VII. AGENCY AND PUBLIC COORDINATION AND COMMENTS

FRA and MDOT have encouraged agency and public input into project development throughout the project. The purpose of this coordination is to provide information on the project to stakeholders, become aware of public and agency concerns and interests, and consider that input in project development. From scoping to alternatives development to the selection of a Preferred Alternative, data received from agencies and the public has supplemented data collected by the project team through desktop research and field visits. This comprehensive information will ultimately aid in the selection of a Preferred Alternative that both meets the Project Purpose and Need and minimizes impacts to the environment.

The agency and public coordination process was implemented to be consistent with the Council on Environmental Quality NEPA regulations (40 CFR parts 1500-1508); FRA Procedures for Considering Environmental Impacts (64 FR 28545 [1999]); and FRA Update to NEPA Implementing Procedures (78 FR 2713 [2013]). It began with the scoping period at the initiation of the B&P Tunnel Project in June 2014. The general public involvement process has evolved as the project has advanced through milestones, including the screening of the preliminary alternatives and the development and evaluation of alternatives carried forward.

This chapter describes the agency and public coordination undertaken throughout the project process, as well as a summary of comments received. The chapter discussion begins with the scoping period, which provides the foundation for the scope of the EIS and the agency and public coordination, and continues to describe the subsequent agency and public involvement efforts throughout the development of alternatives. Comments are then summarized and addressed with Project Team responses. Additional information on agency and public involvement may be found in the *Project Scoping Report*, the *Preliminary Alternatives Screening Report*, and the *Alternatives Report*, available at www.bptunnel.com.

A. Scoping Period

The B&P Tunnel Project was first introduced to agencies and the public during the scoping period, which began with the publication of the Notice of Intent in the *Federal Register* on June 9, 2014 and concluded with the end of the scoping comment period on July 30, 2014. The primary goal of the scoping period was to introduce the B&P Tunnel Project to agencies and the public, and to gather input on project purpose and need and environmental resources. The scoping period also served to determine and clarify issues that are relevant to the scope of the project. During the scoping process, communication was established between the lead project agency and project grantee (FRA and MDOT, respectively) and government agencies, citizens, elected officials, community associations, and other interested stakeholders.

The scoping process for the B&P Tunnel Project was implemented consistent with the Council on Environmental Quality NEPA regulations (40 CFR parts 1500-1508); FRA Procedures for Considering Environmental Impacts (64 FR 28545 [1999]); and FRA Update to NEPA Implementing Procedures (78 FR 2713 [2013]). The scoping process included the following major elements:

- Publishing of the Notice of Intent in the *Federal Register* (June 9, 2014);
- Presentation at an Interagency Review Meeting (June 18, 2014);
- Hosting of a Public Open House (June 19, 2014); and
- Scoping Comment Period for agencies, the public, and any other interested stakeholders (June 9, 2014 to July 30, 2014).

While the scoping period officially began with the publication of the Notice of Intent (NOI) in the *Federal Register* on June 9, 2014, outreach to the public started as early as May 20, 2014, when the project website

(www.bptunnel.com) was launched. The scoping period and the launch of the project website laid the foundation for both agency coordination and public involvement throughout the remainder of the project.

B. Agency Coordination

FRA and MDOT have encouraged agency input into project development throughout the B&P Tunnel Project process. The purpose of this coordination was to provide information on the project to agency stakeholders, gather agency concerns and interests, and consider that input in project development. Information obtained from agency input has been used from project scoping to engineering development and the environmental evaluation of the alternatives.

Federal and state agencies have been kept informed of project updates via the project website, www.bptunnel.com, and regular Interagency Review Meetings (IRM) hosted by the Maryland State Highway Administration. The B&P Tunnel Project was presented to interested federal, state, and local agencies at five separate IRMs. Agencies were invited to attend the IRM via e-mail.

1. Interagency Review Meeting: June 18, 2014

The first IRM was held on June 18, 2014 at Maryland State Highway Administration in Hanover, Maryland. Attendees of the IRM included representatives from the following agencies:

- Baltimore Metropolitan Council (BMC)
- Federal Highway Administration (FHWA)
- Maryland Department of Natural Resources (MD DNR)
- Maryland Department of Planning (MDP)
- Maryland Department of the Environment (MDE)
- Maryland Historic Trust (MHT)
- Maryland Transit Administration (MTA)
- Maryland Transportation Authority (MDTA)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)

The presentation served to introduce agencies to the B&P Tunnel Project and encourage their input in the scoping process. The meeting included a presentation with maps, graphics, and other information on the project background; the tunnel description and existing physical and operational conditions; proposed project needs; environmental resources to be considered; previous studies; next steps and the project schedule; and the public and agency coordination process, along with contact information. Agency questions and comments on the existing physical conditions of the tunnel; construction impacts; whether double-stack freight train operations will be accommodated; stormwater management; and public and agency involvement were discussed.

2. Interagency Review Meeting: October 15, 2014

The second IRM was held on October 15, 2014 at Maryland State Highway Administration in Hanover, Maryland. Attendees of the IRM included representatives from the following agencies:

- Federal Highway Administration (FHWA)
- Maryland Department of Natural Resources (MD DNR)
- Maryland Department of Planning (MDP)
- Maryland Department of the Environment (MDE)
- Maryland Department of Transportation (MDOT)
- Maryland Historic Trust (MHT)

- Maryland Port Administration (MPA)
- National Oceanic and Atmospheric Administration- National Marine Fisheries Service (NOAA- NMFS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)

The purpose of the presentation was to update agencies on the development of the preliminary alternatives and the release of the *Preliminary Alternatives Screening Report*. The presentation included maps, graphics, and other information on the project background; the project purpose and need; preliminary alternatives development; screening methodology and recommendations for alternatives to be carried forward; release of the *Preliminary Alternatives Screening Report*; next steps and project schedule; and contact information. Agency questions and comments pertaining to the accommodation of both passenger rail service and freight rail operations; whether there is a speed goal for the project; and coordination with the FRA NEC FUTURE team were discussed.

