Appendix I



Draft Environmental Impact Statement Comments and Responses

U.S. Department of Transportation
Federal Railroad Administration

Maryland Department
of Transportation

APPENDIX I: Draft Environmental Impact Statement Comments and Responses (Index)

Agency	AGENCY Comment #s	Page #s
Environmental Protection Agency	1	1
Department of the Interior	2	15

Name(s)	DEIS Comment #s	Page #s
Robert Adams	1	17
Laura Amlie	2, 108	19, 368
Field Blauvelt	3, 10, 145	21, 36, 528
Eunice Anderson	4	28
Jamaica Arnold	5	29
Jennifer Beachell	6, 7	30, 31
Courtney Betle	8	32
Janet Blair	9, 118	35, 406
MTA Citizens Advisory Committee	11	38
Cameron Bolling	12	58
Sheila Caldwell	13	59
Daryl and Kau Campbell	14	60
Harold A. Carey	15	61
Chance Carter	16	63
Dr. Marvin Cheatham, Sr. (and Matthew A. Henson Neighborhood Association)	17, 18, 120	65, 68, 426
Craig Close	19	72
Art Cohen for b'more mobile	20	73
Liz Cornish	21	106
Amelia Cox	22	107
Sean Cromwell	23	110
John Cutonilli	24	111
Katherine Ziombra	25	114
Jary Donohue	26	116

Name(s)	DEIS Comment #s	Page #s
Sarah Edelsburg	27	117
John V. Edwards	28	120
Kathryn Epple	29, 32, 33, 34, 35, 36, 107	122, 133, 142, 155, 160, 167, 365
Claire Gorman (Healthy Neighborhoods)	30	123
Glen Eppig	31	131
Kathryn Epple and Eric Hontz	37	190
Michael Felner	38	200
James L. Floyd	39, 40, 128	201, 204, 454
Juanita Garrison	41	211
Stephanie Gates	42, 150	213, 546
Paul Gentner	43	215
Dennise Green	44	218
Lafayette Grier	45	219
Peter Halstad	46, 144	220, 523
Jenifer Harrington	47	225
Thomas Hasler	48	226
Aimee Hickman	49	227
David Highfield	50	230
Benjamin Hovey	51	231
Ginny Hoy	52	232
Karen ILiff	53	233
Edward J. Jennings	54	234
Albert L. Johnson	55	235
Ryan Jordan	56, 140	236, 499
Orla Kastberg	57	237
Faridoon Khosravi	58, 59	240, 242
Chris Kirby	60	244
Barbara Kozminski	61	247
Justin Kuk	62, 111	248, 381
Rebekah Kuk	63, 146	251, 532

Name(s)	DEIS Comment #s	Page #s
Bill Lee	64, 65, 122, 143	252, 255, 436, 521
Nancy Cooper Morgan	66, 142	257, 519
Mary Jane K. McGill	67	259
Amy Miller	68	261
Russ Moss	69, 70, 71, 113, 126, 151	262, 264, 269, 389, 448, 550
Barker B. Much	72	278
Charles Myers III	73	280
Gregg Nesemeier	74	281
Nneka Nnamdi	75	282
Unidentified Commenter	76	283
James Norman	77	284
Rosemay Peternel	78	285
Virginia T. Pond	79	290
Alan Pressman (attached letter from Dr. Karen V. Brown)	80	291
Amber Reed	81	296
Unidentified Commenter	82	297
W. Richardson	83	298
Elizabeth Ryan	84	299
Soledad Salame, Mark West, Michael Kortya; Unidentified speaker on behalf of S. Salame	85, 109, 147; 148	301, 371, 535; 539
Ashe Smith	86	310
Sharon Snead	87	311
Denise G. Speaks	88	314
Remington Stone	89	316
Tobias Stoner	90	319
Page Stroup	91	323
Michael Towstopiat	92	325
Sarah Tupper	93	326
Marco Turra	94	327
Vance Tyree Sr.	95	328

Name(s)	DEIS Comment #s	Page #s
Jeffrey M. Verthein	96	329
Geraldine Walters	97	330
Abbi Weaver	98	332
Denise Wesolowski	99	334
Sheila R. Wiggins	100	335
Rebecca Wilson	101	336
Kylis P. Winborne	102, 125	340, 446
Bobby Cross	103	343
Katherine Brower	104	344
Antonio L. Hayes	105	345
Mark Sissman	106	361
James Houston	110	377
Edward Cohen	112	385
Jamar Day	114	394
Stuart Stainman	115	397
Don Akchin	116	399
Jacqueline Caldwell	117	403
Delegate Barbara Robinson	119	423
Councilman Mosby	121	430
Lauren Haney Provost	123	440
Geri O'Kessa	124	443
Gary Messaman	127	451
Stephen Arthur	129	459
Senator Catherine Pugh	130	463
Margaret Wilson	131	465
Khary Lemon	132	468
Shawn Tarrant	133	471
Mr. Cohen	134	474
Helen Williams	135	478
Heather Weir	136	480
Lisa Dove	137	483

Name(s)	DEIS Comment #s	Page #s
Aaron Brosy	138	485
Randy Houck-Bay	139	487
Jon Kenney	141	516
Pamela Patterson	149	544
Warrick St. Jean	152	553
Jessica Childress	153	556
Emanuel Leach	154	559
Marlene Handler	155	561
Margaret Wilson	156	563
Daniel Cane Robertson	157	565
Tambry Brose	158	568
Dr. John Azalea	159	570

COMMENTS | **RESPONSES**

AGENCY Comment 1:

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

Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.
Customer Service Hotline: 1-800-438-2474

COMMENTS | **RESPONSES**

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

♻ ***Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.***
Customer Service Hotline: 1-800-438-2474

COMMENTS

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

General Comments

1 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 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 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 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 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.

