of Planning)
Jason Vaughan (Baltimore National Heritage Area)		Steve Howard (Mount Royal Improvement Association) – via email

Preserving America's Heritage

June 7, 2016

Ms. Laura A. Shick
Environmental Protection Specialist
Federal Railroad Administration
Office of Railroad Policy and Development
1200 New Jersey Avenue, SE
Washington, DC 20590

Ref: *Proposed Baltimore and Potomac Tunnel Project*
Baltimore City, Maryland

Dear Ms. Shick:

The Advisory Council on Historic Preservation (ACHP) has received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and it is determined that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Maryland State Historic Preservation Office (SHPO), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the notification of adverse effect. If you have any questions or require further assistance, please contact Christopher Wilson at 202-517-0229 or via e-mail at cwilson@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION
401 F Street NW, Suite 308 • Washington, DC 20001-2637
Phone: 202-517-0200 • Fax: 202-517-6381 • achp@achp.gov • www.achp.gov

Delaware Tribe Historic Preservation Representatives
P.O. Box 64
Pocono Lake, PA 18347
temple@delawaretribe.org

August 1, 2016

US Dept. of Transportation
Federal Railroad Administration
1200 New Jersey Ave., SE
Washington, DC 20590

RE: Section 106 Update and Section 4(f) De Minimis Notification B & P Tunnel Project

Dear Mr. Bratcher,

Thank you for updating the Delaware Tribe of the above proposed project. We concur with the "no adverse effect" findings presented in this update. We would like to continue as consultants on this project.

We ask that in the event that a concentration of artifacts and/or in the unlikely event any human remains are accidentally unearthed during the course of the project that all work is halted until the Delaware Tribe of Indians is informed of the inadvertent discovery and a qualified archaeologist can evaluate the find.

If you have any questions, feel free to contact this office by phone at (610) 761-7452 or by e-mail at temple@delawaretribe.org.

Sincerely,

Susan Bachor
Delaware Tribe Historic Preservation Representative

Christeen Taniguchi

From: Johns Hopkins <hopkins@baltimoreheritage.org>
Sent: Thursday, August 4, 2016 2:00 PM
To: Christeen Taniguchi
Cc: Beth Cole -MDP-; Laura.Shick@dot.gov; Tim Tamburrino; Eric Almquist; Amanda Apple -MDP-; brandon.bratcher@dot.gov
Subject: RE: B&P Tunnel Sec. 106

Thanks chrisreen. This helps. Johns

On Aug 4, 2016 12:01 PM, "Christeen Taniguchi" <ctaniguchi@rkk.com> wrote:

Hi Johns,

The two rowhouses would be demolished to maintain connectivity between North Bentalou Street and the adjoining alleyway located south of the Lauretta Avenue rowhouses.

Your insightful comments have been invaluable to this project's Section 106 process, so thank you! Let us know of any other questions or comments.

Christeen

From: Johns Hopkins [mailto:hopkins@baltimoreheritage.org]
Sent: Wednesday, August 3, 2016 4:29 PM
To: Christeen Taniguchi <ctaniguchi@rkk.com>
Cc: brandon.bratcher@dot.gov; Amanda Apple -MDP- <amanda.apple@maryland.gov>; Tim Tamburrino <tim.tamburrino@maryland.gov>; beth cole <beth.cole@maryland.gov>; Laura.Shick@dot.gov; Eric Almquist <ealmquist@rkk.com>
Subject: Re: B&P Tunnel Sec. 106

Thanks Christeen. I'll stop harking on the corner of North and Eutaw...it's clear you get the message.

As for the two additional rowhouse to be demolished, these are not exceptionally great pieces of architecture, but are nice historic rowhouses that are part of an otherwise continuous block without any gaps. It would be helpful to hear (or see) what is going in there that requires their demolition and how it would impact the

remaining houses in the row. On one end of the spectrum, I'm envisioning the street needs widening and that's it. On the other end, I'm envisioning a massive vent plant directly adjacent to the remaining houses. Any help trying to visualize what's going on? Thanks again. Johns

---

Johns Hopkins, Executive Director
Baltimore Heritage
11 ½ West Chase Street, Baltimore, MD 21201
office 410.332.9992

On Wed, Aug 3, 2016 at 4:13 PM, Christeen Taniguchi <ctaniguchi@rkk.com> wrote:

Hi Johns,

On behalf of FRA, thank you for your input on the recent B&P Tunnel project Section 106 Update submittal. Please see below for FRA's responses:

1) Vent Plant – We understand Baltimore Heritage's continued concern about a possible intermediate ventilation plant at the corner of Eutaw Place and North Avenue. Please be assured that FRA and the B&P Tunnel project team are fully committed to incorporating input from the Section 106 consulting parties and public as we design the vent plant. We are working to make the structure as unobtrusive as possible and blend it into the neighborhood through the use of architectural and landscaping treatments. We are also considering the feasibility of adding shallow store fronts and intend to work with interested stakeholders to ensure compatibility with potential future development plans.

2) South Portal Area – The two additional rowhouses to be demolished are located at the southwest corner of Lauretta Avenue and N. Bentalou Street. Their addresses are: 2301 Lauretta Avenue and 2303 Lauretta Avenue.

As you know, the FEIS is scheduled to be released in October 2016. If you'd like, we can add you to the list of interested parties we'll be reaching out to when that document is released to the public.

Let us know of any other questions or comments you may have, and thank you for continuing to play an active and valuable role as a consulting party.

Christeen

From: Johns Hopkins [mailto:hopkins@baltimoreheritage.org]
Sent: Monday, August 1, 2016 11:32 AM
To: brandon.bratcher@dot.gov; Christeen Taniguchi <ctaniguchi@rkk.com>; Amanda Apple -MDP- <amanda.apple@maryland.gov>
Subject: B&P Tunnel Sec. 106

Christeen -- Thank you for sending over the revised Sec. 106 report on the B&P tunnel. I have one comment and one question:

1) Vent Plant -- Thank you for eliminating the Whitelock Street garden for the north vent plant. We still have concerns about the possible site at the corner of Eutaw Place and North Avenue. This is the major gateway and connector between Bolton Hill and Reservoir Hill, and we believe that this corner warrants a structure that can bring the neighborhoods together -- something the vent plant would not do. Although historically there was a large building at the corner, two important things are different this time around: a) the vent plant would not be a hive of activity as the historic building was, but rather by design a place where people are not allowed; and b) historically what we know today as the Reservoir Hill and Bolton Hill neighborhoods were lumped together and known as Mount Royal. Then the community was more seamless. Today North Avenue has unfortunately become full of barriers between the two "new" neighborhoods, and today residents and planners are looking for ways to break down those barriers, especially along North Avenue. A large people-less vent plant will not contribute to this effort, especially on the vital corner of North and Eutaw.

2) South Portal Area -- From the report, it seems as if the number of demolitions is being reduced. Thank you. But I could not get a good idea of which rowhouses were being added to the demolition list in the Greater Rosemont Historic District and the Edmondson Avenue Historic District. Is it possible to email me the addresses of these places?

Thanks Christeen. Johns

Johns Hopkins, Executive Director
Baltimore Heritage
11 ½ West Chase Street, Baltimore, MD 21201
office 410.332.9992

"RK&K" and "RK&K Engineers" are registered trade names of Rummel, Klepper & Kahl, LLP, a Maryland limited liability partnership. This message contains confidential information intended only for the person or

MARYLAND DEPARTMENT OF
PLANNING
MARYLAND HISTORICAL TRUST

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Wendi W. Peters, Secretary
Ewing McDowell, Deputy Secretary

October 11, 2016

Mr. Michael Johnsen
Environmental Protection Specialist
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Baltimore and Potomac (B&P) Tunnel Project
Section 106 Update
Baltimore City, Maryland

Dear Mr. Johnsen:

Thank you for providing the Maryland Historical Trust (Trust) with Federal Railroad Administration's (FRA) latest update for the above-referenced undertaking. FRA's submittal represents ongoing consultation to assess the project's effects on historic properties, pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, and the Maryland Historical Trust Act of 1985, as amended, State Finance and Procurement Article §§ 5A-325 and 5A-326 of the Annotated Code of Maryland. We are writing to provide our comments and concurrence.

Revised Area of Potential Effects (APE): The Trust understands that the project's APE has been amended to reflect ongoing refinements to the preferred alternative (Alternative 3B). We agree that the current APE adequately encompasses the area in which the undertaking may directly or indirectly cause alterations in the character or use of historic properties.

Supplemental Identification and Evaluation: Trust staff has reviewed the Determination of Eligibility (DOE) form prepared for the John Eager Howard School and Recreation Center (MIHP No. B-1379-3) which is located within the APE for the Intermediate Vent Plant. We concur that the school is not eligible for listing in the National Register of Historic Places.

Newly identified historic properties within the revised APE also include the National Register-eligible Union Railroad (MIHP No. B-5163), the National Register-listed Bolton Hill Historic District (MIHP No. B-64) and a commercial building located at 900-908 W. North Avenue that contributes to the significance of the National Register-listed Reservoir Hill Historic District (MIHP No. B-1379).

Due to the selection and refinement of Alternative 3B, we acknowledge that the following resources are no longer located within the undertaking's APE: the David Bachrach House/Gertrude Stein House (MIHP No. B-4098), the Carver Vocational-Technical High School (MIHP No. B-5294) and the Western Maryland Railroad, Owings Mills Division (MIHP. No. B-5293).

Assessment of Effects: The Trust confirms that the overall undertaking continues to have an **adverse effect** on historic properties. The adversely affected properties for Alternative 3B include:

Baltimore & Ohio Belt Line Railroad (MIHP No. B-5287)
Baltimore & Ohio Belt Line Bridge over Jones Falls Valley (MIHP No. B-5288)
Baltimore & Potomac Railroad (MIHP No. B-5164)
Reservoir Hill Historic District (MIHP No. B-1379)
Midtown Edmondson Historic District (MIHP No. TBD)
Lafayette Avenue Bridge over Amtrak (MIHP No. B-4553)
Atlas Safe Deposit and Storage Company Warehouse Complex (MIHP No. B-5188-2)
Greater Rosemont Historic District (MIHP No. B-5112)
Edmondson Avenue Historic District (MIHP No. 5187)

Section 4(f) de minimis Impact Determination: The Trust agrees that the undertaking will have no adverse effect on the Union Railroad (MIHP No. B-5163), Ward Baking Company (MIHP No. B-5112-2) and Fire Department Engine House No. 36 (MIHP No. B-5112-4). For Section 4(f) purposes, we acknowledge that the FRA intends to seek a *de minimis* impact determination pursuant to 23 CFR 774 for these properties.

Continuing Section 106 Consultation: We look forward to further coordination with FRA and the consulting parties to successfully complete the Section 106 review process and execute an effective agreement document to mitigate the undertaking's adverse effects.

If you have questions or need further assistance, please contact Beth Cole at 410-514-7631 / beth.cole@maryland.gov or Tim Tamburrino at 410-514-7637 or tim.tamburrino@maryland.gov. Thank you for providing us this opportunity to comment.