3. Interagency Review Meeting: May 20, 2015

The third IRM was held on May 20, 2015 at Maryland State Highway Administration in Hanover, Maryland. Attendees of the IRM included representatives from the following agencies:

- Baltimore Metropolitan Council (BMC)
- Critical Area Commission (CAC)
- Federal Highway Administration (FHWA)
- Maryland Department of Transportation (MDOT)
- Maryland Transit Administration (MTA)
- Maryland Department of Natural Resources (MD DNR)
- Maryland Department of Planning (MDP)
- Maryland Department of the Environment (MDE)
- Maryland Historic Trust (MHT)
- National Park Service (NPS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)

The presentation served as an update to agencies prior to the July 2015 Public Open House; it provided maps, graphics, and other information on project development that had occurred since the previous meeting and release of the *Preliminary Alternatives Screening Report*. The presentation included information on the project background; the project purpose and need; the previous preliminary alternatives screening; track and operation requirements; the alternatives carried forward from the screening (Alternative 1, Alternative 2, Alternative 3, and Alternative 11) and the development of alternative options (Alternative 3A, Alternative 3B, Alternative 11 Option A, and Alternative 11 Option B); ventilation plants; the future of the existing tunnel; alternatives evaluation criteria; next steps and project schedule; and contact information. Agency questions pertaining to project cost and potential property displacements were discussed.

4. Interagency Review Meeting: June 17, 2015

The fourth IRM was held on June 17, 2015 at Maryland State Highway Administration in Hanover, Maryland. Attendees of the IRM included representatives from the following agencies:

- Baltimore Metropolitan Council (BMC)
- Federal Railroad Administration (FRA)
- Maryland Department of Natural Resources (DNR)

- Maryland Department of Planning (MDP)
- Maryland Historic Trust (MHT)
- Maryland Department of Transportation (MDOT)
- Maryland Transit Administration (MTA)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)

The presentation provided maps, graphics, and other information on project development that had occurred since the previous meeting. The presentation included information on the project background; the project purpose and need; track and operation requirements; the alternatives carried forward from the screening, along with the development of alternative options; an introduction of Alternative 3C; ventilation plants; the future of the existing tunnel; alternatives evaluation criteria; next steps and project schedule; and contact information. Agency questions pertaining to stormwater management; Indirect and Cumulative Effects (ICE) analysis; vibration analysis; operation requirements; hydrogeology; right-of-way impacts; treatment of cut material; the project completion date; natural resources; the future of the existing tunnel; and the Northern Long-Eared Bat were discussed.

5. Interagency Review Meeting: October 21, 2015

The fifth IRM was held on October 21, 2015 at Maryland State Highway Administration in Hanover, Maryland. Attendees of the IRM included representatives from the following agencies:

- Federal Highway Administration (FHWA)
- Maryland Department of Natural Resources (DNR)
- Maryland Department of the Environment (MDE)
- Maryland Transit Administration (MTA)
- National Oceanic and Atmospheric Administration- National Marine Fisheries Service (NOAA- NMFS)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)

The presentation provided an overview of Alternative 1, Alternatives 3A, 3B, and 3C, which were retained for evaluation in this DEIS, as well as the release of the *Alternatives Report*. The presentation included information on the project background; evaluation criteria; the elimination of Alternative 2, Alternative 11 Option A, and Alternative 11 Option B from the study; ventilation plants; a follow-up to questions from the previous IRM; environmental documentation; public involvement activities; next steps and project schedule; and contact information. Agency questions pertaining to climate change resiliency; the treatment of cut material; and the future of the existing tunnel were discussed.

Several agency comments were received through the online project comment form. They were also encouraged to submit comments throughout the project process. Following the meetings, copies of the presentations were made available.

C. Public Involvement

Members of the public, including citizens, elected officials, and other stakeholders (i.e. community associations, Baltimore City agencies, and local institutions and businesses), are important project participants and have been regarded as such throughout the project process. Three Public Open Houses, as well as 10 community meetings have been held since the project's Notice of Intent was published on June 9, 2014. At each of these meetings, the public was given the opportunity to learn about project development in-person and directly ask questions and engage in discussion with the Project Team.

1. Public Open House: June 19, 2014

The first Public Open House was held during the scoping period on June 19, 2014, at the Talon Center at Coppin State University from 5:00 pm to 8:00 pm. The meeting was advertised via letters to elected officials, community associations, Baltimore City agencies, and other local institutions and businesses; postcards mailed to approximately 18,000 residences and businesses within approximately a half-mile of the existing B&P Tunnel alignment; newspaper advertisements in four publications; fliers posted at high-traffic locations within the Study Area; and a press release.

Thirty-nine members of the public and agency representatives attended the first Public Open House. Ten display boards provided an overview of the B&P Tunnel Project, including the following project elements: project need; tunnel description and existing conditions; the NEPA process; environmental resource considerations; previous tunnel-related studies; the project schedule; two maps of the existing B&P Tunnel alignment and vicinity, featuring historic and natural resources; and input solicitation and contact information. The display boards were posted to the project website prior to the meeting.

2. Public Open House: October 29, 2014

The second Public Open House, which updated the public on alternatives development and the *Preliminary Alternatives Screening Report*, was held on October 29, 2014, at Mount Royal Elementary/Middle School, from 5:00 pm to 8:00 pm. The meeting was advertised via letters to elected officials, community associations, Baltimore City agencies, and other local institutions and businesses; postcards mailed to approximately 18,000 residences and businesses within approximately a half-mile of the existing B&P Tunnel alignment; newspaper advertisements in four publications; fliers posted at high-traffic locations within the Study Area; and an announcement on the B&P Tunnel Project website, www.bptunnel.com.