♻ ***Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.***
Customer Service Hotline: 1-800-438-2474

RESPONSES

Response to Comment 1:
The total amount of soil and rock to be excavated for the Project is about 47 million cubic feet (1.8 million cubic yards) of material. About 78% of that volume is from the four running tunnels excavated by the Tunnel Boring Machine. The balance comes from shafts, cross passages, cut sections, cut and cover sections, and ventilation plenum tunnels and evacuation tunnels. However, that volume is considered in "bank," or in place. Once excavated from its natural state, the volume increases and is considered "loose" volume. The project will need to dispose of some 70 million cubic feet (2.7 million cubic yards) of material.

The contractor is expected to provide limited on-site storage for the excavated material. Good practice for the construction industry is to provide on-site storage for about one to three days of excavation production. It is most efficient to not double handle the material, but to load it directly into trucks and haul it out. However, sometimes traffic conditions (e.g. an accident) or truck breakdowns as well as limited hours of the day for truck hauling operations means that some on-site storage for excavated material is warranted.

At this early stage of the project, it is too early to identify a selected disposal site(s). On similar projects, disposal of the excavated material is often left up to bidding contractors and market forces. The contractor with a good plan to deal with this issue (e.g. "sell" the material to fill another project) will have the lower bid. Similarly, haul routes will be developed by the construction contractor working with the City of Baltimore DOT to identify the exact route to support the contractor's means and methods. Amtrak would work with FRA to investigate whether any of the tunnel waste material can be transported away from the site by rail, with the goal of minimizing total truck traffic caused by the project.

Chapter VI, Environmental Consequences, provides additional information regarding construction of the Preferred Alternative, including information about disposal needs.

Response to Comment 2:
Chapter VI Section L provides additional information regarding construction of the Build Alternatives, including information about the location and impacts of the staging areas. It is not yet known how large of a staging area is needed, but several acres or more could be required.

Construction staging areas for the Build Alternatives would be located adjacent to the north portal, south portal, and ventilation facilities. Construction staging areas would include facilities such as materials storage and lay down areas, water treatment, parking, power generation, and offices. Construction staging for the south portal and south vent facility would be primarily to the east and west of the proposed trench and cut-and-cover areas, within the limits-of-disturbance and existing Amtrak right-of-way. At the Intermediate Ventilation Facility, construction staging would be confined to the site limits

COMMENTS

6

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

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

8

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

♻ *Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.*
Customer Service Hotline: 1-800-438-2474

RESPONSES

identified in **Chapter III** and **Chapter IV**. The north portal construction staging area would be located between the existing light rail tracks and the Jones Falls waterway, in the vicinity of the North Avenue, Howard Street, and CSX Bridges over Jones Falls. Construction staging for the north vent facility would occur within the I-83 loop ramp area, currently in use as a BCDOT facility.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Placing the Intermediate Ventilation Facility on Druid Hill Avenue was explored during the creation of the DEIS. Specifically, the Team considered Druid Hill Avenue between Cloverdale Road and Retreat Street, as well as between Whitelock Street and Clendenin Street. These sites were not considered further due to their distance from the optimal location for a ventilation facility near the tunnel alignment. For more information, please see **Chapter III**.

Response to Comment 4:
As stated in the comment, the total number of daily commuter train service using the tunnel would be 164 trains. **Chapter IV, Section H** contains an operational emissions analysis that takes into consideration future diesel emissions (including from projected increase in diesel-powered MARC trains). The table below displays this information:

COMMENTS

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. 9

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: 10

♻ *Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.*
Customer Service Hotline: 1-800-438-2474

RESPONSES

Diesel Locomotive Emissions (2040)

Scenario	CO	VOC	NO_x	PM_{10}	$PM_{2.5}$
2040 No Build Alternative	8.6	0.3	6.7	0.1	0.1
2040 Build Alternatives	19.4	0.6	15.2	0.2	0.2
Net Increase	**10.9**	**0.3**	**8.5**	**0.1**	**0.1**
De Minimis Threshold	--	50	100	--	100
Below *De Minimis*?	**--**	**Yes**	**Yes**	**--**	**Yes**

Notes: De Minimis thresholds do not apply within an area in attainment for that specific pollutant. The Project is in an attainment area for CO and PM_{10}.
Values of "Net Increase" subject to rounding. All values in table rounded to the nearest 0.1 tons.
USEPA does not provide any SO2 or SOx emissions factors (see *Emission Factors for Locomotives,* EPA-420-F-09-025, April 2009); furthermore, the project is in an attainment area for SOx.

As shown in the table above, the build alternatives would have no net increase in operational emissions exceeding applicable *de minimis* thresholds. The build alternatives would result in no projected increase in diesel freight train operations, and no significant air emissions would be generated by electric locomotive trains (e.g., Amtrak). Net increases in emissions would be due to diesel MARC trains. The No-Build and build alternatives' diesel emissions were estimated based upon emissions factors provided by the EPA (EPA, 2009). As shown in the table, the MARC equipment and operational changes would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between the 2040 No-Build and the 2040 build alternatives scenarios would be below the *de minimis* levels.

The increase in diesel emissions was evaluated for impacts on the local community, which is comprised of environmental justice populations. The Ventilation System Analysis contained in **Chapter VI, Section H** is a hot spot analysis of diesel emissions. Please see this chapter and associated tables for more information.

Response to Comment 5:
Long idling times at stations due to construction-related delays are not anticipated to occur, but mitigation measures will be considered during final design if applicable.

Response to Comment 6:
This is beyond the purview of this FEIS.