Sincerely,

Elizabeth Hughes
Director / State Historic Preservation Officer
Maryland Historical Trust

EH/TJT/EJC
201504398
Distribution List:
Laura Schick (FRA)
Brandon Bratcher (FRA)
Jacqueline Thorne (MDOT)
Jean-Wolfers-Lawrence (MTA)
Erik Almquist (RK&K)
Christine Taniguchi (RK&K)
Johns Hopkins (Baltimore Heritage)
Lauren Schiszik (CHAP)
Nicholas Redding (Preservation Maryland)
Margaret De Arcangelis (Preservation Maryland)
Kyle Leggs (Baltimore City Department of Planning)
Odessa L. Phillip (Baltimore City DOT)
Jason Vaughan (Baltimore National Heritage Area)
Steve Howard (Mount Royal Improvement Association) – via email

Correspondence Related to Natural Resources

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
PHONE: (410)573-4599 FAX: (410)266-9127

Consultation Tracking Number: 05E2CB00-2015-SLI-0326 December 09, 2014
Project Name: Baltimore and Potomac Tunnel

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

Preliminary

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

Preliminary

United States Department of Interior
Fish and Wildlife Service

Project name: Baltimore and Potomac Tunnel

Preliminary Species list

Provided by:

Chesapeake Bay Ecological Services Field Office
177 ADMIRAL COCHRANE DRIVE
ANNAPOLIS, MD 21401
(410) 573-4599

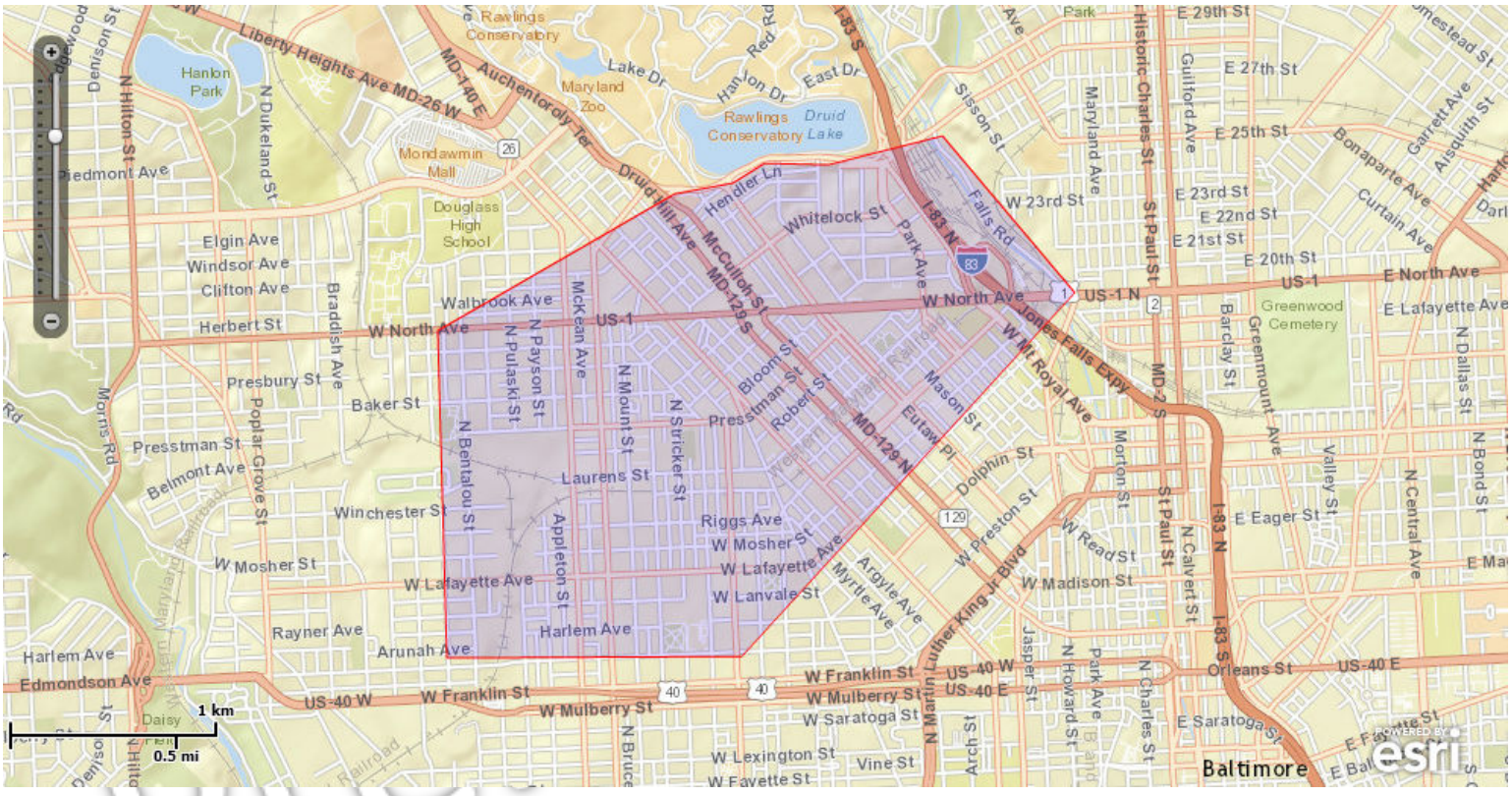
Consultation Tracking Number: 05E2CB00-2015-SLI-0326
Project Type: Transportation
Project Description: The proposed project involves replacing an existing 1.4 mile underground tunnel along one of three potential alignments in Baltimore City (see attached mapping). The project is in the planning phase and it remains to be determined whether the final tunnel design will extend beneath the Jones Falls or the track alignment will remain on the existing bridge structure above the stream before entering the B&P Tunnel.

Preliminary

United States Department of Interior
Fish and Wildlife Service

Project name: Baltimore and Potomac Tunnel

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-76.6268744 39.3179166, -76.6194114 39.3110768, -76.638204 39.2952033, -76.6548552 39.2951369, -76.6553744 39.3094166, -76.6419891 39.3153933, -76.6387276 39.3158581, -76.6369251 39.3167213, -76.6333202 39.3166549, -76.6268744 39.3179166)))

Project Counties: Baltimore (city), MD

United States Department of Interior
Fish and Wildlife Service

Project name: Baltimore and Potomac Tunnel

Endangered Species Act Species List

There are a total of 0 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

There are no listed species identified for the vicinity of your project.

Preliminary

Critical habitats that lie within your project area

There are no critical habitats within your project area.

Preliminary

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, *Governor*
Boyd K. Rutherford, *Lt. Governor*
Mark J. Belton, *Secretary*
Frank W. Dawson, III, *Deputy Secretary*

June 11, 2015

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

RE: Environmental Review for Baltimore and Potomac Tunnel Project, Baltimore City, MD.

Dear Ms. Willis:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2015.0251.bc

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, *Governor*
Boyd K. Rutherford, *Lt. Governor*
Mark J. Belton, *Secretary*
Mark L. Hoffman, *Acting Deputy Secretary*

15-MIS-201

June 29, 2015

Angela Willis
Maryland Transit Administration
6 St. Paul Street
Baltimore, MD 21202

Subject: Fisheries Information for the Proposed Baltimore and Potomac Tunnel Project, in Baltimore, Maryland.

Dear Ms. Willis,

The above referenced project has been reviewed to determine fisheries species in the vicinity of the proposed project. The proposed activities include the Baltimore and Potomac Tunnel Project, in Baltimore, Maryland.

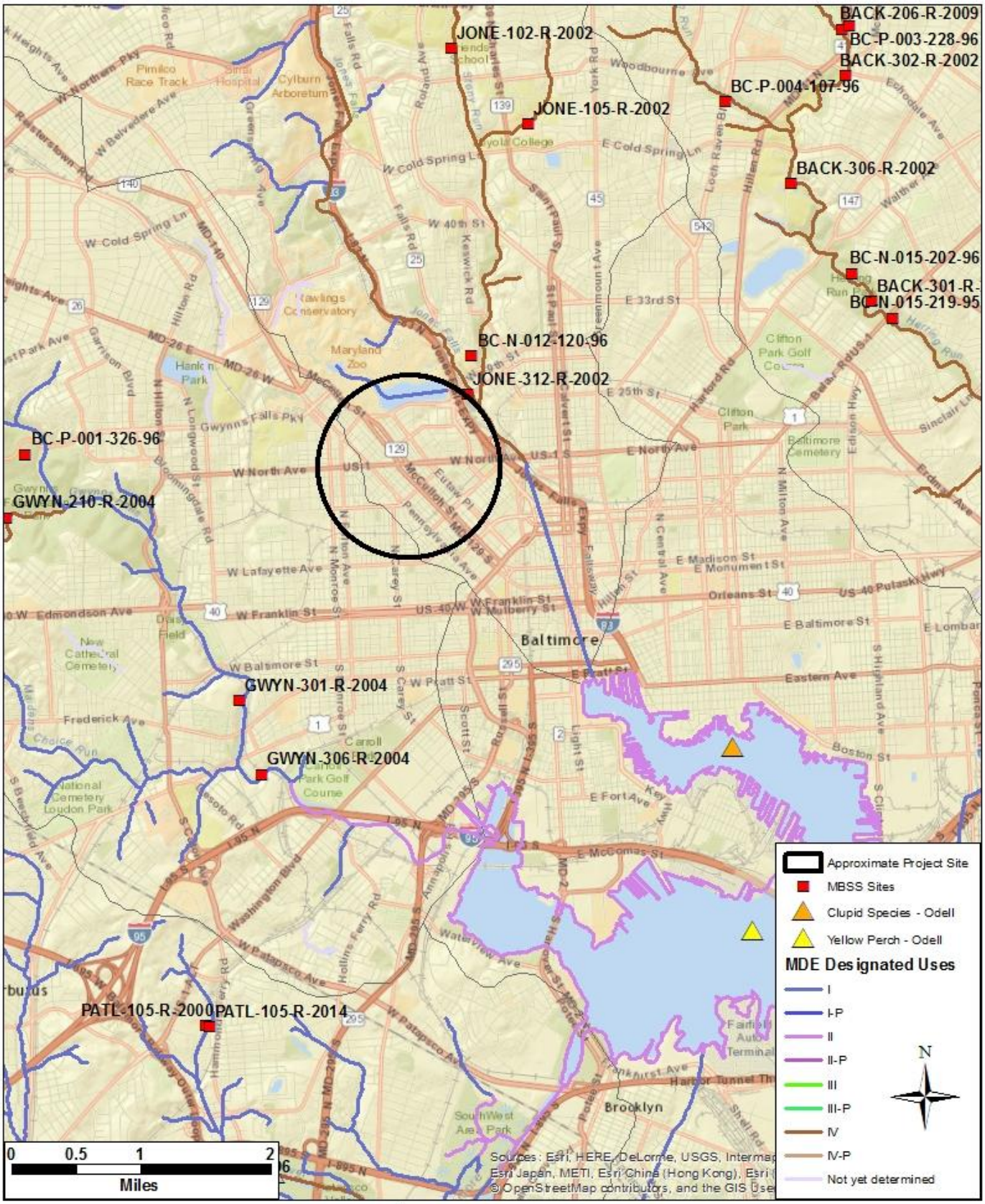
Jones Falls, Stony Run (Patapsco River Basin) and tributaries near the site are classified as Use IV streams (Recreational Trout Waters). Generally, no instream work is permitted in Use IV streams during the period of March 1 through May 31, inclusive, during any year.

No anadromous fish have been documented near the project site. However, these streams may support many resident fish species documented by our Maryland Biological Stream Survey. There are Maryland Biological Stream Survey (MBSS) stations near the project location. The species collected at one of these stations has been itemized in the attached list. MBSS data can be accessed via the MDDNR web page at http://streamhealth.maryland.gov, allowing access to resource surveys in neighboring tributaries.

If you have further questions, please contact the Environmental Review Program at 410-260-8803.

Sincerely,

Alison Armocida
Environmental Review Program



MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

The following fishes were collected at JONE-312-R-2002

Common name	Percent of total
LONGNOSE DACE	30.0
WHITE SUCKER	22.1
SATINFIN SHINER	19.4
TESSELLATED DARTER	10.2
BLUNTNOSE MINNOW	7.0
YELLOW BULLHEAD	4.2
REDBREAST SUNFISH	2.3
MUMMICHOG	1.5
SWALLOWTAIL SHINER	1.4
AMERICAN EEL	1.0
LARGEMOUTH BASS	0.5
NORTHERN HOGSUCKER	0.3

United States Department of the Interior
U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575

Online Certification Letter

Today's date: 9/17/15

Project: Baltimore and Potomac Tunnel

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA).This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), we certify that except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay)

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species

program at (410) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

Correspondence Related to the Draft Environmental Impact Statement and Section 4(f) Evaluation

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

February 2, 2016

9043.1
ER15/0695

Michelle Fishburne
Office of Railroad Policy and Development
USDOT Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Subject: Northeast Corridor Baltimore and Potomac Tunnel Project Draft EIS/Section 4(f)

Dear Ms. Fishburne:

The Department of the Interior (Department) has reviewed the Draft EIS and Section 4(f) Evaluation prepared by the Federal Railroad Administration (FRA) for the Baltimore and Potomac Tunnel Project in Baltimore, MD. We understand from the DEIS that the FRA is considering the no action alternative and three action alternatives; the preferred alternative will be identified in the Final EIS.