The Public Open House was attended by 110 members of the public, including citizens and agency representatives. Display boards provided an overview of the B&P Tunnel Project, specifically the preliminary alternatives development. Downloadable versions of these display boards were made available on the project website prior to the meeting.

3. Public Open House: June 16, 2015

The third Public Open House for the B&P Tunnel Project was held on June 16, 2015, at Carver Vocational-Technical High School, from 5:00 pm to 8:00 pm. The purpose of this meeting was to present more detailed engineering development and environmental evaluation on the alternatives that had been carried forward from the preliminary screening, including Alternative 1, Alternative 2, Alternative 3A, 3B, and 3C, and Alternative 11 A and 11B. This Public Open House also served as the public introduction of the alternative options.

The meeting was advertised via letters to elected officials, community associations, Baltimore City agencies, and other local institutions and businesses; postcards mailed to approximately 18,000 residences and businesses within approximately a half-mile of the existing B&P Tunnel alignment; newspaper advertisements in four publications; fliers posted at high-traffic locations within the Study Area; an announcement on the B&P Tunnel Project website, www.bptunnel.com; and an e-mail to the project mailing list.

The Public Open House was attended by 66 citizens and agency representatives. Display boards provided detailed information on the alternatives development and evaluation. Additionally, a presentation, which served as a broad introduction to the information on the display boards, was delivered three separate times during the evening. Downloadable versions of these display boards were made available on the project website prior to the meeting.

4. Project Community Meetings

In addition to the Public Open Houses, the Project Team hosted 10 smaller-scale project community meetings in April, July, and October 2015. These community meetings provided opportunities for the public to both learn about the project background and milestones, as well as engage with the Project Team. Downloadable versions of the presentation were made available on the project website after the meeting.

a. April 2015

A series of four project community meetings were held in April 2015 in order to provide a status update on the engineering activities and environmental evaluation that had occurred since the *Preliminary Alternatives Screening Report*. Over 25 people attended the four meetings. These meetings were intended to prepare the public for the new information to be released at the Alternatives Public Open House. A 30-minute presented by members of the Project Team provided project background, purpose and need, an overview of the preliminary alternatives screening process, the alternatives carried forward and continuing project activities. The presentation was followed by a Question-and-Answer session, during which community members voiced questions and concerns to the Project Team. The project community meetings were held from 6:00 pm to 8:00 pm on the following dates:

- April 13, 2015, at Gilmor Elementary School;
- April 14, 2015, at Mount Royal Elementary/Middle School;
- April 20, 2015, at Westside Elementary School; and
- April 21, 2015, at Lockerman Bundy Elementary.

b. July 2015

Another series of three project community meetings were held in July 2015 to provide a recap of information presented at the Alternatives Public Open House and provide opportunities for additional public input and questions. A total of 76 people attended the three meetings. During these meetings, the Project Team made a 30-minute presentation. The presentation highlighted the major topics of the June 2015 Public Open House, including the latest engineering development and environmental evaluation on Alternative 1, Alternative 2, Alternatives 3A, 3B, and 3C, and Alternative 11 Options A and B. The presentation was followed by a Question-and-Answer session, during which community members voiced questions and concerns to the Project Team. The project community meetings were held from 6:00 pm to 8:00 pm on the following dates:

- July 7, 2015, at Perkins Square Baptist Church;
- July 14, 2015, at Mount Lebanon Baptist Church; and
- July 16, 2015, at Mount Royal Elementary/Middle School.

c. October 2015

Three project community meetings were held in October 2015 to provide community residents project updates concurrent with the release of the *Alternatives Report*. A total of 97 people attended the three meetings. During these meetings, the Project Team made a 30-minute presentation. The presentation explained the reasons for eliminating Alternative 2, Alternative 11 Option A, and Alternative 11 Option B from further study; it also provided the latest engineering development and environmental evaluation on Alternative 1, Alternative 3A, Alternative 3B, and Alternative 3C, as well as the latest information on ventilation plants. The presentation was followed by a Question-and-Answer session, during which community members voiced questions and concerns to the Project Team. The project community meetings were held from 6:00 pm to 8:00 pm on the following dates:

- October 6, 2015, at Carver Vocational-Technical High School;
- October 13, 2015, at John Eager Howard Recreation Center; and

- October 20, 2015, at Mount Lebanon Baptist Church.

5. Community Association Meetings

The Project Team also attended several local community association meetings to present information on the project and respond to questions in smaller, neighborhood-focused settings. The Project Team attended a meeting of the Alliance of Rosemont Community Organizations (ARCO) on June 17, 2015, at St. Edwards RCC; a meeting of the Western District Community Council Meeting on August 27, 2015 at First Mount Calvary Baptist Church; as well as the regularly held meeting of the Reservoir Hill Improvement Council, Inc. (RHIC) on September 1, 2015, at John Eager Howard Recreation Center.

D. Comments

An extensive agency and public involvement effort has been part of this Project. Input from federal, state, and local agencies, as well as the public, has been solicited continually throughout the development of the B&P Tunnel Project. Throughout the course of the project, 142 total comments were received from agency representatives, members of the public, elected officials, and other project stakeholders. Comments were submitted via written comment forms at three Public Open Houses and ten community meetings; an online comment form at the project website; the project e-mail address, info@bptunnel.com; and postal mail. The public was also encouraged to ask questions or provide comments through telephone communication with a Baltimore City project representative, whose telephone number was made available on the project website and meeting materials.