Response to Comment 7:
Information regarding erosion and sediment controls as well as stormwater and groundwater control measures are included in **Chapter VI** and **Chapter VII**. The Preferred Alternative will include the development and implementation of a Stormwater Management Plan in accordance with MDE guidelines. The plan will focus on stormwater

COMMENTS

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

10

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

11

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

♻ *Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.*
Customer Service Hotline: 1-800-438-2474

RESPONSES

runoff associated with construction activities and surface impacts, both temporary and permanent, throughout the study area. As the Project advances beyond 10% design and toward 30% design, the management of stormwater will be developed in greater detail. Planned mitigation efforts to reduce stormwater impacts include potentially greening vacant lots, adding landscaping and street trees within a half mile of the alignment, and adding vegetative buffers along the northeast corridor of the Study Area. The Preferred Alternative will also include development and implementation of an Erosion and Sediment Control Plan for construction activities.

Groundwater will be managed during both construction and operation of the tunnels. During construction a closed face machine will install segmented concrete waterproof linings. There is low likelihood of experiencing significant groundwater during construction. During operation, there will be an internal drainage system which will pump out water.

Response to Comment 8: Climate Change

The guidance provided by the CEQ addressing the ways that Federal agencies can improve their consideration of the effects of GHG emissions and climate change in their evaluation of proposals for Federal actions under NEPA was finalized on 8/1/16. Please see **Chapter VI** for a discussion of GHG emissions of the Build alternatives compared to Alternative 1: No-Build. Please see **Chapter V, Section E** for a summary discussion of climate change impacts relevant to the Study Area. The Project Team did consider impacts related to resiliency, specifically the impacts of rainfall and flooding on the Project. The Jones Falls might experience flooding, and the North Portal is located within the floodplain. Modelling indicates that the portal would be inundated in a major storm event. The tunnels are being designed to have storm doors. Sub-stations are also being considered for potential flooding impacts.

Chapter VI describes removing a chokepoint from the NEC. The section acknowledges that, as operations become more efficient, environmental benefits are generated through the avoidance of emissions and through energy savings, and includes a brief discussion of GHG emissions of the Build condition compared to Alternative 1: No-Build. However, the data for this Project was insufficient to quantify the specific emission reductions from moving commuters from reliance on automobiles to more energy-efficient train use.

Response to Comment 9: Environmental Justice

Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

COMMENTS

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." 11

	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: 12

- 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

♻ ***Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.***
Customer Service Hotline: 1-800-438-2474

RESPONSES

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three public open houses and ten community meetings were held where the public was given the opportunity to learn about the Project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter Claver Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A

COMMENTS

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

12

- 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.

♻ *Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.*
Customer Service Hotline: 1-800-438-2474

RESPONSES

would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project sponsor will be underground which would reduce the overall impact to the communities. The Project will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project sponsor will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

The value provided in the FEIS is the weighted average poverty threshold in 2013 for a family of four as per the September 2014 "Income and Poverty in the United States: 2013" report (P60-249). Regarding methodology, we have used guidance from the CEQ 1997 and from US DOT orders. The resulting analysis indicates that 74 of 77 Block Groups within the Study Area meet criteria for EJ populations. We believe we have adequately captured where environmental justice populations reside within the Study Area. For more information, please refer to **Chapter VI, Section A.**

Chapter V, Section A includes information on housing. 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. Seven of these developments provide family housing, 12 serve the elderly, and two provide disabled housing. One development is not classified (HABC, Accessed 2014). According to the Housing Authority of Baltimore City website, "with an inventory of approximately 11,000 units, the Housing Authority of Baltimore City's (HABC) portfolio includes 28 family developments, 19 mixed population buildings, 2 senior buildings and scattered sites throughout the City" (baltimorehousing.org). The 2,467 units of publicly-owned housing in the Study Area represents roughly 3% of all publicly-owned housing in the city. According to affordable housing information obtained from the HUD Affordable Apartment search, the 22 affordable housing apartment developments in Baltimore City represent roughly 5% of the total 112 affordable housing apartment developments in Baltimore City.

As stated above, the Project Team has engaged extensively with the community throughout the development of the Project. For more details, please see **Chapter VIII**.

COMMENTS

Hazardous Materials Management

13 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
14 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.

♻ ***Printed on 100% recycled/recyclable paper with 100% post-consumer fiber and process chlorine free.***
Customer Service Hotline: 1-800-438-2474

RESPONSES

Response to Comment 10: Noise and Vibration
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in reductions in impacts, including to noise and vibration. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Information regarding estimated vibrations and noise impacts during operation is as follows:

From the FEIS Evaluation Matrix: Estimated Noise and Vibration Impacts During Operation

Criterion	Measure	Alt 1	Alt 3A	Alt 3B	Alt 3C
Estimated Number of Buildings with Potential Noise Impacts	# of Buildings, Moderate or Severe	0 Severe 0 Moderate	0 Severe 254 Moderate	141 Severe 297 Moderate	111 Severe 979 Moderate
Estimated Number of Sites with Potential Vibration Impacts	# of Sites	0 Vibration 12 Ground-Borne Noise	0 Vibration 156 Ground-Borne Noise	0 Vibration 449 Ground-Borne Noise	0 Vibration 168 Ground-Borne Noise

During construction, both noise and vibration will be mitigated, and the public will be notified of construction as per information in **Chapter VI**.