The purpose of the Project is to address the structural and operational deficiencies of the existing B&P Tunnel and to accommodate future high-performance intercity passenger rail service goals for the NEC, including: to reduce travel time through the B&P Tunnel and along the NEC; to accommodate existing and projected travel demand for intercity and commuter passenger services; to eliminate impediments to existing and projected operations along the NEC; and to provide operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure. We offer the following comments on this project for your consideration.

Section 4(f) Evaluation Comments

The Department appreciates that you have coordinated with various agencies regarding this project and the development of the Section 4(f) Evaluation. We encourage continued coordination with these agencies and tribes throughout the life of this project.

Currently, there is no preferred alternative identified and while the Section 4(f) Evaluation does contain specific analysis about impacts to Section 4(f) resources, the Department of the Interior

is currently unable to provide concurrence that there is a no feasible and prudent alternative and that all measures have been taken to minimize harm. We appreciate and encourage continued interagency communication as you move through the process of finalizing the EIS and selecting a preferred alternative.

We note that there has been extensive consultation with the consulting parties and that a Memorandum of Agreement (MOA) will be developed to resolve any adverse effects. We agree that this should be an appropriate measure to minimize harm and to mitigate the adverse effect to the Section 4(f) resources. We would appreciate the opportunity to review the MOA along with the finalized Section 4(f).

We appreciate the opportunity to provide these comments.

Sincerely,

Lindy Nelson
Regional Environmental Officer

cc: Cheryl Sams, NPS

February 4, 2016

Ms. Brittany Rolf
Environmental Planner,
RK&K Engineers
81 W. Mosher Street
Baltimore, MD 21217

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20151222-1081
Applicant: RK&K Engineers
Project Description: Draft Environmental Impact Statement & Section 4(f) Evaluation Baltimore & Potomac (B&P) Tunnel Project: To Address the Structural and Operational Deficiencies of the existing B&P Tunnel, Improve Passenger Rail Services... (Prior:MD20150515-0391)
Project Location: Baltimore City
Approving Authority: U.S. Department of Transportation DOT/FRA
Recommendation: Consistent with Qualifying Comment(s)

Dear Ms. Rolf:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.02.04-.07, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation based upon comments received to date. This recommendation is valid for a period of three years from the date of this letter.

Review comments were requested from the Maryland Department(s) of Natural Resources, the Environment; Baltimore Metropolitan Council; and the Maryland Department of Planning, including the Maryland Historical Trust. As of this date, the Maryland Department of Natural Resources and the Baltimore Metropolitan Council have not submitted comments. **This recommendation is contingent upon the applicant considering and addressing any problems or conditions that may be identified by their review. Any comments received will be forwarded.**

Our Department (Planning) found this project to be consistent with our plans, programs, and objectives.

Planning appreciates the opportunity to review the Draft Environmental Impact Statement (DEIS) and Section 4(f) Evaluation for the Baltimore and Potomac (B&P) Project. Planning supports the B&P project; and we believe that improvements of the existing tunnel are necessary to bring the outdated infrastructure to the modern era to accommodate the existing and future passenger travel demand and help rail freight in Maryland and along the northeast corridor while meeting the goals of the U.S. Department of Transportation's North East Corridor Future Study and promoting economic development in Maryland. All the alternatives retained for detailed study are located within a Priority Funding area. We appreciate the project team's public outreach efforts to address community and environmental impacts of various proposed alternatives and the selection of the alternatives retained for detailed study, which in general would have less impact as compared to those dropped for further study, e.g., reduced impacts to the West Baltimore MARC station area revitalization goals. We also appreciate the consideration of minimizing potential community impacts of ventilation plants through design and materials appropriate to the neighborhood context in which they would reside.

The Maryland Department of Environment and the Maryland Historical Trust found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments summarized below.

The Maryland Department of Environment (MDE) stated the following:

1. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.

2. If the proposed project involves demolition – Any above ground or underground petroleum storage tanks that may be on site must have contents and tanks along with any contamination removed. Please contact the Oil Control Program at (410) 537-3442 for additional information.

3. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.

4. The Waste Diversion and Utilization Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

5. Any contract specifying "lead paint abatement" must comply with Code of Maryland Regulations (COMAR) 26.16.01 - Accreditation and Training for Lead Paint Abatement Services. If a property was built before 1950 and will be used as rental housing, then compliance with COMAR 26.16.02 - Reduction of Lead Risk in Housing; and Environment Article Title 6, Subtitle 8, is required. Additional guidance regarding projects where lead paint may be encountered can be obtained by contacting the Environmental Lead Division at (410) 537-3825.

6. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.

7. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.

The Maryland Historical Trust appreciates the opportunity to review the Draft Environmental Impact Statement. Our agency has no comments at this time. The Federal Railroad Administration (FRA) initiated the Section 106 review process in 2014. We look forward to further consultation with FRA to complete the Section 106 process.

Any statement of consideration given to the comments(s) should be submitted to the approving authority, with a copy to the State Clearinghouse. The State Application Identifier Number must be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at myra.barnes@maryland.gov. **Also please complete the attached form and return it to the State Clearinghouse as soon as the status of the project is known.** ***Any substitutions of this form must include the State Application Identifier Number.*** **This will ensure that our files are complete.**

Thank you for your cooperation with the MIRC process.

Sincerely,

Linda C. Janey

Linda C. Janey, J.D., Assistant Secretary

LCJ:MB
Enclosure(s)
cc: Ryan Snyder - RK & K
Greg Golden - DNR
Amanda Degen - MDE
Odessa Phillip - BLCO Transp.
Todd Lang - BMC
Bihui Xu - MDPI-T
Peter Conrad - MDPL
Beth Cole - MHT

15-1081_CRR.CLS.doc

PROJECT STATUS FORM

Please complete this form and return it to the State Clearinghouse upon receipt of notification that the project has been approved or not approved by the approving authority.

TO: **Maryland State Clearinghouse**
Maryland Department of Planning
301 West Preston Street
Room 1104
Baltimore, MD 21201-2305

DATE: _____
(Please fill in the date form completed)

FROM: _____
(Name of person completing this form.)

PHONE: ____-____-_____
(Area Code & Phone number)

RE: **State Application Identifier:** **MD20151222-1081**
Project Description: Draft Environmental Impact Statement & Section 4(f) Evaluation Baltimore & Potomac (B&P) Tunnel Project: To Address the Structural and Operational Deficiencies of the existing B&P Tunnel, Improve Passenger Rail Services... (Prior:MD20150515-0391)

PROJECT APPROVAL

This project/plan was: ☐ **Approved** ☐ **Approved with Modification** ☐ **Disapproved**

Name of Approving Authority: _____ **Date Approved:** _____

FUNDING APPROVAL

The funding (if applicable) has been approved for the period of:

_____, 201____ to _____, 201____ as follows:

Federal $:	Local $:	State $:	Other $:

OTHER

☐ *Further comment or explanation is attached*

NATIONAL RAILROAD PASSENGER CORPORATION
60 Massachusetts Avenue, NE, Washington, DC 20002
Tel 202 906.3960 fax 202 906.2850

AMTRAK

Joseph H. Boardman
President and Chief Executive Officer

February 10, 2016

Mr. David Valenstein
Division Chief
Environment and Corridor Planning
Office of Railroad Policy and Development
USDOT Federal Railroad Administration
RPD- 13 W38-314
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: National Railroad Passenger Corporation (Amtrak) Comments
Draft FRA Environmental Impacts Statement (DEIS)
B&P Tunnel Replacement Project, Baltimore, Md.

Dear Mr. Valenstein:

Amtrak has reviewed the Draft Environmental Impact Statement (DEIS) for the B&P Replacement Tunnel Project (*DEIS & Section 4(f) Evaluation*; *Baltimore and Potomac Tunnel Project; Baltimore, Maryland; December 2015*) and is pleased to transmit these comments. Amtrak appreciates the diligence and precision with which the FRA has undertaken the NEPA process for this project, as the tunnel design is outdated, and the tunnel structure is aged, costly to maintain, and needs replacement. Amtrak welcomes the opportunity to work with the FRA to shape and further refine the tunnel replacement options to minimize local and community impacts while maximizing the transportation benefits of a replacement. Amtrak, as a good steward of the NEC, is also committed to mitigating any impacts of the project that cannot be avoided, in consultation with the FRA, MDOT, the City of Baltimore and local representatives.

Importance of the Project

Amtrak views the B&P Tunnel replacement project as critical to Amtrak's continuing efforts to modernize its Northeast Corridor (NEC) and associated intercity and commuter rail services. A new tunnel will reduce operating and maintenance (O/M) costs, ensure continuing safe and reliable service, and build upon Amtrak's four-decade-long effort to increase NEC train speeds and reduce travel times as it replaces, upgrades and modernizes older or antiquated equipment and facilities. Replacement of the tunnel is not only a modernization project. It also avoids the potential loss of NEC service in its entirety should the tunnel become unsafe due to age-related deterioration.

Over the past 40 years, Amtrak and its federal, state and local partners has spent billions of dollars upgrading NEC infrastructure and equipment to ensure that it can offer its customers higher speeds, shorter travel times, and more frequent and reliable service. In replacing the B&P Tunnel, it is essential that the selected alternative enables Amtrak to maintain the NEC as a high-quality rail service for commuter and intercity passenger rail services through the 21st Century and beyond.

As noted in the DEIS, the existing two-track B&P Tunnel is beyond its useful service life structurally, and its sharp curves restrict train speeds. It is a slow-speed bottleneck that hobbles both Amtrak and MARC as they work to provide higher-speed, dependable rail services. As such, the tunnel represents a late 19th Century vision of regional rail service, a vision which is out of date and incapable of satisfying the demands of current and future rail passengers. Amtrak therefore welcomes FRA's decision to sponsor the necessary studies and analyses that will permit the B&P Tunnel replacement project to advance.

Amtrak is sensitive to the fact that while the B&P Tunnel project's benefits are both regional and local, its impacts are local. Amtrak is eager to assist in refining the selected project alternative to minimize these impacts while still providing rail system improvements that eliminate bottlenecks and raise overall network performance. In this spirit, Amtrak will provide input on its preferred alternative and provide comments on other aspects of the DEIS.

Amtrak's Preferred Alternative

The No Build Alternative is not a viable option. It does not meet the project Purpose and Need and fails in virtually every respect to progress NEC services to meet future MARC and Amtrak passenger demand. Moreover, it leaves the NEC vulnerable to a major outage should the tunnel fail, as there is no practical bypass through Baltimore that avoids it. Of the three "build" alternatives discussed in the DEIS, however, Amtrak wishes to express in the strongest possible terms its preference for either of the two higher-speed Alternatives – 3B and 3C – modified and refined as may be possible to minimize community impacts.

The Importance of Speed Increases on the NEC

Since the Northeast Corridor Improvement Program (NECIP) era beginning in 1976, Amtrak has been making incremental improvements to increase service reliability and speed. These investments have cumulatively delivered significant changes in the inter-city rail experience, amounting since 1980 to between a one-hour and a one-and-one-half hour reduction (Regional vs. Acela) of the travel time between New York City (NYC) and Washington, DC. Equivalent improvements have been made over the Boston-to-NYC leg.

These incremental investments demonstrate recognition by Amtrak and the FRA that higher speed and shorter travel times are critical if passenger rail service is to compete with the private automobile and airlines serving this corridor. Over time, this concept has been ratified by experience – as trip times have shortened, ridership and rail market share have grown, demonstrating that travelers favor faster rail service over other modes of transportation.

Amtrak and many other rail systems nationally and internationally can demonstrate a strong relationship between market share and travel time. For Amtrak, the evidence is compelling: prior to the completion of the electrification of the NEC between New Haven and Boston between 1980-2000, Amtrak travel times between Boston and New York were approximately 4:10 (express service, trips were slower for local/regional services).[1] With electrification and various track improvements over the past 40 years,

[1] Source: Table 4.9-2 from the Final Environmental Impact Statement/Report and 4(f) Statement; Northeast Corridor Improvement Project – Electrification New Haven, CT – Boston, MA, 10/31/1994

which have in turn allowed introduction of high speed Acela equipment in the last fifteen years, that trip time is now approximately three and one-half hours (3:30). Because of this Improvement, Amtrak's share of the Boston-New York travel market has expanded from 5.9%[2] to 54%[3].