Information obtained from agency and public input has been used during the engineering development and environmental evaluation of the alternatives. During the development of preliminary alternatives, Alternative 16 was added to preliminary evaluation directly as a result of public input. Other natural, cultural, and socioeconomic resources considered by the Project Team include, but are not limited to, the following: floodplains and climate resiliency; the federally endangered Northern Long-Eared Bat; historic districts and properties, including residences and buildings such as the American Ice Company House; local businesses throughout West Baltimore; and a community garden in Reservoir Hill. Additionally, the project community meetings and community association meeting presentations were implemented in an effort to be responsive to community needs, clarify community concern, and facilitate project understanding among Study Area residents.

In addition to being addressed in internal project team discussion and incorporated into alternative development and evaluation, comments were addressed through an e-mailed reply and/or environmental documentation available on the project website, including the *Scoping Report*, *Preliminary Alternatives Screening Report*, and *Alternatives Report*. **Table 70** summarizes the comments received after the release of the *Alternatives Report*. The specific public comments received are listed in **Appendix F**. Comments from this DEIS and the associated Public Hearing following this DEIS will be included in the evaluation for selecting the Preferred Alternative, in addition to the Final EIS and Record of Decision, to be released at the conclusion of the study.

Table 70: Comments and Responses to the Alternatives Report

Comment Summary	Project Team Response
Support for or objection to specific alternatives	Comments regarding support for or objection to specific alternatives that are recommended for further study will be taken into account as the alternatives evaluated. These comments will also be considered by FRA and MDOT when identifying a preferred alternative.
Concerns over environmental impacts near south portals, including:	Detailed information on Project impacts from the proposed alternatives are included in this DEIS have

• Historic buildings • Redevelopment potential • Displacements	been presented at ongoing public involvement efforts, such as the three public meetings held in October 2015.
Potential impacts from noise and vibration on historic residential structures	Operational impacts were evaluated using the guidelines set forth by the FTA Transit Noise and Vibration Impact Assessment. In addition, temporary construction vibration levels were also evaluated using both the FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities. An analysis was conducted using currently available information absent of vibration monitoring data that describes the ground-propagation characteristics or the building coupling losses. The results will, therefore, be limited to the quality and accuracy of the available data much of which is based on default assumptions from the FTA guidelines. Additional, more detailed information, as well as potential mitigation measures, will be considered and presented in the Final Environmental Impact Statement (FEIS).
Need to ensure MTA input regarding changes to the West Baltimore MARC Station are considered	The Maryland Department of Transportation (MDOT) has been involved throughout the project and their input, particularly MTA's concerns regarding the West Baltimore MARC Station, has been included in each step of the alternatives evaluation process.
Inquiries about benefits to local neighborhoods from the project	Construction of Build Alternatives could include mitigation measures with potential benefits to local communities impacted by the project. The public will have opportunity to provide input on proposed mitigation measures. Mitigation measures could potentially include landscape improvements, community open space, or other measures.
Potential impacts to community from ventilation plant, including air quality and noise concerns	Tunnels require ventilation for safe operation. Ventilation occurs through ventilation plants that are above-ground buildings that contain fans, operation and control equipment, fire protection equipment, and emergency exits. The purpose of a ventilation plant is to pull fresh air into the tunnel and ventilate the tunnel air to the outside; this is done through both passive and active ventilation. The proposed B&P Tunnel ventilation system includes three above-ground structures: one at the north portal, one at an intermediate tunnel location, and one at the south portal. The location of the intermediate ventilation plant must be located

	above the tunnels being ventilated, but some offset is permitted to accommodate buildings at the surface. The ventilation plants will be designed with input from the community to complement and blend with the surrounding built environment. The B&P Tunnel ventilation system, including ventilation plant equipment and operations, will be designed and implemented in accordance with National Fire Protection Association (NFPA) 130 fire/life/safety codes. In general, ventilation plants are relatively quiet. During normal operations, they emit a low hum (around 45 decibels) that is approximately as loud as a quiet urban street at night. Because noise decreases quickly with distance from its source, surrounding residents will generally not hear the noise of a ventilation plant when fans are running; only a person standing at the louvers would hear the machinery in operation. Under emergency operation, when the fans run at their highest speed, a louder humming sound and the whooshing of air exiting the louvers could be heard at a greater distance from the plant. The Project Team has not yet identified the predicted noise level of the ventilation plants for the B&P Tunnel Project. Noise attenuators in the ventilation plant would be able to reduce the noise to Baltimore City noise criteria levels (or below). Under normal operation, the ventilation system will dilute all emissions so that pollutant concentrations are well below regulatory thresholds. Ventilation plants eject tunnel air into the surrounding sky, at a height that (accounting for wind currents and particle dispersion) would not have any measureable effect on air quality. In the very rare event of a tunnel fire, the path from a tunnel fire to the exhaust louvers is long and circuitous, with many bends that retard the ability of particles to travel through the fans and louvers. During an extreme event, if the emitted air is determined to be unsafe, evacuation of the areas surrounding the ventilation plant may be required and would be implemented per the directions from

	the Mayor's Office of Emergency Management pursuant to the Emergency Operations Plan.
Provide information to residents on how potential impacts would be prevented and mitigated, to features such as: • Neighborhoods and communities • Residences and businesses • Neighborhood gardens and green space • Historic properties • Utilities • Druid Hill Reservoir • Groundwater • Noise • Bats and other wildlife habitat	These suggestions have been considered throughout the project process. Ongoing alternatives development and selection of a preferred alternative will take into account measures to avoid, minimize, or mitigate environmental impacts.
Concern over the frequency of and materials carried by freight trains through the tunnel	The B&P Tunnel Project would not preclude freight travel. Freight train usage of the tunnel will be determined by Norfolk Southern and CSX and be market-driven to the extent that it does not interfere with passenger train operation. Please note that there are no plans to alter the current rights of freight trains on the Amtrak-owned NEC, and that the priority for the NEC will remain passenger service. The two local Norfolk-Southern Corp freight trains that operate through the B&P Tunnel serve customers south of the tunnel. The cargo that is carried/shipped is at the request of local businesses for their particular operations. Currently, cargos to/from specific railroad customers through the B&P Tunnel include, but are not necessarily limited to: vegetable oil, plastic pellets, paper, lumber, and produce.
Public safety concerns regarding the proposed demolition of the fire house under Alternative 3C	Any impacts to community facilities would be coordinated with the City of Baltimore to ensure no public safety hazards occur.