Alternative 3A is estimated to have 254 Moderate noise impacts, Alternative 3 B is estimated to have 141 Severe and 296 Moderate noise impacts, and Alternative 3C is estimated to have 111 Severe and 979 Moderate noise impacts. The severe impacts were predicted at residential areas nearest the railroad between the West Baltimore station and the south portal. The duration of the construction period will be six years; 2020 to 2025. Measures will be implemented to lessen noise during construction, which could potentially include erection of temporary walls or earth berms between the noise source and the sensitive receptor, the identification of haul routes that avoid sensitive receptors to the maximum extent possible, and location of stationary noise generating equipment at a distance from sensitive receptors. In addition, construction activities can be planned to avoid prolonged noise generating activities and to minimize construction activities during the most sensitive time of day or night. **Chapter VI** of this FEIS further details noise construction mitigation.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA

COMMENTS

RESPONSES

Transit Noise and Vibration Impact Assessment and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 11: Cultural Resources

Since publication of the DEIS, Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies

COMMENTS

RESPONSES

Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Chapter VI, Section D provides detailed information on Section 4(f) Impacts to each of the alternatives, including Alternative 3B, the Preferred Alternative. The table below indicates specific impacts.

Overview of Section 4(f) Impacts

Alternative	Alternative 3A	Alternative 3B - Preferred	Alternative 3C
Section 4(f) Properties	4 (use) (+3 No Use) (+2 De Minimis)	8 (use) (+1 No Use) (+3 De Minimis)	9 (use) (+1 No Use) (+2 De Minimis)
Use	• B&O Belt Line Railroad • B&O Belt Line Bridge • Bridge 2410 • Midtown-Edmondson Historic District (1 demolition, 1 other)	• B&O Belt Line Railroad • B&O Belt Line Bridge • B&P Railroad • Bridge 2410 • Midtown-Edmondson Historic District (27 demolitions, 8 other) • Greater Rosemont Historic District (5 demolitions, 15 other) • Edmonson Avenue Historic District (2 demolitions, 13 other) • Atlas Storage Co	• B&O Belt Line Railroad • B&O Belt Line Bridge • B&P Railroad • Bridge 2410 • Midtown-Edmondson Historic District (5 demolitions, 2 other) • Greater Rosemont Historic District (17 demolitions, 35 other) • Edmonson Avenue Historic District (12 demolitions, 35 other) • Fire Company 36 • Ward Baking Co
De Minimis	• Union Railroad • B&P Railroad	• Fire Company 36 • Ward Baking Co • Union Railroad	• Western Maryland Railroad • Union Railroad
Total Contributing*	2 Total 1 Demolition	53 Total 30 Demolitions	57 Total 18 Demolitions

Note: does not include intermediate ventilation plant
*Number of historic resources contributing to historic districts. Note that some buildings contribute to multiple historic districts.

Additional information can be found in **Chapter VII**.

COMMENTS

RESPONSES

The Architectural Historic Properties Effects Assessment Report will be posted on the B&P Tunnel Project website.

Response to Comment 12: Air Quality

The Preferred Alternative includes development and implementation of a construction emissions reduction plan, which includes measures such as reducing equipment idling times, utilizing on-site storage to reduce truck haul trips, using low-emissions equipment, dust suppression measures, ensuring the contractor has knowledge of appropriate fugitive dust and equipment exhaust controls, and other measures.

Dust control measures will be in conformance with COMAR 26.11.06.03D pertaining to Particulate Matter from Materials Handling and Construction and may include application of water and calcium chloride to haul roads, provision of truck wheel wash stands, minimization of exposed, erosion prone areas to the greatest extent possible; stabilization of exposed earth with grass, geotextile fabric, ground cover, paving, or other finished surface as easily as possible; and covering or shielding stockpiled materials from wind. Additional information regarding air quality consequences and mitigation can be found in **Chapter VI** and **Chapter VII**.

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. The combination of these variables makes it virtually impossible to accurately forecast freight usage. Variability of freight traffic is further described in **Chapter V.**

While it is not possible to accurately forecast future freight rail traffic, it is possible to roughly estimate the order of magnitude of growth in freight traffic that would result in exceeding the applicable de minimis thresholds for NO_x and $PM_{2.5}$. This rough estimate assumes that regional freight trains would use six locomotives, local freight trains would use two locomotives, each locomotive would have the same emissions profile as a diesel passenger train locomotive, and that freight locomotives would move at approximately 30 mph through the tunnels. Based on these assumptions, every ten additional freight trains would emit approximately the equivalent diesel emissions of 104 additional diesel passenger trains. Ultimately, to exceed the de-minimis thresholds for NO_x and $PM_{2.5}$ in the

COMMENTS

RESPONSES

vicinity of the Intermediate Ventilation Facility one would need to assume a market for, and the track and signal capacity sufficient to accommodate, approximately thirty-four times more freight traffic than currently operates through the existing tunnel. This would be about 68 freight trains daily, in addition to the two that occur now. The NEC cannot accommodate that many additional freight trains under any signal-control scenario, and it is unlikely that there is market for, or available equipment sufficient to operate, that much additional service in the greater Baltimore area.

Response to Comment 13: Hazardous Materials Management
The Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan, to be implemented in the event of a tunnel emergency.

Norfolk Southern (NS) has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

Additional information on hazardous material management can be found in **Chapter VI**.

Response to Comment 14: Children's Health
Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no

COMMENTS	RESPONSES
	significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water. Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

COMMENTS | **RESPONSES**

AGENCY Comment 2:

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

COMMENTS

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.