This same relationship between speed and ridership is still evident today through a comparison of market shares between the NYC-Washington, DC, and the NYC-Boston segments of the NEC: where the former enjoys a 2.5-hour express service travel time, and the latter a 3.5-hour express service travel time for approximately the same distance (Boston is 6 miles further than Washington, DC, from NYC), the rail market share among air/rail travelers is 80% for the former and 54% for the latter. (Flight times are approximately equal from NYC to either Boston or DC, at slightly over an hour.) Clearly, speed matters in attracting rail ridership on the NEC.

The relationship is equally valid elsewhere. Data from France's Train à Grande Vitesse (high-speed train, or TGV) program (Figure 1) show that the TGV's market share grew significantly among competing modes compared to the slower-speed train service that preceded it, while corridor market share for air and automobile shrank.

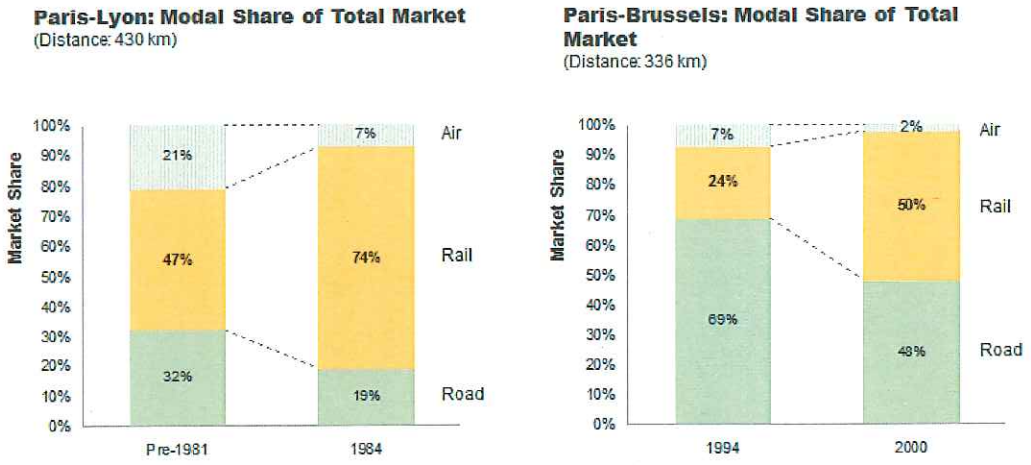


Figure 1 – France TGV Program Improvements in Intercity Rail Market Share
(Source: UIC High Speed Rail November 2000, Rail International Sept/Oct 1998.)

The same result has been seen in other high-speed rail corridors in France, Japan, and Germany (Figure 2). As travel time decreased, market share increased, in a generally linear relationship.

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[2] Source: Table 4-59, IBID.

[3] Source: Amtrak Department of Planning, January 26, 2016

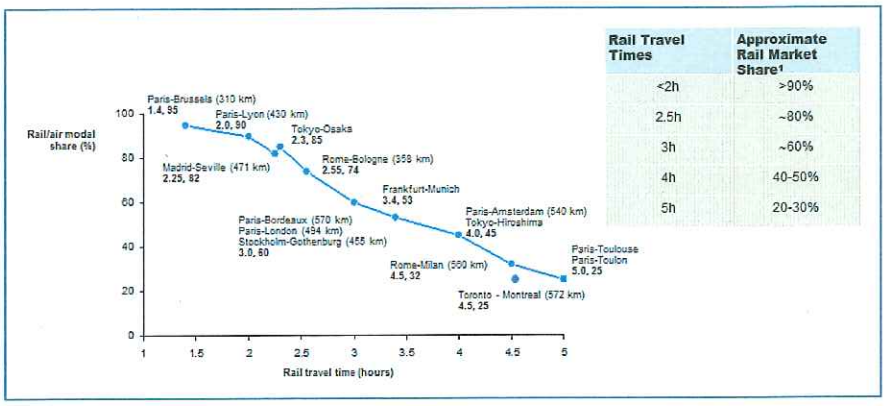

Figure 2 – Market Share as a Function of Travel Time for High-Speed Rail Corridors (Sources: Paris-Lyon: http://www.southeastalleance/com/files/businesscase2028-03.ppt#410,6, slide 6 citing Air Inter; Thalys; McKinsey&Co.; CER Paris-Brussels: UIC, CER & UNIFE, *High Speed Trains in Europe* (October 2002) at 5, available online at http://www.cer.be/files/Br_01_10_2002_ENb-112515A.pdf)

This relationship holds true in other U.S. rail corridors. When NJ TRANSIT opened the Kearny Connection (allowing the introduction of its *MidTOWN Direct* train service) between Morris & Essex line stations and midtown-Manhattan jobs, reducing the trip by approximately 15 minutes and eliminating a transfer, NJ TRANSIT concluded that "*After MidTOWN DIRECT,* ***M&E annualized rider growth [sic] more than twice the rate of core lines***" (Figure 3).

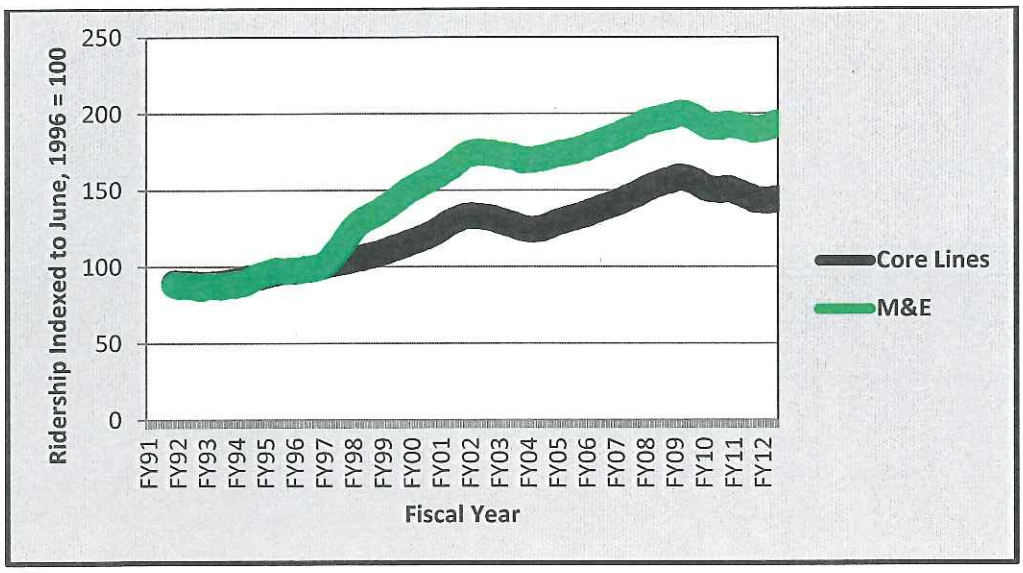

Figure 3 – M&E growth rate 1998-2003 Compared to System Core Lines (SOURCE: NJ RANSIT: Impact of NY Penn Service Improvements On Rail Line Ridership Trends; March 2012)

NJ TRANSIT showed the same speed-ridership relationship upon its completion of the *Montclair Connection,* which converted a two-seat to a one-seat ride to midtown Manhattan and saved 20 minutes for most riders. NJ TRANSIT's data for ridership growth on the Montclair-Boonton line over the next five years showed, "*After Montclair Connection,* ***Montclair-Boonton annualized ridership growth [sic] almost six times the rate of core lines"*** (Figure 4).

NJ TRANSIT recorded similar results with its *Secaucus Transfer* station, which replaced a long and circuitous route to midtown Manhattan with a simple transfer, saving approximately 20 minutes. The result, "*After Secaucus Junction,* ***Main-Bergen-Pascack annualized ridership growth*** **[sic]** ***more than three times the rate of core lines***" (Figure 5).

More recently, and looking to the 21st Century, under its Sustainability Program, Amtrak in November 2015 signed the *International Union of Railways (UIC) Railway Climate Responsibility Pledge*. This international partnership demonstrates Amtrak's commitment to a global effort toward a cleaner transportation future within and beyond U.S. borders. Among other goals, by signing the pledge, Amtrak has committed to "Stimulate modal shift to rail in national and international markets." Such a shift is accomplished most immediately and reliably by increasing speed and reducing travel time, while maintaining a high level of amenity and customer services on trains and in stations. A higher speed B&P Tunnel furthers this goal.

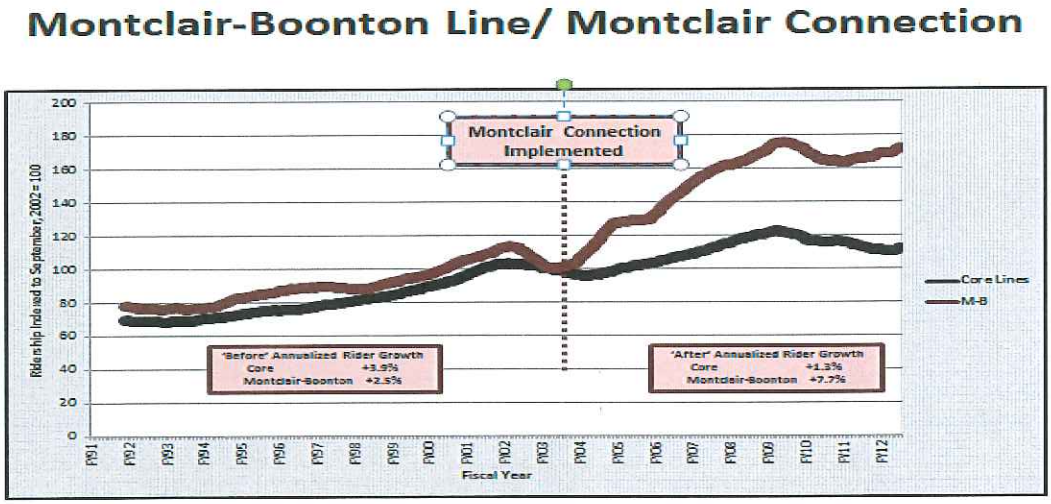

Figure 4 – Montclair-Boonton Line Growth Post Montclair Connection (2002) (SOURCE: NJ RANSIT: Impact of NY Penn Service Improvements on Rail Line Ridership Trends; March 2012)

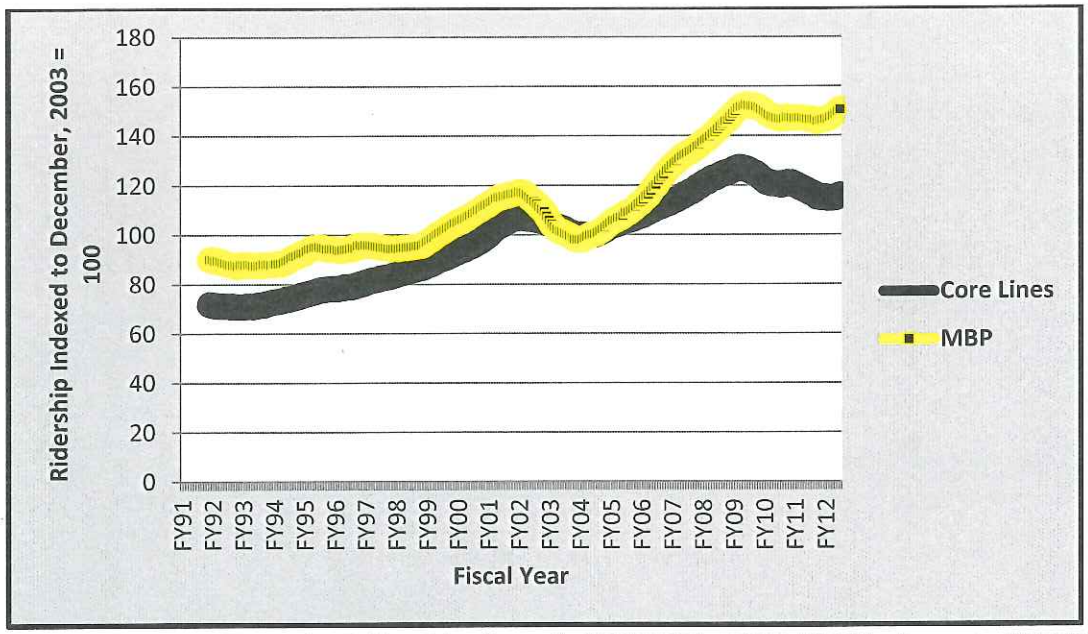

Figure 5 – Secaucus Transfer Ridership Growth (SOURCE: NJ RANSIT: Impact of NY Penn Service Improvements on Rail Line Ridership Trends; March 2012)

So it is clear that railroad operators and political leaders must cooperate in making investments that increase speed if Amtrak rail services are to maintain their dominance in the NEC.