E. Public Hearing and Final EIS

A public hearing will be held to solicit input on the DEIS and remaining Alternatives 1, 3A, 3B, and 3C. Agency and public input received on the DEIS, at the Public Hearing, and related to the alternatives will be considered in the evaluation and identification of a Preferred Alternative. A Final EIS will be prepared to address comments received on the DEIS and provide information on the identification of the Preferred Alternative. Comments on the Final EIS will be solicited prior to FRA making a final decision on the project. FRA anticipates publishing a Record of Decision documenting the project decision in mid-2017.

VIII. LIST OF PREPARERS

FRA and MDOT, in cooperation with FTA and coordination with Amtrak, have prepared the B&P Tunnel DEIS with aforementioned agency staff and with the assistance of a team of consultants. The following personnel were instrumental in the preparation of this document.

FEDERAL RAILROAD ADMINISTRATION

Name	DEIS Contribution
Richard Cogswell	Project Engineer
Bradley Decker	Planner; Technical Reviewer
Michelle W. Fishburne, PE	Environmental Protection Specialist; DEIS Review
Kyle Gradinger	Lead Rail Planner
Whitney M. Phend	Attorney Advisor – Office of Chief Counsel
Jeff Price	Regional Manager, Mid Atlantic
Laura Shick	Federal Historic Preservation Officer

BALTIMORE CITY DEPARTMENT OF TRANSPORTATION

Name	DEIS Contribution
Odessa Phillip, PE	Baltimore City DOT, Environmental Manager

MARYLAND DEPARTMENT OF TRANSPORTATION

Name	DEIS Contribution
Jacqueline Thorne	Project Manager
Jason Lodge	Engineer

MARYLAND TRANSIT ADMINISTRATION

Name	DEIS Contribution
Jean Wolfers-Lawrence	MDOT B&P Tunnel Project Environmental Manager

CONSULTANT, RUMMEL, KLEPPER, AND KAHL LLP

Name	DEIS Contribution
Eric Almquist, AICP; PWS; CE	Environmental Manager/DEIS Development
Henry Bankard, Jr.	Graphics, Public Involvement and Project Documents
Joanna Biden, PSP	CPM Schedule Preparation
Ted Chadeayne, HAZWOPER	Hazardous Materials Assessment
Jean-Paul Chevalier	Senior 3D Specialist
Elizabeth Fagan	Architectural Historian
Kenneth A. Goon, AICP	Project Manager, Document Review DEIS
Andrew Griffey	Solid Waste
Philip A. Hayden	Senior Architectural Historian
Kevin Hughes	Noise Measurements
Lyneisha Jackson	Contributing Author and Environmental Planning

Name	DEIS Contribution
Leslie Jamka	Technical Editor
Alexandra Kalyuzhnaya, EIt; CTQP Certifications	Author, Document Control Plan, Project Management Plan, and Quality Management Plan
Henry Kay	Technical Advisor
James Kodlick, PWS, RPA	Document Control and Contributing Author
Tyler Lane	Senior Project Scientist, Hazardous Materials Assessment
Kristina Miller, PE	Author, Notice of Intent, Purpose and Need, Technical Report Introductory Documentation
Susan G. Miller, RPA	Contributing Author; Environmental Planning
Erron L.G. Ramsey, AICP	Scoping; Purpose and Need; Preliminary Alternatives; DEIS Review
Brittany Rolf	Contributing Author and Environmental Planning
J. Andrew Ross	Archaeologist
Jason Shellenhamer, RPA	Project Archaeologist
Madeline Sigrist	Natural Resources
Ryan Snyder	Contributing Author, Environmental Planning, GIS
Christeen Taniguchi	Project Architectural Historian
Kimberly Troiani	Website Administrator/Graphics Specialist
Vance Tsiamis, PEM,; PSP; CCM	Project Controls
George Tye	Noise Analyst
Elizabeth Workman-Maurer	Author, Purpose and Need Statement

SUBCONSULTANT, AECOM TECHNICAL SERVICES, INC.

Name	DEIS Contribution
Thomas Herzog, MBA	Vibration Specialist
Angela Jones, PE	Task Leader, Alternatives Analysis
Steven R. Kramer, PE	Tunnel Lead and Technical Advisor
David R. Nelson	Information Graphics/Design

SUBCONSULTANT, DOVETAIL CULTURAL RESOURCE GROUP

Name	DEIS Contribution
Kerri S. Barile, RPA	Cultural Resources Manager
LeeAnne Brooks	Architectural Historian
Michael L. Carmody, RPA	Cultural Resources Manager
Marco Gonzalez, GIS Certificate	GIS/Graphics
Chris Manning	Architectural Historian
Curtis A. McCoy	GIS/Graphics
Danae Peckler	Architectural Historian
Heather D. Staton	Architectural Historian
Michelle Salvato	Architectural Technical Studies
Alan Tabachnick	Cultural Resources Manager and Architectural Technical Studies.

SUBCONSULTANT, KB ENVIRONMENTAL SCIENCES, INC.

Name	DEIS Contribution
Wayne Arner	Noise Specialist
Lindsay Baumaister	GIS Analysis/Mapping
Michael Kenny, QEP; CHMM; CIH	Air Quality Specialist
Clinton Morrow	Noise and Air Quality Documentation; Project Management
Paola Pringle	Air Quality Technical Analyst

SUBCONSULTANT, REMLINE CORP.