1 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

RESPONSES

Response to Comment 1:
The Memorandum of Agreement (MOA) has been replaced with the Programmatic Agreement. Please reference FEIS **Appendix H.**

COMMENTS

DEIS Comment 1:

From: Adams, Robert E. (CMS/DHI)
To: BPTunnel Information
Subject: DEIS Comment
Date: Friday, February 05, 2016 1:06:59 PM

I am opposed to the construction of tunnels under the proposed route in Reservoir Hill for the following reasons:

1. There has been a lack of information provided to give the assurance that all appropriate mitigation efforts will be made so as not to compromise the current infrastructures, especially homes
2. There is a strong prospect that such tunnels and related structures will degrade the community's environment thereby making it unhealthy for residents and become a discouragement to future homeowners to purchase homes which will in tur undermine efforts to develop Reservoir Hill as a viable homeowner community and add to the City's tax base
3. Constructing tunnels under a community with a majority of African American residents will ignite suspicions that this route has been proposed because it is assumed that black lives do not matter adding to existing racial and socio-economic tensions in Baltimore City

Respectfully submitted,
Robert Adams

RESPONSES

Response to Comment 1:
The Project Team has engaged in extensive public outreach throughout the development of the Project, including three public open houses and ten community meetings where the public was given the opportunity to learn about the Project and engage in discussion with the Project Team. In addition to these meetings, the Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS. Additional details of this outreach are described in **Chapter VI**, as well as **Chapter VIII.**

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 2:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS	RESPONSES
	No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns. The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community. **Response to Comment 3:** The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

COMMENTS

DEIS Comment 2:

From: Laura Amlie
To: BPTunnel Information
Cc: Kathryn Epple; George Epple; Bill Lee; Russ Moss; "Remington Stone"; "Rebecca Wilson"; "Kylis Winborne"; Soledad Salame; Russ Moss
Subject: DEIS COMMENT
Date: Monday, February 15, 2016 5:16:24 PM

As a 37 year resident of Baltimore, I respectfully submit the following comment:

Something doesn't add up, and there is an effort to hide it.

I attended a B&P tunnel information meeting in December. At the time, I specifically asked about the use of the tunnels for freight trains. The host, Odessa Phillips, avoided answering and charged the Amtrak representative present to answer. His response: "These tunnels are under the auspices of Amtrak. Amtrak is dedicated to passenger service." THAT is NOT an answer to the question. It is an intentional evasion seemingly crafted to lead the questioner to make the logic leap of "therefore these tunnels are not for freight." So while the actual words may be true, the evasive 'answer' is dishonest. It indicates a purposeful intent to mislead. It is also projects an insultingly patronizing 'don't you worry about it' attitude, while waving a flag of transparency. Therefore these meetings have lost credibility, and made us even more suspicious of the project's true backers and nature. There seems to be a decision that Passenger Service is sellable, while freight lines under housing is not – so do your best to deny it without actually lying.

1

Some supporters of the tunnel project cite it as 'necessary for the competitive edge of Baltimore's Port.' That is clearly not about passengers, but about freight. At the B&P public meetings, elaborate charts are presented showing time savings for passengers of a maximum of 3 minutes, with a silly "total value of time for passengers" of about $40 million/year. It is ridiculous to expect us to believe that it is in Amtrak's, the public's or anyone's interest to spend $4billion to save passengers mere seconds of time, and that the 1% annual return of $40 million – which cannot be captured, and would take 100 years to realize – is a compelling reason for this action.

2

When you follow the money, it does not lead to the answers we are being sold. I so wish an investigative reporter would uncover and explain exactly what is going on, since B&P is not forthright. There is conjecture that because there are Federal $$ to fix the Baltimore bottleneck for the NEC, that the state and Port Authority, CSX & other freight interests are trying to piggyback and usurp those $$ to serve their own purposes – "Since we are tunneling anyway." I'd really like to know the machinations at work.

Thank you for considering this comment in reviews.
Laura Amlie

RESPONSES

Response to Comment 1:
The primary purpose of the Project is to address structural and operational deficiencies of the existing B&P Tunnel and to accommodate future high-performance intercity passenger rail service goals for the Northeast Corridor (NEC). However, the build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project.

While no increase in freight traffic is planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel would change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, and market forces on rail transported materials such as coal (which represents 20-25 percent of total railroad car loads), crude oil/crude industrials sands, and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V**.

Response to Comment 2:
While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason that the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

COMMENTS

RESPONSES

Brittany Rolf

From: Laura Amlie
Sent: Friday, February 26, 2016 8:30 AM
To: BPTunnel Information
Subject: DEIS COMMENT
Attachments: Field testimony.docx

I am forwarding this testimony on behalf of Field Blauvelt.

Please see responses to the testimony of Field Blauvelt on the next page.

COMMENTS

DEIS Comment 3:

I am Field Blauvelt, a current resident of Reservoir Hill. I lived here in the 1980s, and since then have lived in New York City, Dallas, Los Angeles, Washington, D.C., London and Berlin. I have returned to live within the gracious architecture and diverse population of this Historic Baltimore Neighborhood. I have the perspective to say that even with its challenges, this is a very special - and fragile – place. I object to the proposed plan as I sincerely believe it will do serious, irreparable damage to the community. 1

Looking at the recommendations, I see a huge gap between what "policy' considers acceptable, and what I, or any resident, or any caring human being would consider acceptable. In that chasm lie my objections.