Increasing Speed – The Challenge

Amtrak inherited a rail system from a time when general design policies produced rights of way with numerous curves and other impediments that limited speeds to 50-60 mph. The result was a train route featuring up to 4-5-hour travel times between NYC and Boston and 3.5-4-hour travel times between NYC and Washington, DC, through much of the twentieth century. (The NYC-Boston leg has many more sharp curves, and is therefore slower.) Yet the tremendous cost of any realignment of in-place rail rights of way to straighten curves introduces difficult challenges because, once the NEC was established, adjacent land developed rapidly, particularly in densely-settled cities.

Despite these physical challenges and despite constrained funding resources, incremental travel time improvements to the NEC have been made as part of the Northeast Corridor Improvement Program (NECIP) of the 1970-80s, the Northeast High Speed Rail Improvement Program (NHRIP) of the 1990s, and Amtrak's "101 Projects" program in the past decade. These programs all contained speed improvements in recognition of the critical importance of reducing travel times to sustain the region's economic vitality and mobility. As an example of the benefits realized from these improvements, Curve 401 north of Bowie, Md. was flattened during the NECIP program to increase the train speed from 90 mph to 125 mph, saving approximately 16 seconds. In 2014, some 30 curves were modified for the State of Michigan between Kalamazoo and Battle Creek to increase speeds from 70-79 mph to 110 mph. None of the curve modifications, individually, contributed much in the way of travel time reduction but,

collectively, they significantly reduced scheduled run times. By accomplishing this program, these thirty curves, which average 3,000 feet in length each, collectively produce an overall travel time reduction of approximately 3.5 minutes for every train.

Most of these curve improvements were able to be accomplished by adjusting track within the ROW. Future speed increases may not be able to be accomplished as easily, however, but will likely impose impacts to adjacent land uses if the right of way has to be physically relocated to flatten its degree of curve. Surgical investments to straighten curves and eliminate other impediments to high-speed travel must now be carefully implemented to gain continued improvement while minimizing local impacts.

Beyond the straightening of curves, Amtrak has made other investments to raise the performance of the system and increase speeds (and also to accommodate twice the number of trains since its beginnings in the mid-1970s), as follows:

- The electrification program of the NEC between New Haven and Boston permitted higher-speed and higher-performance locomotives to operate on this route, saving in total approximately one hour on the four and one-half hour trip in the 1995-2000 period;
- The installation of concrete ties in place of wood, use of heavier rail, and installation of higher-speed turnouts has allowed trains to move at higher speed without unacceptably straining the track system;
- The use of "constant tension" overhead catenary systems (OCS) allows 145-160 mph operation in place of the 125-135 permitted with standard catenary systems. For each ten miles of replaced catenary (at a cost of approximately $25M), the speed differential can save 28 seconds. Of the 450 miles of NEC track, about 100 miles can support 150 mph operation, saving about six minutes if totally converted to the new OCS standard;
- The use of improved miter rails on moveable bridges and concrete-tie turnouts; such improvements typically increase speeds through the area from 40-45 mph to 60-70 mph; and
- The Acela and ACS high-speed locomotive programs that have – with supporting infrastructure in place as noted above – permitted operations above 135 mph for express runs over the straighter segments of track.

Through these programs and projects, Amtrak has made immense progress in creating a high-quality passenger rail experience. The traveling public has voted with its feet, and is looking forward to further gains in rail travel efficiency. The B&P Tunnel project higher-speed alternatives should be viewed as part of this larger, network-wide improvement program aimed at producing continually higher speeds, shorter travel times, and increased ridership as the NEC population continues to grow.

Curve 381 at West Baltimore Station

Improving Curve 381 at the West Baltimore Station is part of this continuing process. Rail travel at this curve is limited to 55 mph, just a thousand feet south of the southern portal of the proposed B&P tunnel. Until now, and since the existing B&P Tunnel just east of this location is limited to 30 mph, it has not been worthwhile to consider upgrading the curve, as trains exiting the tunnel southbound at 30-40 mph cannot reach much more than 55 mph by the time they enter Curve 381. Beyond the curve (southbound), trains accelerate to much higher speeds of 125-135 mph (with further increases possible once additional signal system upgrades are completed) to complete the trip to Washington DC.

With a new, 100 mph tunnel, however, Curve 381 will become a chokepoint in the system, one that cannot be further improved once the tunnel portals are set in their place. The opportunity to improve Curve 381 is therefore a one-time chance that should be included in the B&P Tunnel Preferred Alternative decision. With an unimproved curve continuing to constrain train speeds to 55 mph, the potential speed gains available through the immense investment in the new tunnel will be largely forfeited for the life of the new tunnel, perhaps a century or more. In addition, the slowing and re-accelerating that are required to negotiate changing track speeds between the high-speed tunnel and the lower-speed curve will translate into a century of increased energy consumption and increased need for mechanical maintenance of parts (rolling stock and rail) that suffer additional wear and tear from the acceleration and braking necessary to slow for the curve and speed up beyond it. Failing to address Curve 381 now will therefore both retard the level of service and increase its day-to-day costs for the life of the new tunnel, compared to a design that could, with careful management of local impacts, allow continuous 100-125 mph operation from Baltimore Pennsylvania Station south to Washington, DC, and the associated increase in overall network capacity between NYC and Washington, DC, that the higher speed delivers.

Correcting Curve 381 is not a trivial engineering undertaking, and it is costly. In 1928, the Pennsylvania Railroad (the former owner of this portion of the NEC) developed its "Baltimore Improvements" program, which was to have constructed a new tunnel bypassing the existing B&P Tunnel, and upgrade this entire section of the railroad (including Curve 381 at West Baltimore Station). Because of the Depression, however, much of the program was not implemented. After WWII, with auto travel becoming the preferred means of travel, the PRR's financial circumstances turned downward, ending in its bankruptcy in 1972 and the eventual transfer of its assets to Amtrak and Conrail in 1976. And the "Baltimore Improvement" (including Curve 381) was never implemented.

Curve 381 is situated on a section of right of way that is surrounded on both sides by residential neighborhoods and commercial and historic properties. To smooth the curve requires shifting the right of way, which can only be accomplished by demolishing some of these buildings. But with elimination of this impediment, trains will be able to realize a significant speed benefit over the entire segment between Baltimore Pennsylvania Station and West Baltimore Station, improving network performance throughout the NEC and beyond.[4]

Amtrak's Recommendation

Given the above, Amtrak recommends that the FRA select either of the higher-speed alternatives 3B or 3C as the Preferred Alternative, for the following reasons:

a. Prior studies note that the B&P Tunnel constitutes a choke point, with the lowest speed limit on the entire NEC, limiting system capacity and likely to produce increasing local train congestion as Amtrak and MARC ridership and train frequencies increase with projected future increase in travel demand. Alternatives 3B and 3C provide significantly higher average speeds than Alternative 3A by extending the improved, higher-speed alignment of the new tunnel through Curve 381 at the MARC West Baltimore Station.

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[4] Because congested areas like Baltimore can be impediments to travel, long-distance trains are frequently scheduled to avoid these areas during peak periods, preventing the use of more market-responsive schedules travelers seek. With elimination of slower sections and increases in throughput capacity at major junctions, this ripple effect can be lessened and improved schedules offered to cross-country travelers.

b. The failure to smooth Curve 381 under Alternative 3A leaves the MARC West Baltimore Station incapable of being reconstructed with high-level platforms at its current location.[5] Absent raised platforms at the current location, MARC will have to move the station south such that commuters will have a long walk from the commuter parking area to board trains. Further amplifying the benefits of the improvement, with high-level platforms at the station, dwell times will be reduced, further speeding service compared to current low-level boarding platforms.
c. Opportunities exist to refine Alternatives 3B and 3C via additional design development to reduce their local and community impacts.,
d. Alternatives 3B and 3C would impose no greater maintenance or operating costs on Amtrak than Alternative 3A, while giving significant speed, ridership and revenue benefits.
e. Alternative 3B largely avoids the Flannigan property; Flannigan is an important local employer.
f. While Alternatives 3B and 3C both involve residential relocations, these can be minimized through more careful alignment design and reductions of limits of disturbance at critical points to avoid takings or the loss of historic structures. Amtrak will work with local community representatives, the City of Baltimore, MDOT and the FRA to minimize harm to those affected, and to mitigate unavoidable impacts.

Given these characteristics of the higher-speed Alternatives 3B and 3C, recognizing that a central goal of the entire national rail program is to increase travel speed, and acknowledging the need to address any local impacts with maximum sensitivity and care, Amtrak finds Alternatives 3B and 3C to be greatly superior to Alternative 3A and recommends the selection of one of them.

Other Comments
Amtrak has the following additional comments on the DEIS, covering Ventilation, Waste Removal during Construction, Freight, 4-Track vs. 2-Track Tunnel, Disposition of the Existing Tunnel, the Air Quality Report, Executive Summary, Body of the DEIS, and Amtrak Responses to Recorded Public Comments – Appendix H, as follows:

Ventilation
Location: The DEIS correctly notes the need for an Intermediate Ventilation Facility (IVF), and proposes a potential location for such a plant on the City-owned parcel currently serving as an informal community park and garden. Amtrak affirms the criticality of such a facility to comply with modern fire and safety codes, and to allow design of a tunnel system that can meet the FRA's *NEC Future* study goal of 2-minute headways. Amtrak will assist the FRA (and, by extension, the local community) to site such a plant to be maximally compatible with nearby land uses and activity centers, while remaining operationally efficient. The DEIS shows two photos of such contextually-sensitive ventilation facility designs from other projects; similarly unobtrusive structures would be designed for the Reservoir Hill area or other site locations.

[5] The curve is too sharp to permit manageable gaps between boarding platforms and train floors due to the curved edge of the platform conflicting with the straight edge of the rail car.

Exhaust Filtration: Although not a subject of the DEIS, comments during public meetings indicated local concerns with the need for filtration systems on the ventilation plants to achieve higher air quality in the vicinity of the plant. Ventilation system design does not, however, incorporate filtration or pollutant removal technologies to address tunnel air pollution, as the system accomplishes the same result through dilution of polluted tunnel air with fresh air. The IVF operates best if its exhaust fans can force the maximum volume of air out of the tunnel air in the shortest possible time, and filtration technologies would retard this capability. By slowing the rate at which polluted air is evacuated from the tunnels, filtration systems potentially create an unsafe air quality condition in the tunnels for passengers, crews, and emergency responders. The IVF will be designed to ensure that all applicable air quality standards are met outside the IVF exhaust louvers and that community air quality is protected.

Waste Removal During Construction

Amtrak notes that waste removal during construction of new tunnels will be comparable for any of the three build options, and is not therefore a factor in selecting one over the others. Amtrak is sensitive, however, to the community's interest in minimizing truck traffic through residential neighborhoods during construction regardless which alternative is selected. Amtrak will work with the FRA to investigate whether any of the tunneling waste material can be transported away from the site by rail, with the goal of minimizing total truck traffic caused by the project. For waste materials that must be hauled by truck, efforts will be made to coordinate with local traffic agencies to minimize truck traffic through residential neighborhoods.

Freight

Amtrak must preserve freight operators' ability to run on the NEC. Amtrak acknowledges that tunnels that may accommodate double-stack freight trains have potential economic benefits to Baltimore. However, although the project would create double-stack- capable tunnels, existing infrastructure north and south of the tunnels cannot currently accommodate double-stack equipment. Therefore, although the tunnels will permit double-stack operations, such benefits would not be realized until clearance projects not the subject of this study can be implemented on connecting sections of the NEC. The FEIS should be worded to avoid public expectation of double-stack freight trains through the new tunnel until these many other projects have been completed. And, given the tone of comments at public meetings, the FEIS should be clear that the purpose of the project is not to induce double-stack freight traffic through the new tunnel, but merely to accommodate it if and when private freight rail operators see a need and successfully clear a path for such equipment.