Name	DEIS Contribution
Linda Moreland	Public Outreach

SUBCONSULTANT, ROSBOROUGH COMMUNICATIONS, INC.

Name	DEIS Contribution
Anthony Brown	Public Outreach Manager
Lineta Duren	Public Outreach
Tori Leonard	Public Outreach
Carl Williams	Public Outreach

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IX. DISTRIBUTION OF THE DRAFT EIS

DISTRIBUTION LIST

The B&P Tunnel Project Draft EIS, including Appendices and supporting Technical Reports, was made available to the following organizations:

Federal Agencies

Advisory Council on Historic Preservation
Federal Highway Administration
Federal Transit Administration
National Oceanic and Atmospheric Administration – National Marine Fisheries Service
National Park Service, National Capital Region
National Railroad Passenger Corporation (Amtrak)
U.S. Army Corps of Engineers
U.S. Department of Housing and Urban Development
U.S. Department of Transportation
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service

State Agencies

Maryland Department of the Environment
Maryland Department of Natural Resources
Maryland Department of Planning
Maryland Department of Transportation
Maryland Historical Trust
Maryland Port Administration
Maryland State Highway Administration
Maryland Transit Administration
Maryland Transportation Authority

Regional Agencies

Baltimore Metropolitan Council

City/County/Other Agencies

Baltimore City
Baltimore City Commission for Historical & Architectural Preservation
Baltimore City Department of Human Resources
Baltimore City Department of Public Works
Baltimore City Department of Transportation
Baltimore City Emergency Management and Public Safety
Baltimore City Fire Department
Baltimore City Hispanic Commission
Baltimore City Planning Commission
Baltimore City Planning Department
Baltimore City Police Department

Baltimore City Public Schools
Baltimore Development Corporation
Baltimore Housing

Community Organizations

2500 Block McCulloh Street Neighborhood Association
Alba Neighborhood Association
Alliance of Rosemont Community Organizations, Inc.
Ashburton and Presbury Better Neighborhood Association
Ashburton Area Association
Charles-North Community Association
Citizens Concerned For The Hanlon Community
Citizens For Community Improvement-(CCI)
Clergy United to Transform Sandtown-(CUTS)
Communities Organized To Improve Life-(COIL)
Community Survival Center/The Community School
Concerned Citizens of Woodberry Association
Concerned Citizens of Grayson Street
Druid Heights Community Development Corporation
Easterwood Neighborhood Improvement Association
Fairmount Neighborhood Association, Inc.
Fulton Community Association, Inc.
Fulton Heights Community Organization
Friends of Gwynns Falls/Leakin Park
Greater Remington Improvement Association
Gwynn's Falls Trail Council
Heathbrook Community Organization, Inc.
Hilton/North Merchants Association
Hoes' Heights Improvement Association, Inc.
Laurens House
Liberty Square Neighborhood Association
Matthew A. Henson Community Association
Mondawmin Neighborhood Improvement Association
New Auchentoroly Terrace Association
Old Goucher Business Alliance
Old Goucher Community Association, Inc.
Old Mill Town Association
Panway Neighborhood Improvement Association
Parkview Improvement Association, Inc.
Penn-North Nehemiah Homeowners' Association
Pennsylvania Avenue Merchants Association
Pennsylvania Avenue Redevelopment Collaborative
People's Homesteading Group, Inc.
Remington Neighborhood Alliance
Reservoir Hill Historic District
Reservoir Hill Improvement Council, Inc.
Robert W. Coleman Community Organization

Sandtown Habitat Homeowners' Association
Sandtown-Winchester Building In Partnership
Sandtown-Winchester Improvement Association
Sanford-Cumberland Task Force Association
Stone Hill Residents' Association
Upton Planning Committee, Inc.
Westwood Avenue Neighborhood Association
Winston-Govans Neighborhood Improvement
Woodbrook Avenue Neighborhood Association

Stakeholders

Arthur 'Smokestack' Hardy Fire Station
Baltimore City Bureau of Parks Administration
CSX Transportation Inc.
Druid Hill Family Center
Eutaw-Marshburn Elementary School
Maryland Institute College of Art
Midtown Academy Elementary School
Mt. Royal Elementary Middle School
Norfolk Southern Corporation
P. Flanigan & Sons Construction and Material Supply
University of Baltimore

Elected Officials

Federal

Senator Benjamin L. Cardin
Senator Barbara A. Mikulski
Congressman Andrew P. Harris, District 1
Congressman C.A. Dutch Ruppersberger, III, District 2
Congressman John P. Sarbanes, District 3
Congresswoman Donna F. Edwards, District 4
Congressman Steny H. Hoyer, District 5
Congressman John K. Delaney, District 6
Congressman Elijah E. Cummings, District 7
Congressman Christopher Van Hollen, Jr., District 8

State
Governor Lawrence Joseph Hogan, Jr.

Legislative District 12
Senator Edward J. Kasemeyer
Delegate Eric D. Ebersole
Delegate Terri L. Hill
Delegate Clarence K. Lam

Legislative District 31
Senator Bryan W. Simonaire
Delegate Nicholaus R. Kipke
Delegate Meagan C. Simonaire

Legislative District 32.
Senator James E. DeGrange, Sr.
Delegate Pamela G. Beidle
Delegate Mark S. Chang
Delegate Theodore J. Sophocleus

Legislative District 40
Senator Catherine E. Pugh
Delegate Frank M. Conaway, Jr.
Delegate Antonio L. Hayes
Delegate Barbara A. Robinson

Legislative District 41
Senator Lisa A. Gladden
Delegate Jill P. Carter
Delegate Nathanial T. Oaks
Delegate Samuel I. Rosenberg

Legislative District 43
Senator Joan Carter Conway
Delegate Curtis S. Anderson
Delegate Maggie McIntosh
Delegate Mary L. Washington

Legislative District 44
Senator Shirley Nathan-Pulliam
Delegate Keith E. Haynes
Delegate Charles E. Sydnor, III
Delegate Patrick G. Young, Jr.