The study claims that the chosen alternatives minimize disruption, because it affects the *fewest* people and buildings. The problem is, those people are US and those buildings are OURS. Policy might say this is acceptable. But I object. I object to our community and our homes being considered acceptable collateral damage because, it's *just* us. It's not the first time we've been told we don't count, and I object. 2

The current study states that 1200 homes could suffer extreme noise during construction, and that 140 historic homes will continue to be vibrated as trains pass under. This construction noise is not that annoying jack-hammer for a couple of days, this is months or *years* of daily noise, industrial traffic and monster machinery. ~~Noise pollution~~Excessive noise ~~studies show that aggressive behavior,~~is proven to cause aggression, disturb~~ance of~~ sleep, ~~constant~~ increase stress, fatigue and hypertension. ~~That's why it is used as a military weapon. can all be linked to continual or excessive noise levels.~~ 3

And even after construction, ~~for~~ those fragile homes that are condemned to ~~the~~ eternal shaking? We are told it is 'minor' – as in "acceptable." One of the engineering representatives in the information area said it would be 'gentle, hardly noticeable- like a washing machine in the basement.' If I were to give you ONE gentle shake, you might not notice. But you'd notice the second, and get annoyed at the third and after Three hundred and eighty eight shakes a DAY, you wouldn't consider it negligible at all – and your house certainly wouldn't. The agitation – both literal and figurative – will be ~~highly detrimental to~~damage the physical stability of our homes and ~~the~~our mental and social stability of our people. As someone who had to change my subway commute when my station at Penn-North was closed during April's riots, I can tell you that agitation is NOT conducive to peace and safety. Policy might consider it acceptable to raise levels of aggression and ~~health problems~~sickness, but I object. 4

The Vent stack is proposed at 100'x200' – right smack to the sidewalk, and 50+' tall. That is roughly the size of 10 neighboring homes and looms about 15' taller. The recommendations say that putting such an industrial behemoth in the middle of a residential neighborhood is acceptable. I object. We are told that it will be decorated to *blend with the surroundings*. I have never seen decorations make something smaller. I object. 5

The engineers state that: "The primary function of the ventilation system is to provide emergency ventilation should there be a fire." So, there is enough concern about fire to build this multi-million dollar monster system, yet we who live here, are told that the fire risk is negligible and acceptable. I object. 6

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
The Preferred Alternative would displace 22 residential buildings in the Midtown-Edmondson neighborhood, Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings. Executive Order 12898 requires federal agencies to 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 Project Team has engaged in extensive public outreach throughout the development of the Project, including three public open houses and ten community meetings. In addition to these meetings, Mitigation Working Groups comprised of community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI** and **Chapter VIII**.

Response to Comment 3:
Alternative 3A is estimated to have 254 Moderate noise impacts, Alternative 3 B is estimated to have 141 Severe and 296 Moderate noise impacts, and Alternative 3C is estimated to have 111 Severe and 979 Moderate noise impacts. The severe impacts were predicted at residential areas nearest the railroad between the West Baltimore station and the south portal. The duration of the construction period will be six years; 2020 to 2025. Measures will be implemented to lessen noise during construction, which could potentially include erection of temporary walls or earth berms between the noise source and the sensitive receptor, the identification of haul routes that avoid sensitive receptors to the maximum extent possible, and location of stationary noise generating equipment at a distance from sensitive receptors. In addition, construction activities can be planned to avoid prolonged noise generating activities and to minimize construction activities during the most sensitive time of day or night. **Chapter VI** of this FEIS further details noise construction mitigation.

COMMENTS

6

As to its secondary function, tunnel air quality: I looked up and do understand that policy considers a nitrogen-dioxide level of 3 parts-per-million *unsafe inside* the tunnels-prompting the sensors to activate the fans, but *safe* to exhaust into our neighborhood. ~~—acceptable.~~ And that the expected addition of Carbon Monoxide is well under policy maximum standards – even though it DOUBLES the CO baseline in our neighborhood. So policy considers these pollutants acceptable. ~~However, near homes.~~ This is in the HEART of our neighborhood, near ~~and~~ our elementary school, in a city with multiple 'Code Orange' air quality alert days from June through September last year, and an asthma rate over 12% compared with the state & nation's 8.6% rate. Acceptable to add more poisons? I object. ~~et to additional poisons~~.

Thank you for recording these few of my objections.

RESPONSES

Regarding concerns for the impact of vibration on historic homes, the Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area, which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, and would include sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest.

Response to Comment 4:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation

COMMENTS

RESPONSES

Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 5:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

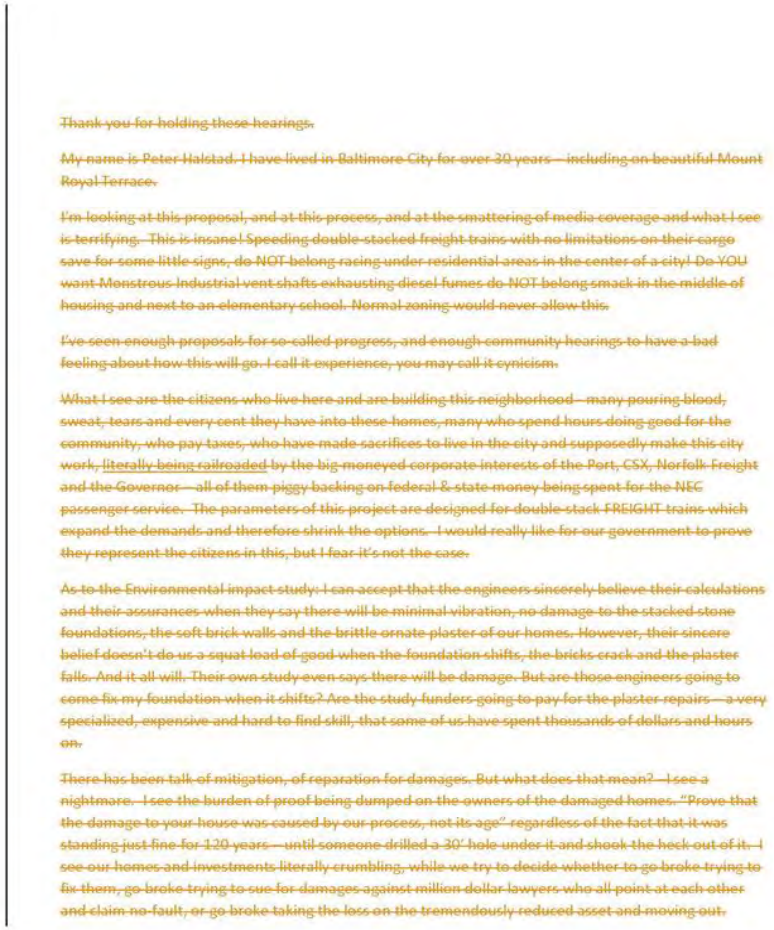
Response to Comment 6:
The tunnel must be constructed to meet current standards for fire The Project sponsor will develop an Emergency Management Plan to be implemented in the event of a tunnel emergency.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality; emissions would fall within all acceptable federal air quality standards. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, which have been set to safeguard public health. Because the concentrations of NO_2 were modeled to be within acceptable levels, all other criteria pollutant concentrations would be within NAAQS, as NOx is the most strictly regulated air pollutant generated from diesel locomotive operation. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Regarding concerns for siting the ventilation facility near the elementary school, **Chapter VI** of this FEIS specifically reviewed air quality, water, soil and hazardous material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-