Four-Track vs. Two-Track System

Slow-speed chokepoints like the B&P Tunnel and Curve 381 affect more than just the trains passing them; their effects ripple through the entire rail network, resulting in poorer overall network performance, lower capacity, fewer service options and, ultimately, difficulty meeting increases in future travel demand. Because Baltimore is a key "overtake" point – where high-speed Acela trains generally "catch up" to Regional and MARC commuter trains sharing the same tracks – the need to address the B&P Tunnel and Curve 381 chokepoints is compelling. Network performance between Boston and Washington, DC, is affected by the lack of capacity caused by these slow-speed conditions; until they are speeded up, trains all along the NEC are limited as to how quickly they can travel, with Baltimore being a key congestion point that slows the entire network.

Besides reducing freight/passenger train conflicts, a four-track system through Baltimore will better accommodate projected increasing train traffic among Amtrak, MARC and freight services. All three build alternatives feature universal interlockings among four tracks at both ends of the tunnel, giving Amtrak maximum flexibility in maintaining train schedules through what is expected to be an increasingly heavily-trafficked area as ridership and train traffic increases. Current daily schedules already call for two-minute headways between following trains in a few instances. As train volumes increase with increasing ridership, these close headways will become more frequent, and a four-track, segregated high- and slower-speed rail system will accommodate this growth while avoiding the congestion and delays that might otherwise emerge on a two-track system. Four tracks also provide operational redundancy to maintain operations during abnormal conditions – stalled trains, tunnel closed for maintenance, etc. Given the expected volume of future rail traffic, as identified in the FRA's *NEC FUTURE Tier I DEIS*, a four-track solution is required for the tunnel; to simply replace the existing tunnel with another sub-standard facility would be shortsighted, and could crab regional growth by limiting train capacity among major NEC job centers.

Should the decision be made to implement only two of the four tracks in the short term, reserving the implementation of the other two tracks for a later time, it is all the more important to reach for the highest-speed solution addressing both tunnel speeds and speeds through Curve 381, to minimize the potential retardant effect of this chokepoint on regional system capacity and network performance. It should be noted that such a two-track tunnel system would still require ventilation plants of size equal to those proposed in the DEIS, at the same location; community participants should not be led to assume that a two-track tunnel would allow a smaller ventilation plant.

Disposition of the Existing Tunnel

The DEIS is unspecific as to the disposition of the existing (original) B&P Tunnel after the new tunnels are built, and discusses several potential future uses. Amtrak wishes to state its overwhelming preference that the original tunnel be reserved for a future rail transportation use. Amtrak requests that FRA reflect this preference along with the Preferred Alternative selected for inclusion in the final environmental impact statement (FEIS).

Air Quality Report

The DEIS and supporting Air Quality Technical Report need to be clear that the deminimus increase in NOx and particulates for the build alternatives is due only to the new tunnel being slightly longer compared to the length of the existing tunnel. The report should be clear that the increase in emissions that will be caused by MARC's conversion of its fleet to 100% diesel locomotive propulsion (p. 14) – which would happen whether the tunnels are built or not – is not attributable to any of the build alternatives or the project 0 this conversion will occur even if no new tunnel is built. Because MARC will make this change, and its emissions will therefore increase locally, the higher speed alternatives are again preferred, as they will result in lower pollutant concentrations than would the slower-speed Alternative 3A or the No Build alternative.

Executive Summary

Executive Summary (Page ES-4): "*From an engineering standpoint, Alternatives 3A, 3B, and 3C: Have identical maximum and minimum design speeds.*"

While Amtrak agrees that the three alternatives have identical maximum design speeds, this comparison leaves the incorrect impression that they are functionally equivalent in trip time and performance. While the design speed for the portal-to-portal tunnel segment would be essentially equivalent among the three alternatives (at 70 mph for the outside local tracks and 100 mph for the inner express tracks), the alignments for Alternatives 3B and 3C both smooth Curve 381 at West Baltimore station such that maximum allowable speeds (MAS) past the station for high-speed trains would be 100 mph, rather than the 55 mph MAS that would be the case for the unimproved curve under Alternative 3A. Because trains cannot speed up and slow down quickly over short distances, the lack of a high-speed curve at West Baltimore Station under Alternative 3A will result in most trains – even high-speed Acela trains – leaving Baltimore Pennsylvania Station southbound operating at only 55-70 mph through the tunnel, and then slowing to 55 mph until they pass this curve. Amtrak trains (which do not stop at West Baltimore Station) leaving BPS under Alternatives 3B and 3C would accelerate directly to their top 100 mph speed and maintain that speed for the balance of the trip to Washington DC, (except over sections permitting 125-135 mph farther south). This produces a faster and smoother ride between Baltimore Pennsylvania Station and points south than would be possible with Alternative 3A, with an overall higher average operating speed over the length of the study area, between Gwynn's Falls bridge and Baltimore Pennsylvania Station. The final EIS should clarify this distinction among the alternatives.

Executive Summary (Page ES-5): *Alternatives 3A, 3B, and 3C differ from one another primarily with regard to the location and impact of the south portal, and their impact to the existing West Baltimore MARC station.*

Amtrak disagrees with this statement as a summary of the salient differences among the alternatives. Amtrak views the higher speed capabilities of Alternatives 3B and 3C as a significant distinction between these alternatives and Alternative 3A. The failure to discuss in the DEIS the higher speed capabilities of Alternatives 3B and 3C is in Amtrak's opinion a disappointing omission, since improvement of trip times has been one of Amtrak and FRA's primary investment goals for 40 years. Amtrak believes that this sentence should read: "*Alternative 3A is broadly distinct from Alternatives 3B and 3C, in that Alternative 3A, while having somewhat fewer community impacts in terms of property requirements and impacts to historic resources, does not achieve a significantly higher speed than the existing tunnel, and therefore significantly underperforms relative to Alternatives 3B and 3C in terms of the basic project purpose and need.*"

Executive Summary (P. ES-5): *Alternatives 3B and 3C would impact the Station and reconstruct a new West Baltimore MARC Station as part of the Project in the same location as the existing station.*

This sentence is incomplete for failing to note that Alternative 3A's lack of improved track geometry at West Baltimore Station either prevents conversion of the station to be fully accessible at its current location or requires its relocation farther from existing commuter parking so that high-level platforms could be built along straighter track to the south of the existing location. Amtrak thinks that this sentence should read: "*Alternative 3A would not modify the track at West Baltimore station to allow high-level platforms to be built at the current location, near established commuter parking. Alternatives 3B and 3C would modify the track geometry at this location so that MARC could reconstruct the West Baltimore*

Station to incorporate high-level platforms in compliance with the Americans with Disabilities Act (ADA) at the current location, immediately adjacent to established station commuter parking. This is an important distinction in that the MARC plan to relocate the station 500' south of its current location to permit construction of high-level platforms under Alternative 3A would either require MARC to convert adjacent residential and commercial land uses to commuter parking at the new station location, or would subject daily commuters to a lengthy walk between the relocated boarding platforms and the existing commuter parking area."

Executive Summary Table 2, item 17 (page ES-7): "*West Baltimore Station in proximity to MARC (commuter) parking. Alternative 3A – Yes.*"
Amtrak disagrees that a relocated West Baltimore station would continue to be proximate to the adjacent MARC commuter-parking area. Relocation of the station 500' south to straighter track would require much longer walks for commuters using the existing MARC parking area.

Executive Summary Table 2, item 37 (page ES-10): For Alternative 3A, the report offers the following evaluation of the degree to which the alternatives impact and are compatible with the MARC West Baltimore Station Master Plan: "*None (impacts) – Compatible with West Baltimore MARC Station Master Plan.*"
Amtrak is concerned that this representation leaves the reader with the impression that Alternative 3A is benign with respect to its impact on MARC commuters. The DEIS indicates on Page 16 that the Master Plan has the following purpose: The *West Baltimore MARC Station Master Plan (Transit-Centered Community Development Strategy)* identifies improvements to the Penn Line and West Baltimore MARC Station that would reduce the amount of time between trains (Baltimore City and MDOT, 2008). The proposed improvements would allow a decrease from 25-minute to 15-minute headways during rush hour, from once an hour to once every 30 minutes in non-rush hour times, and providing late evening and weekend service. <u>The MTA has been considering the potential to create accessibility, in compliance with the Americans with Disabilities Act (ADA), to the West Baltimore MARC Station. One method to accomplish this is to relocate the existing MARC platforms several hundred feet south of the existing West Baltimore MARC Station</u> (emphasis added.) Under Alternative 3A, MARC would relocate the station 500' south to a point along the NEC with straighter track, to permit the construction of high-level platforms that would enable MARC to offer service at this station to persons with disabilities, in compliance with the ADA. While Alternative 3A is therefore "compatible" with MARC's plans in the most literal sense, in fact, the station relocation would create an inferior solution from a transportation standpoint compared to reconstructing the station with high-level platforms at its current location as would be possible under Alternatives 3B and 3C, preserving the close relationship between the boarding platforms and the existing MARC commuter parking and allowing existing adjacent buildings to be redeveloped close by the reconstructed station (thus furthering opportunities for local TOD redevelopment at the Ice House and other surrounding historic buildings). Further, on page 32, the DEIS notes that a reason contributing to the FRA's valid decision to discard Alternative 11A is: *Potentially severe impact to redevelopment efforts envisioned in the West Baltimore MARC Station Master Plan due to relocation of the station away from planned redevelopment properties and demolition of the American Ice Company building, a centerpiece of the plan.* Given these conditions, this finding should instead be worded: "*For Alternative 3A, the West Baltimore MARC Station Master Plan envisions relocation of the*

station south, some 500' from its associated commuter parking area. Although Alternative 3A is therefore technically "compatible" with MARC's West Baltimore Station Redevelopment Plan, this alternative would obligate commuters to a long walk to/from their cars to/from boarding platforms, or the conversion of adjacent land uses otherwise available for redevelopment to commuter parking."

Page ES-14: *The DEIS compares the impacts of the Build Alternatives to the No Build and to each other. Alternative 3A has no high and adverse impacts, whereas Alternative 3B and Alternative 3C have high and adverse impacts in the following areas: property acquisition; housing displacement; land use/zoning; visual quality; community facilities; and noise.*
Amtrak appreciates that Alternatives 3B and 3C have greater local and community impacts than Alternative 3A. However, Alternative 3A – which includes an intermediate vent plant at the Whitelock Street community garden site, the likely relocation of the Flannigan aggregate business, and the reconstruction of the West Baltimore Station 500' south of its current location and away from its associated parking – cannot be said to have no high and adverse impacts. Certainly, the noise/vibration and residential and commercial property impacts of Alternatives 3B and 3C are higher than those for Alternative 3A. But the difference is of degree not type, and the finding should be worded so that the Alternatives are properly compared in terms of specific impact areas, rather than in terms of a broadly defined general category (high/adverse). This is especially important in the Executive Summary, which many readers will consider the final word on the material in the DEIS. This statement leaves the reader with the impression that Alternative 3A is benign, while Alternatives 3B and 3C are greatly damaging to the local community. The differences between the higher-speed Alternatives 3B and 3C and the lower-speed Alternative 3A are not as extreme as this sentence implies. Also, as noted in question 5, Alternative 3A would require adopting a remote and greatly inferior West Baltimore station location since it is not possible to incorporate high level platforms on the 3A alignment, thus creating a new set of impacts not found in 3B or 3C.

Body of the DEIS
Page 146: *Impacts*
The DEIS notes that nine commercial businesses are affected by Alternative 3B and ten by Alternative 3C, among them the Flannigan site. The DEIS notes in the charts on pages 69-70 that Alternative 3A would impact 6 historic properties, Alternative 3B 8 properties, and Alternative 3C, 10 properties. Concerning the resulting displacements or demolition each alternative would require, Amtrak understands that the analysis of impacts for each alternative was conducted for defined "worst case" "limits of disturbance" (LOD) designed to provide the most generous construction areas alongside the tracks; in most cases, these construction areas were defined to be 50' from the outer retaining wall or fence, adding a linear swath of an additional 100' of local community streets and buildings targeted for removal in order to construct the project.

Notwithstanding that a 50' construction area is preferred for this kind of project, it should be noted that the construction work can be performed in much narrower areas alongside the right of way where the right of way is near street grade. Given that the DEIS notes commercial and residential properties and significant historic structures would have to be demolished to clear the most generous construction "limits of disturbance" for each alternative, Amtrak would expect to work with the FRA to narrow these construction allowances and hope to reduce local impacts and preserve some or many of the at-risk structures noted in the DEIS.