Legislative District 45
Senator Nathaniel J. McFadden
Delegate Talmadge Branch
Delegate Cheryl D. Glenn
Delegate Cory V. McCray

Legislative District 46
Senator William C. Ferguson, IV
Delegate Luke Clippinger
Delegate Peter A. Hammen
Delegate Brooke E. Lierman

Baltimore City
Ms. Stephanie Rawlings-Blake, Mayor, City of Baltimore
Mr. Bernard C. Young, City Council President
Councilman Nick Mosby, District 7
Councilman William Welch, District 9

Councilman Eric T. Costello, District 11
Councilman Carl Stokes, District 12

DEIS Document Availability Locations

Location	Address	City	State	Zip Code
Baltimore City Department of Transportation, Transit Bureau	417 E. Fayette Street, 5th Floor	Baltimore	Maryland	21201
Bentalou Recreation Center	220 N. Bentalou Street	Baltimore	Maryland	21223
Bon Secours Community Works	26 N. Fulton Avenue	Baltimore	Maryland	21223
Enoch Pratt Library – Central Branch	400 Cathedral Street	Baltimore	Maryland	21201
Enoch Pratt Library – Edmondson Avenue Branch	4330 Edmondson Avenue	Baltimore	Maryland	21229
Enoch Pratt Library – Pennsylvania Avenue Branch	1531 W. North Avenue	Baltimore	Maryland	21217
Enoch Pratt Library – Walbrook Branch	3203 W. North Avenue	Baltimore	Maryland	21216
John Eagar Howard Recreation Center	2100 Brookfield Avenue	Baltimore	Maryland	21217
Maryland Department of Transportation	7201 Corporate Center Drive, 1st Floor Reception Desk	Hanover	Maryland	21076
Maryland Transit Administration	6 St. Paul Street, By Appointment Only at 410-767-3785	Baltimore	Maryland	21202

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Mapping Data Sources

Figure No.	Figure Title	GIS Data Source(s)
1.	B&P Tunnel Project Study Area Overview	City of Baltimore, 2012
2.	Existing B&P Tunnel Project Vicinity	City of Baltimore, 2012
7.	Alternative 1: No-Build Plan and Profile	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
8.	Alternative 3A Plan and Profile	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
9.	Alternative 3A North Portal	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
10.	Alternative 3A South Portal	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
11.	Alternative 3B Plan and Profile	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
12.	Alternative 3B North Portal	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
13.	Alternative 3B South Portal	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
14.	Alternative 3C Plan and Profile	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
15.	Alternative 3C North Portal	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
16.	Alternative 3C South Portal	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
17.	Areas of Consideration for Intermediate Ventilation Plant Location	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
18.	Alternate Intermediate Ventilation Plant Locations	Google Pro Aerial Imagery, 2012; City of Baltimore, 2010
23.	Study Area Census Tracts and Block Groups	U.S. Census Bureau 2013; City of Baltimore, 2010
26.	Existing Land Use within the Study Area	City of Baltimore, 2008 (with revisions based on field observation); Maryland Department of Planning, 2012
27.	Existing Zoning within the Study Area	City of Baltimore, 2008; Maryland Department of Planning, 2012
28.	Zip Codes within the Study Area	City of Baltimore, 2008-2011
29.	Neighborhoods within the Study Area	City of Baltimore, 2008

30.	Community Facilities within the Study Area	City of Baltimore, 2008; U.S. Geological Survey Geographic Names Information System, 2012; Field observation, 2014-15
31.	Minority and Low Income Block Groups within the Study Area	U.S. Census Bureau American Community Survey (ACS) 5-Year Estimates (2013-2018); Google Pro Aerial Imagery, 2012
32.	Historic Architectural Resources within the APE	Maryland Historical Trust, 2015; Field survey 2014-2015
33.	Natural Resources within the Study Area	Google Pro Aerial Imagery, 2012; FEMA 100-Year Flood Zone, 2008; City of Baltimore, 2010; U.S. Fish and Wildlife Survey National Wetlands Inventory, 2013; USDA Web Soil Series Mapping, 2013; Desktop and Field Review, 2014-2015
34.	Potential Hazardous Material Locations within the Study Area	Google Pro Aerial Imagery, 2012; *Hazardous Materials Technical Report*, 2015
36.	Alternatives within Census Tracts and Block Groups	City of Baltimore, 2010; U.S. Census Bureau, 2013
37.	Alternatives within Land Use Types	City of Baltimore, 2008 (with revisions based on field observation); Maryland Department of Planning, 2012
38.	Alternatives within Zoning Districts	City of Baltimore, 2008; Maryland Department of Planning, 2012
39.	Alternatives within Zip Codes	City of Baltimore, 2008-2011
40.	Alternatives within Neighborhoods	City of Baltimore, 2008
41.	Alternatives and Community Facilities	City of Baltimore, 2008; USGS Geographic Names Information System, 2012; Field Observation, 2014-2015
42.	Alternatives within Minority and Low Income Block Groups	U.S. Census Bureau ACS 5-Year Estimates (2013-2018); Google Pro Aerial Imagery, 2012
43.	Historic Architecture Area of Potential Effects	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
44.	Alternative 3A North Portal Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
45.	Alternative 3A South Portal Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
46.	Alternative 3A, 3B, & 3C Intermediate Ventilation Plant Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
47.	Alternative 3B North Portal Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
48.	Alternative 3 B South Portal Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
49.	Alternative 3C North Portal Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
50.	Alternative 3C South Portal Section 4(f) Resources	Maryland Historical Trust, 2015; Field survey and review, 2014-2015
51.	Section 4(f) Resources Avoidance Alternatives	Maryland Historical Trust, 2015; Field survey and review, 2014-15; *Preliminary Alternatives Screening Report*, 2015.