COMMENTS	RESPONSES
	Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

COMMENTS



Thank you for holding these hearings.

My name is Peter Halstad. I have lived in Baltimore City for over 30 years – including on beautiful Mount Royal Terrace.

I'm looking at this proposal, and at this process, and at the smattering of media coverage and what I see is terrifying. This is insane! Speeding double-stacked freight trains with no limitations on their cargo save for some little signs, do NOT belong racing under residential areas in the center of a city! Do YOU want Monstrous Industrial vent shafts exhausting diesel fumes do NOT belong smack in the middle of housing and next to an elementary school. Normal zoning would never allow this.

I've seen enough proposals for so-called progress, and enough community hearings to have a bad feeling about how this will go. I call it experience, you may call it cynicism.

What I see are the citizens who live here and are building this neighborhood – many pouring blood, sweat, tears and every cent they have into these homes, many who spend hours doing good for the community, who pay taxes, who have made sacrifices to live in the city and supposedly make this city work, literally being railroaded by the big-moneyed corporate interests of the Port, CSX, Norfolk Freight and the Governor – all of them piggy backing on federal & state money being spent for the NEC passenger service. The parameters of this project are designed for double-stack FREIGHT trains which expand the demands and therefore shrink the options. I would really like for our government to prove they represent the citizens in this, but I fear it's not the case.

As to the Environmental impact study: I can accept that the engineers sincerely believe their calculations and their assurances when they say there will be minimal vibration, no damage to the stacked stone foundations, the soft brick walls and the brittle ornate plaster of our homes. However, their sincere belief doesn't do us a squat load of good when the foundation shifts, the bricks crack and the plaster falls. And it all will. Their own study even says there will be damage. But are those engineers going to come fix my foundation when it shifts? Are the study funders going to pay for the plaster repairs – a very specialized, expensive and hard to find skill, that some of us have spent thousands of dollars and hours on.

There has been talk of mitigation, of reparation for damages. But what does that mean? – I see a nightmare. I see the burden of proof being dumped on the owners of the damaged homes. "Prove that the damage to your house was caused by our process, not its age" regardless of the fact that it was standing just fine for 120 years – until someone drilled a 30' hole under it and shook the heck out of it. I see our homes and investments literally crumbling, while we try to decide whether to go broke trying to fix them, go broke trying to sue for damages against million dollar lawyers who all point at each other and claim no-fault, or go broke taking the loss on the tremendously reduced asset and moving out.

RESPONSES

Please reference **DEIS Comment #46.**

COMMENTS

RESPONSES

~~One alternative has huge tracks and entry tunnels right outside this very school.~~

~~Don't railroad right over us – or under us, I should say. And don't shaft us.~~

~~I understand the problem of the existing tunnel and the future of Amtrak's North East Corridor.~~

~~On the one hand, Morrell Park's victory in keeping the freight trains~~

~~Something doesn't add up, and there is an effort to hide it.~~

~~I attended a B&P tunnel information meeting in December. At the time, I specifically asked about the use of the tunnels for freight trains. The host, Odessa Phillips, avoided answering and charged the Amtrak representative present to answer. His response: "These tunnels are under the auspices of Amtrak. Amtrak is dedicated to passenger service." THAT is NOT an answer to the question. It is an intentional evasion seemingly crafted to lead the questioner to make the logic leap of "therefore these tunnels are not for freight." So while the actual words may be true, the evasive 'answer' is dishonest. It indicates a purposeful intent to mislead. It is also projects an insultingly patronizing 'don't you worry about it' attitude, while waving a flag of transparency. Therefore these meetings have lost credibility, and made us even more suspicious of the project's true backers and nature. There seems to be a decision that Passenger Service is sellable, while freight lines under housing is not – so do your best to deny it without actually lying.~~

~~Some supporters of the tunnel project cite it as 'necessary for the competitive edge of Baltimore's Port.' That is clearly not about passengers, but about freight. At the B&P public meetings, elaborate charts are presented showing time savings for passengers of a maximum of 3 minutes, with a silly "total value of time for passengers" of about $40 million/year. It is ridiculous to expect us to believe that it is in Amtrak's, the public's or anyone's interest to spend $1billion to save passengers mere seconds of time, and that the 1% annual return of $40 million – which cannot be captured, and would take 100 years to realize – is a compelling reason for this action.~~

COMMENTS

RESPONSES

When you follow the money, it does not lead to the answers we are being sold. I so wish an investigative reporter would uncover and explain exactly what is going on, since B&P is not forthright. There is conjecture that because there are Federal $$ to fix the Baltimore bottleneck for the NEC, that the state and Port Authority, CSX & other freight interests are trying to piggyback and usurp those $$ to serve their own purposes – "Since we are tunneling anyway." I'd really like to know the machinations at work.