Should such refinements of the limits of disturbance successfully avoid significant numbers of the identified commercial, residential and historic properties noted as impacted by the higher-speed Alternatives in the DEIS, Amtrak presumes that significantly different findings would emerge in the FEIS as to the local impacts that would have to be mitigated for either of the higher-speed alternatives. Amtrak looks forward to working with the FRA on this critical issue, as Amtrak cannot overstate its interest in a higher-speed alternative as the result of this very crucial infrastructure upgrade.

Amtrak's Responses to Recorded Public Comments – Appendix H
Amtrak has reviewed Appendix H comments by public participants, and offers the following:

Appendix H, P. 2: *The present B&P Tunnel which was put in service in 1873 is outdated and unsafe, is an impediment to modern high speed passenger rail service and modern high capacity freight cars which comprise 21st Century American freight trains.*
Amtrak does not agree with a representation that the existing tunnel is currently unsafe for passengers, crews, or maintenance workers. Amtrak maintains the tunnel in conformance with applicable codes and industry standards, and inspects the tunnel regularly for signs of wear and tear warranting repairs. Amtrak performs all indicated repairs immediately. The bulk of tunnel problems involve water intrusion and the wearing of masonry joints and concrete track bed due to water. These problems are recurrent and are leading to the continued degradation of the tunnel's performance. As they are identified, such problems are remedied with new material and the tunnels are kept safe for their purpose. They are adequately ventilated by virtue of the two mid-tunnel openings, structurally sound, and maintain proper track geometry allowing safe passage of trains at the required speeds. Evacuation procedures are well within standards and Amtrak and local emergency personnel are fully capable of responding to any incident involving either freight or passenger trains that may break down in the tunnel or if there were a fire condition. Because of the existing tunnel's age, however, the frequency and length of service interruptions due to its continued decay are likely to increase until, ultimately, they reach a point where continued safe train operation could be jeopardized, possibly requiring shut down of the tunnel and suspension of NEC services until repairs can be made or the tunnel replaced.

Appendix H, P.7: *Please define what is meant by infeasible geometry.*
"Infeasible geometry" refers to track that is either too steep for trains to climb (grade greater than 2%, or two feet of rise for each 100 feet of horizontal travel), or too sharply curved for trains to negotiate at a required speed without derailing. As train speeds increase, the sharpness of curved track that they can negotiate without fear of derailing lessens. Where a particular alignment requires the use of track curves or grades that cannot be negotiated by trains at the desired speed, that alignment is considered to be fatally flawed and not worthy of further study.

Appendix H, P.8: *Are the proposed alternatives compatible with Amtrak's plan for high speed rail through the existing West Baltimore MARC station of* [sic] *is this being proposed as a separate project?*
Of the three current build alternatives contained in the DEIS, two – Alternatives 3B and 3C – are compatible with Amtrak's plan for high speed rail through the West Baltimore station. These two alternatives smooth the curve at this station such that speeds of 100 mph will be feasible for high-speed Acela trains traveling to and from Washington, DC, and Baltimore Pennsylvania Station. Alternative 3A

provides an operating speed of only 55 mph at the West Baltimore Station, which limits the speed of trains traveling through the proposed tunnels to a range between 55 and 70 mph, rather than 100 mph throughout. Therefore, Alternative 3A is not supportive of the high-speed rail program to the same degree as are the higher-speed alternatives.

A number of people have voiced concern about the impacts of construction or train operation on the neighborhood located above the build alternatives. The construction of new tunnels 100' – 150' beneath the Reservoir Hill neighborhood would have no discernible impact on the community or buildings at the surface. Neither boring to construct the tunnels, nor operating high-speed trains at that depth, is expected to create measureable vibration in the buildings above. The noise and vibration findings expressed in the DEIS relate to impacts to properties at the portals, where the trains and tunnel are shallower or out in the open. While the tunnel's construction and operation under Reservoir Hill will not cause measureable noise or vibration in the Reservoir Hill area, creation of any of the build alternatives will require the construction of an intermediate ventilation facility (IVF) in the Reservoir Hill or nearby commercial area. Construction and operation of the ventilation facility should have no noticeable noise or vibration impacts to surrounding community or adjacent structures.

Appendix H, P.10: *It would be ideal for the new tunnel construction, Alternative 3 or 11 to be tall enough for Amtrak Superliner railcars and double stack Norfolk Southern trains.*
Currently, the NEC does not feature sufficient vertical clearance to allow double-stack operation in most places, as most of the bridges and spanning infrastructure were built for single-stack freight cars, before double-stack train systems were invented. Therefore, before double-stack trains can operate through the B&P Tunnel, many nearby bridges, tunnels, and signal trusses north and south of the tunnel – as well as the station mezzanine and platform canopies at and the underpasses beneath the streets surrounding Baltimore Pennsylvania Station – would have to be raised at significant cost before a double-stack route could be established through the new tunnels.

Conclusion
Over the past 40 years, substantial investments have been and will continue to be made to gain speed and reduce travel time, with the proven result that this yields better and more desirable service for rail passengers. In keeping with this history, Amtrak strongly prefers Alternatives 3B and 3C to Alternative 3A, as these alternatives are in keeping with Amtrak's long term capital investment program goals. Amtrak recognizes that local impacts resulting from this project must be handled with great sensitivity to the community, the streetscape, and the built environment, and Amtrak welcomes the opportunity to work closely with FRA, the State of Maryland, and the City of Baltimore to effectuate the least-impact design that accomplishes meaningful improvements in travel time for rail travelers. We anticipate that refinements to either of the higher-speed alternatives can be developed that result in a meaningful and important high-speed rail improvement with only minor local impacts, conferring a 100-year benefit to millions of annual rail travelers, and a net positive for the region.

Amtrak appreciates the opportunity to express its views concerning the DEIS for the subject project, and looks forward to cooperating with the FRA in more precisely identifying the impacts of the alternatives as they are refined, so as to best inform the FRA's selection of a Preferred Alternative for the project. Should you have any questions concerning these comments, please do not hesitate to e-mail or call William Prosser at 215-349-2015 (prossew@amtrak.com), or Michael Stern at (203) 773-6138 (sternm@amtrak.com).

Sincerely,

Joseph H. Boardman
President and Chief Executive Officer

cc: William Prosser
Michael Stern

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

February 26, 2016

Michelle Fishburne, PE
Environmental Protection Specialist
Office of Railroad Policy and Development
USDOT Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Subject: Draft Environmental Impact Statement (DEIS) & Section 4(f) Evaluation Baltimore & Potomac Tunnel Project, Maryland 2016 CEQ #20150353

Dear Ms. Fishbourne:

In accordance with Section 102(2) (c) of the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332(2) (c), Section 309 of the Clean Air Act, 42 U.S.C. § 7609, and the Council on Environmental Quality (CEQ) regulations, 40 CFR Parts 1500-1508, the U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) and the Section 4(f) evaluation for the Baltimore & Potomac Tunnel Project prepared by the Federal Railroad Administration (FRA).

As you are aware, the purpose of the proposed action is to address the structural and operational deficiencies of the existing Baltimore & Potomac Tunnel, improve passenger rail services, and support existing and future demands along the Northeast Corridor. The alternatives considered in the DEIS include four alternatives, one No-Build and three Build Alternatives – 3A, 3B, 3C, respectively. The No-Build Alternative would include the continued use of the existing tunnel with no significant improvements other than routine maintenance. The existing 143 year old tunnel is actually a series of a three tunnels (Gilmor St. Tunnel, Wilson St. Tunnel and the John St Tunnel) with two day lighting sections. It travels north and south on the western side Baltimore City. The two-track tunnel system is one of the oldest structure along Amtrak's Northeast Corridor. The Build Alternatives, 3A, 3B and 3C would provide for a 4-tube tunnel system each ranging in length from 1.91 miles to 2.23 miles and traveling in a wide arch north of the existing tunnel. Each tunnel bore would be 20ft tall and 30ft wide.

The DEIS does not identify the selection of a Preferred Alternative; the Preferred Alternative will be identified in the Final EIS and/or Record of Decision (ROD) and will be based on how the Preferred Alternative meets Purpose and Need, an assessment of the rail

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operations, engineering transportation, cost, construction, an assessment of all the environmental impacts, and on public and agency comments received. Since a Preferred Alternative was not selected in the DEIS, EPA has reviewed and rated each of the build alternatives. EPA has rated each of the alternatives an EC-2 (Environmental Concerns/Insufficient Information), according to the EPA rating system described on the website: www.epa.gov/compliance/nepa/comments/ratings.html. These ratings are based on some deficiencies and area of concerns including Climate Change, Environmental Justice, noise and vibration, cultural resources, air quality, hazard material management, and Children's Environmental Health. EPA requests additional information in the Final EIS on alternative locations for ventilation plants, construction staging areas, sediment and erosion control during construction, potential added diesel emissions from the MARC and freight trains, and disclosure of emergency planning. EPA recognizes efforts made to evaluate and address community concerns and impacts and to coordinate this project with the community. The DEIS includes several environmental commitments, for example limiting hours of construction and implementing a rodent control program. These should be memorialized in the Final EIS and Record of Decision (ROD). While the DEIS includes several environmental commitments, there still remains a great deal of information that should be shared with the public, including final information regarding noise, vibration, utility disruptions, providing pre-construction building inspections, and emergency planning. EPA suggests that FRA consider the best way to share information, some of which may not yet be available, with the public after the completion of the ROD. EPA recommends alternatives to minimize loss of community cohesion, quality of life and historic locations, including in the siting of ventilation plants. The basis of EPA's ratings are detailed in the enclosed Technical Comments document.

Thank you for the opportunity to review this project. If you have questions regarding these comments, the staff contact for this project is Mr. Kevin Magerr; he can be reached at 215-814-5724 or Magerr.kevin@epa.gov

Sincerely,

Barbara Rudnick
NEPA Team Leader
Office of Environmental Programs

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Technical Comments for the DEIS & Section 4(f) Evaluation – Baltimore & Potomac Tunnel Project

General Comments

1. Page 239, the construction of the tunnel (Alternatives 3A, 3B, 3C) would involve horizontal mining (1.91-2.23 miles), trench cutting and fill construction technique for the portal sections. It is anticipated that the construction activity will create a significant amount of construction debris and excavation spoils. The Final EIS should provide an estimate of this material, how it will be managed and the location of the ultimate disposal.

2. The DEIS does not provide any information on the location, size and the potential impacts of the construction lay-down and staging areas. This information should be included in the Final EIS.

3. All three Build Alternatives will require three ventilation plants. Two of the plants are located at either end of the tunnel (north and south portal) and integrated into the tunnel portal construction. However the third tunnel (Intermediate Ventilation Plant) will require surface and subsurface disturbance to connect the ventilation shaft to the tunnel construction. The preferred intermediate ventilation plant would be located at the south side of the Brookfield Avenue and Whitelock Street intersection in the Reservoir Hill neighborhood. The Reservoir Hill neighborhood is a Historic District and is listed on the National Register. The site would displace the community garden and a community gathering and learning space. The community garden and the community gathering spaces are considered integral to the neighborhood character of Reservoir Hill by its residents. On Page 56 of the DEIS identifies additional alternative sites for the intermediate ventilation plant proposed by the public. EPA recommends that these alternatives be seriously considered; in particular, the Druid Hill Avenue between Whitelock Street and Clendenin Street site. This site consist of a block of abandon houses adjacent to an industrial facility. Further it is approximately the same distance to the tunnel alignment as the preferred third ventilation site.

4. The MARC commuter service is expected to replace existing electric locomotives with diesel powered locomotives by 2019. Based on operational projections, the total number of daily commuter train service using the tunnel would be 164 trains. It is unclear if the air quality analysis of this increase in diesel emissions was evaluated locally in the areas of the ventilation facilities on the community, particularly considering the most sensitive portion of the community: the elderly, health-impaired and young children.

5. For possible operational rail service delays, provisions should be made to include designating acceptable waiting locations, away from homes, schools, heavily-used parks, and waterways. If locomotives could be laying over in these locations for extended periods, authorities should consider furnishing "portable air" and generators to supply electric power to enable locomotives to shut down safely.