52.	Alternatives and Natural Resources	Google Pro Aerial Imagery, 2012; FEMA Flood Mapping, 2008; City of Baltimore, 2010; USFWS NWI, 2013; USDA WSS Mapping, 2013; Desktop and Field Review, 2014-2015
53.	Alternative 3A Hazardous Material Locations	Google Pro Aerial Imagery, 2012; *Hazardous Materials Technical Report*, 2015
54.	Alternative 3B Hazardous Material Locations	Google Pro Aerial Imagery, 2012; *Hazardous Materials Technical Report*, 2015
55.	Alternative 3C Hazardous Material Locations	Google Pro Aerial Imagery, 2012; *Hazardous Materials Technical Report*, 2015
56.	Alternative 3A Residential Noise Receptors	Google Pro Aerial Imagery, 2012; *Noise Technical Report*, 2015
57.	Alternative 3B Residential Noise Receptors	Google Pro Aerial Imagery, 2012; *Noise Technical Report*, 2015
58.	Alternative 3C Residential Noise Receptors	Google Pro Aerial Imagery, 2012; *Noise Technical Report*, 2015
59.	Alternative 3A Vibration Impacts	Google Pro Aerial Imagery, 2012; *Vibration Technical Report*, 2015
60.	Alternative 3B Vibration Impacts	Google Pro Aerial Imagery, 2012; *Vibration Technical Report*, 2015
61.	Alternative 3C Vibration Impacts	Google Pro Aerial Imagery, 2012; *Vibration Technical Report*, 2015
62.	Indirect and Cumulative Effects Analysis Area	City of Baltimore, 2012

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XI. ACRONYMS

AAR	Association of American Railroads
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
ADA	Americans with Disabilities Act
APE	Area of Potential Effects
AM	"Ante meridiem" or before noon
ARRA	American Recovery and Reinvestment Act
ARCO	Alliance of Rosemont Community Organizations
AST	Above-ground Storage Tank
B&O	Baltimore and Ohio
B&P	Baltimore and Potomac
BIBI	Benthic Index of Biological Integrity
BLS	Bureau of Labor Statistics
BMC	Baltimore Metropolitan Council
BRTB	Baltimore Regional Transportation Board
BSID	Biological Stressor Identification
BWI	Baltimore Washington International
C&D	Construction and Debris
CAA	Clean Air Act
CAC	Critical Area Commission
CAGR	Compound Annual Growth Rate
CCC	Charm City Circulator
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
CWA	Clean Water Act
dB(A)	A-weighted sound decibels
DDOT	District Department of Transportation
DEIS	Draft Environmental Impact Statement
DNR	Department of Natural Resources
DOE	Department of Energy
DOT	Department of Transportation
EIS	Environmental Impact Statement
EJ	Environmental Justice

EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FACP	Fire Alarm Control Panel
FCP	Forest Conservation Plan
FD.C.s	Fire Department Connections
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIBI	Fish Index of Biological Integrity
FIRM	Flood Insurance Rate Maps
FR	Federal Register
FRA	Federal Railroad Administration
FSD	Forest Stand Delineation
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GIS	Geographic Information System
HABC	Housing Authority of Baltimore City
HSIPR	High Speed Intercity Passenger Rail
HUD	Housing and Urban Development
IBI	Index of Biological Integrity
ICE	Indirect and Cumulative Effects
IOAC	Infrastructure and Operations Advisory Commission
IPaC	Information for Planning and Conservation
IRM	Interagency Review Meetings
LCD	Land Clearing Debris
LIHTC	Low-Income Housing Tax Credit
LOD	Limits of Disturbance
LRP	Land Redevelopment Program
LRT	Light Rail
MARC	Maryland Area Regional Commuter
MDE	Maryland Department of Environment
MDOT	Maryland Department of Transportation
MDP	Maryland Department of Planning
MERLIN	Maryland Environmental Resources and Land Information Network
MHT	Maryland Historical Trust
MIHP	Maryland Inventory of Historic Properties
MOA	Memorandum of Agreement
MPH	Miles per hour
MPN	Most Probable Number
MSA	Metropolitan Statistical Area
MTA	Maryland Transit Administration
MPWG	NEC Master Plan Working Group

NAAQS	National Ambient Air Quality Standards
NB	Northbound
NE	Northeast
NEC	Northeast Corridor
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NRCS	Natural Resource Conservation Service
NS	Norfolk Southern Railway
NOAA	National Oceanic and Atmospheric Administration
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OCC	Operations Control Center
OCP	Oil Control Program
OHW	Ordinary High Water Mark
OSHA	Occupational Safety and Health Administration
PASR	Preliminary Alternatives Screening Report
PM	"Post Meridiem" or afternoon
PRIIA	Passenger Rail Investment and Improvement Act
PSA	Preliminary Screening Assessment
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
RHIC	Reservoir Hill Improvement Council
ROD	Record of Decision
ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	Southbound
SBA	Small Business Administration
SDP	Service Development Plan
SHA	State Highway Administration
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SOGR	State of Good Repair
SSA	Sole Source Aquifer
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load

TOD	Transit-Oriented Development
TSS	Total Suspended Solids
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOL	United States Department of Labor
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound
WQA	Water Quality Analysis
WQL	Water Quality Limited
WSS	Web Soil Survey
WTY	Washington Terminal Yard
WUS	Washington Union Station
YOE	Year of Expenditure