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6. Because infrastructure and equipment is always subject to disuse and misuse, and operations can achieve or undermine efficiency, the FRA should execute binding agreements with the railroads and system operators that:

- Require use of idle reduction infrastructure where provided.
- Establish engine shutdown policy/protocol (based on duration of wait, season, onboard and trackside equipment, etc.).
- Designate waiting locations.

7. Greater details should be included in the Final EIS on the erosion and sediment controls during construction and the stormwater and groundwater control measures during tunnel operations.

Specific Comments

Climate Change

1. Page 129, the DEIS summarizes the December 2014 CEQ draft guidance (Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change Impacts). Although still a draft, it provides helpful general guidelines that, unfortunately, were not applied in the DEIS. It would be beneficial for the Final EIS to provide an analysis with details on how the agency considered the GHG emissions of each alternative. If warranted, the Final EIS would also benefit from including a qualitative description of relevant climate change impacts, an analysis of emissions from reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. It is recommended that the "Affected Environment" section of the EIS include a summary discussion of climate change and ongoing and reasonably foreseeable climate change impacts relevant to the project and project area, based on U.S. Global Change Research Program (http://www.globalchange.gov) assessments. This will assist in identifying potential project impacts or other factors that may be exacerbated by climate change and inform consideration of measures to adapt to climate change impacts. (Among other things, this will assist in identifying resilience-related changes to the proposal and provide background for the reader and decision-maker on data that might be used in resilience design).

2. Page 156, the DEIS lists as one of several bullets that the project design would result in a "cost avoided" based on Climate Change resiliency. Nothing further is said, including no detail on design considerations to accommodate climate change resiliency. The Final EIS would benefit from the inclusion of details on how the project design incorporates concepts of resiliency from the effects of climate change, data that was used to assist in design, and considerations that were made in design alternatives.

3. Page 157, the DEIS discusses the benefits of three action alternatives in removing a chokepoint from the NEC and moving commuters from reliance on automobiles to more energy-efficient train use. However, the DEIS makes no connection between these benefits and GHG

emission reductions. The FEIS would be far stronger if it analyzed and compared among alternatives the annual CO_{2e} tons that FRA actions might save.

Environmental Justice

1. The goal of the Environmental Justice (EJ) assessment is to identify areas of potential EJ concern using objective, clearly-definable methodology, to identify the potential adverse impacts associated with the project, mitigations for those impacts, and other relevant data that may help to better define the situation from an EJ perspective in a comprehensive and coherent manner. EPA is concerned that environmental justice issues may not have been adequately addressed, that additional documentation of impacts on populations of EJ concern may be needed, and that there may be impacts to populations of concern. Comprehensive steps should be taken to assure early, frequent and appropriate engagement of the community in the decision-making process.

2. The low income benchmark may be inaccurate. Low-income populations in an affected area should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect. The approach to determine the appropriate benchmarks include:

- Apply the 50% test (all areas that are more than 50% are areas of EJ concern. Benchmark value should be compared to the state or county average)
- If the percent minority population is greater than the state or county average, then this would equal the Area of Potential EJ concern; OR
- Set a benchmark that exceeds the state or county average by a given percentage (*e.g.*, taking 110% of the state or county average).

3. The Study Area currently contains six publicly-owned housing developments, with a total of 2,467 units, dispersed throughout the Study Area. There are also 22 affordable housing apartment developments with a total of 3,111 units. The Final EIS should include the percentage of publicly owned housing developments and affordable housing developments impacted in the City of Baltimore.

4. As stated in page 176, "Executive Order 12898 requires federal agencies ensure effective, meaningful involvement of low-income and minority populations in project planning and development and potentially affected EJ populations have fair and equal access to information." The Final EIS should include a listing of low-income and minority community organizations or representatives engaged in the project and dates of involvement.

Noise and Vibration

1. The impacts from noise and vibration appear to be significant, as stated on page 234 and elsewhere. The exceedances of FTA frequent impact criteria for Noise and Vibration include:

- Alternative 3A - Noise 215 residences, Vibrations 69 residences
- Alternative 3B – Noise 303 residences, Vibration 138 residences
- Alternative 3C – Noise 265 residences, Vibration 92 residences

2. It is unclear in the DEIS what the impacts of noise and vibration are during construction, how the communities will be informed and what mitigation measures will be implemented.

3. EPA suggest the following noise and vibration preventative and mitigation measures:

- Where practicable, schedule individual project construction activities to avoid or minimize adverse impacts. Consider using noise barriers, including temporary barriers, semi-permanent barriers, noise curtains, and/or noise tents. Consider using vibration reducing techniques or mitigation measures.
- Coordinate construction activities with projects under construction in adjacent and nearby locations to avoid or minimize impacts.
- Consider condition of surrounding buildings, structures, infrastructure, and utilities, where appropriate. Consider whether any special protection is needed for historic properties.
- Prepare contingency measures in the event established limits are exceeded. Consider steps to avoid generating noise/vibration from cumulative operations that may exceed noise limits.
- Consider establishing a public communication plan in order to keep the public informed and attempt to reduce public frustration. This plan could include regular public meetings, emails, a hotline, and other notices.
- Consider whether a noise technician/acoustical engineer is needed during peak construction phases.
- Consider restricting the use of certain types of equipment during noise/vibration-sensitive hours. Consider restricting night work all together.

Cultural Resources

1. Page ES 6, Table 2: Summary of Potential Engineering and Environmental Impacts provides a clear and concise summary of the impacts for the action alternatives (3A, 3B, 3C) and the No-build Alternative. It is evident from this chart and the Cultural Resources sections of the DEIS that of the build alternatives, Alternative 3A is the alternative with the least cultural resources/Section 4(f) properties impact (as well as environmental and community impacts) in comparison with the other two action alternatives (3B and 3C) as summarized below.

	Alternative 3A	Alternative 3B	Alternative 3C
Adverse Effects for Historic Properties	6 (6 contributing historic elements impacted)	8 (87 contributing historic elements impacted)	10 (132 contributing historic elements impacted)
Area of Surface Disturbance within	12.0 acres	12.0 acres	20.3 acres

Historic District			
Use of Section 4(f) Properties	5 properties	11 properties	10properties

2. Page ES-15 (3. Section 4(f) Properties) and pages 183-194 (Chapter 6), discuss specific impacts to the Section 4(f) properties. In particular, ***Alternative 3A*** would result in potential use of five (**5**) Section 4(f) properties requiring the demolition of three (**3**) historic buildings which are contributing elements to the Midtown Edmondson Historic District. ***Alternative 3B*** would result in the use of eleven (**11**) properties qualifying for Section 4(f) requiring demolition of **82** historic buildings or other contributing elements to the Midtown Edmonson Historic District. In addition, construction of the south portal would require demolition of five (**5**) historic buildings or other contributing elements to the Greater Rosemont Historic District. ***Alternative 3C*** would result in the potential use of ten (**10**) Section 4(f) properties. In addition, this would result in the demolition of seven (**7**) historic buildings or other contributing elements to the Midtown Edmondson Historic District, **31** historic buildings or other contributing elements to the Greater Rosemont Historic District and **28** historic buildings or other elements contributing to the Edmondson Avenue Historic District. As is evident, the specific impacts discussed within each alternative is far greater (at least for Alternative 3B and 3C) than the total number of Section 4(f) properties impacted for each alternative (Alternative 3A – 5 properties, Alternative 3B – 11, Alternative 3C – 10); Specific impacts (Alternative 3A – 3, Alternative 3B – 87, Alternative 3C – 66). It is not clear if there is overlap of effects for Historic Properties and Section 4(f) properties or if these impacts are distinctly separate. Although it is obvious that impacts to both Historic Properties and Section 4(f) is significant and adverse (for all action alternatives) this should be made clear in the Final EIS. Table 2 should include the total number of individual impacts within each Section 4(f) property (as shown below) for each action alternative as was done for "adverse effects for historic properties."

	Alternative 3A	Alternative 3B	Alternative 3C
Use of Section 4(f) Properties	5 (3 individual impacts)	11 (87 individual Impacts	10 (66 individual impacts)

3. Page 179 (Chapter 6) references the *Architectural Historic Properties Effects Assessment Report* which provides details of individual historical property effects. This document was not included as part of the Appendix. EPA recommends that this document be available for public review and be made part of the Final EIS documentation.

Air Quality

1. In an effort to attain and maintain National Ambient Air Quality Standards the FRA should control or minimize construction emissions through use of the following typical Best Management Practice (BMPs) in association construction:

- Utilize appropriate dust suppression methods during on-site construction activities. Available methods include application of water, surfactants, soil stabilizers, or vegetation; use of enclosures, covers, silt fences, or wheel washers; and suspension of

earth-movement activities during high wind conditions. Consider implementing a dust control program.

- Maintain a speed of less than 15 mph with construction equipment on unpaved surfaces as well as utilize ultra-low sulfur diesel (ULSD) fuel in off-road construction equipment with an engine horsepower (HP) rating of 50 HP or above fuel with lower sulfur content.

- Employ a construction management plan in order to minimize interference with regular motor vehicle traffic.

- Use electricity from power poles instead of generators whenever possible.

- Repair and service construction equipment according to the regular maintenance schedule recommended for each individual equipment type.

- Use low-VOC architectural materials and supplies equipment.

- Incorporate energy-efficient supplies whenever feasible.

- Consider whether a PM-10 or PM-2.5 monitoring program should be utilized.

- Use diesel engine retrofit technology in off-road equipment to further reduce emissions. Such technology may include diesel oxidation catalyst/ diesel particulate filter (DOC/DPF), engine upgrades, engine replacements, or combinations of these strategies.

- Limit unnecessary idling times on diesel-powered engines to three minutes.

- Locate diesel-powered exhausts away from fresh air intakes.

- Control dust related to the construction site through a Construction Environmental Protection Program (CEPP), including a Soil Erosion and Sediment Control Plan that includes, among other things, spraying of a suppressing agent (nonhazardous, biodegradable) on dust piles, containing fugitive dust, and adjusting construction activities to respond to meteorological conditions, as appropriate.

2. The build alternatives tunnel dimensions would provide access for larger freight trains including Plate H freight cars. This would facilitate freight access between the southwest and the northeast portions of the Port of Baltimore. The existing tunnel limits freight access to two freight trains per day. Since the build alternatives will provide increased freight capacity, the FEIS should estimate increased freight traffic through the proposed tunnel and potential localized air quality impacts.

Hazardous Materials Management

1. The potential number of hazardous material sites ranges from 92 to 153 sites along alternative alignments and may include dry cleaners, rail maintenance, gas station and automotive repairs. As a precautionary measure, the tunnel project should include a hazardous material contingency plan that would address how to properly remove, handle and dispose of any hazardous material that may be encountered and or related to the construction activity.

2. As stated on page 82, cargos to/from specific railroad customers of the freight trains that pass through the B&P Tunnel include vegetable oil; plastic pellets; paper; lumber; and produce. However, there are no regulations or restrictions which would preclude other forms of freight cargo on these trains, providing the material is moved in accordance with federal transportation rules. There is concern that the potential material could include hazardous materials. We recommend that emergency contingency plans in place to address potential spills or other accidents as a result of carrying these materials be disclosed to the public through the NEPA process or communicated to the public in the future.

Children's Environmental Health

Executive Order 13045 on Children's Health and Safety directs that each Federal agency shall make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and shall ensure that its policies, programs, activities, and standards address these risks. Analysis and disclosure of these potential effects under NEPA is necessary because some physiological and behavioral traits of children render them more susceptible and vulnerable than adults to health and safety risks. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed and their growing organs are more easily harmed. Although the DEIS identifies communities and public schools located near the proposed project area, the DEIS does not clearly describe the potential direct, indirect, and cumulative impacts of the project on children's health.

1. Children's Environmental Health does not appear to have been included in the DEIS. The FRA Executive Order 13045 for the Protection of Children from Environmental Health Risks and Safety Risks. Without analysis or documentation on this topic, it cannot be assumed that there is no potential risk associated with the proposed project that may adversely affect children's health.

2. EPA recommends that the EIS include an evaluation of potential direct, indirect and cumulative health impacts of the project that may have a disproportionate effect on children's health. This may include evaluating the excavated soil lead levels, and additional consideration to dust reductions and stockpile stabilization techniques. We also suggest evaluating noise and vibration impacts associated with the project specific to children. Consider evaluating potential impacts associated with pest/rodent extermination specific to children.