COMMENTS

DEIS Comment 4:

From: [redacted]
To: BPTunnel Information
Subject: Comment Form [2]
Date: Monday, December 21, 2015 2:44:37 PM

Ms Eunice Anderson

A few of the public meetings will be held at an Enoch Pratt Free Library branch. Please correct Halbrook branch, to Walbrook branch, the address is 3023 W. North Avenue, 21216. This library branch is located in the Walbrook Junction community.

Thank you very much.

RESPONSES

Thank you for your comment.

COMMENTS

DEIS Comment 5:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Thursday, January 28, 2016 12:17:56 PM

Mrs Jamaica Arnold

I support this project and overall the build alternatives. I currently use the Marc everyday to commute to work and live very close to the project in Heritage Crossing. I recommend Alternative 3A. Alternative 3A seems to have the most benefits and the only real drawback that I see is the speeds are a little slower on the train. This project will greatly improve transportation in the northeast. In my opinion, this project and adding a 4th rail line from DC to Washington is a better idea than Maglev.

Thank you for presenting this complex information in a clear format.

1

RESPONSES

Response to Comment 1:
Thank you for your comment. The FEIS identifies Alternative 3B as the Preferred Alternative.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 6:

From: [redacted]@bpttunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Tuesday, January 26, 2016 4:42:53 PM

Ms Jennifer Beachell

As the project team considers environmental safety and operational transportation efficiency in rebuilding the tunnel, please also consider integrating wireless infrastructure. A significant proportion of the revenue generated by the rail service is from business commuters along the northeast corridor. The current tunnels that service both the MARC and AMTRAK trains do not support wireless communications/Wi-Fi networks. As a result, the Baltimore tunnels are major impediment to uninterrupted commerce during an otherwise convenient train ride. Please consider integrating wireless infrastructure into the rebuilding of the tunnels to facilitate increased consumer satisfaction.

1

RESPONSES

Response to Comment 1:
We appreciate your concern. However, wireless services on trains are features offered by the train operators and are not considered in this Project.

COMMENTS

RESPONSES

DEIS Comment 7:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Tuesday, January 26, 2016 1:48:17 PM

Ms Jennifer Beachell

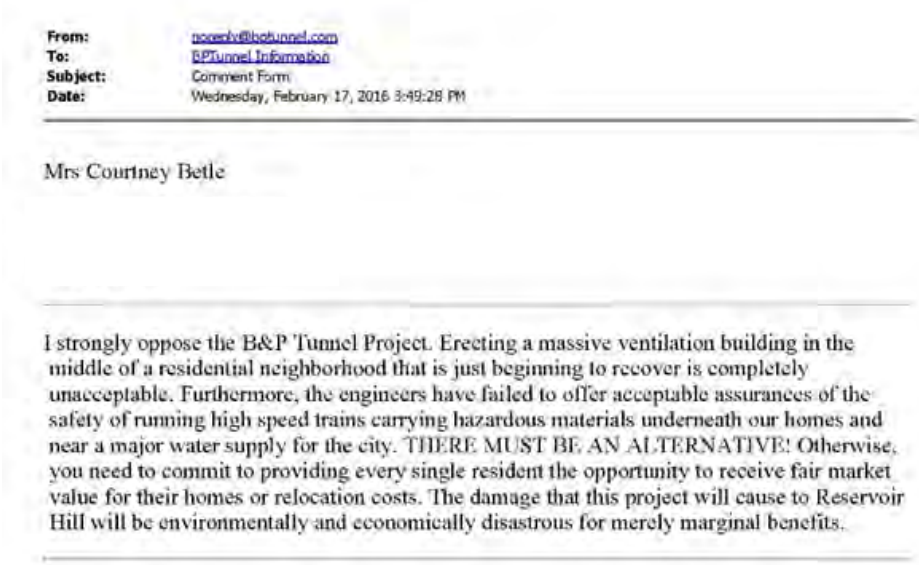
DEIS COMMENT

1 Please consider integrating wireless infrastructure within the B&P tunnels to support wireless communications during the AMTRAK and MARC train services. For those of us who routinely conduct business on the train, at the point the train enters the Baltimore tunnels, we lose all connectivity via wireless telephone and internet connection. It is a considerable inconvenience to uninterrupted commerce and an improvement that would increase rider satisfaction considerably.

Response to Comment 1:
We appreciate your concern. However, wireless services on trains are features offered by the train operators and are not considered in this Project.

COMMENTS

DEIS Comment 8:



From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Wednesday, February 17, 2016 3:49:28 PM

Mrs Courtney Betle

1 I strongly oppose the B&P Tunnel Project. Erecting a massive ventilation building in the middle of a residential neighborhood that is just beginning to recover is completely unacceptable. Furthermore, the engineers have failed to offer acceptable assurances of the
2 safety of running high speed trains carrying hazardous materials underneath our homes and
3 near a major water supply for the city. THERE MUST BE AN ALTERNATIVE! Otherwise, you need to commit to providing every single resident the opportunity to receive fair market
4 value for their homes or relocation costs. The damage that this project will cause to Reservoir Hill will be environmentally and economically disastrous for merely marginal benefits.

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
Amtrak and Norfolk Southern (NS) are anticipated to use existing fleets and newly acquired equipment in the tunnel. This equipment must meet federal standards for safe operations. In addition, the tunnel will be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and freight trains within the tunnel.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

COMMENTS

RESPONSES

No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

Response to Comment 3:
A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

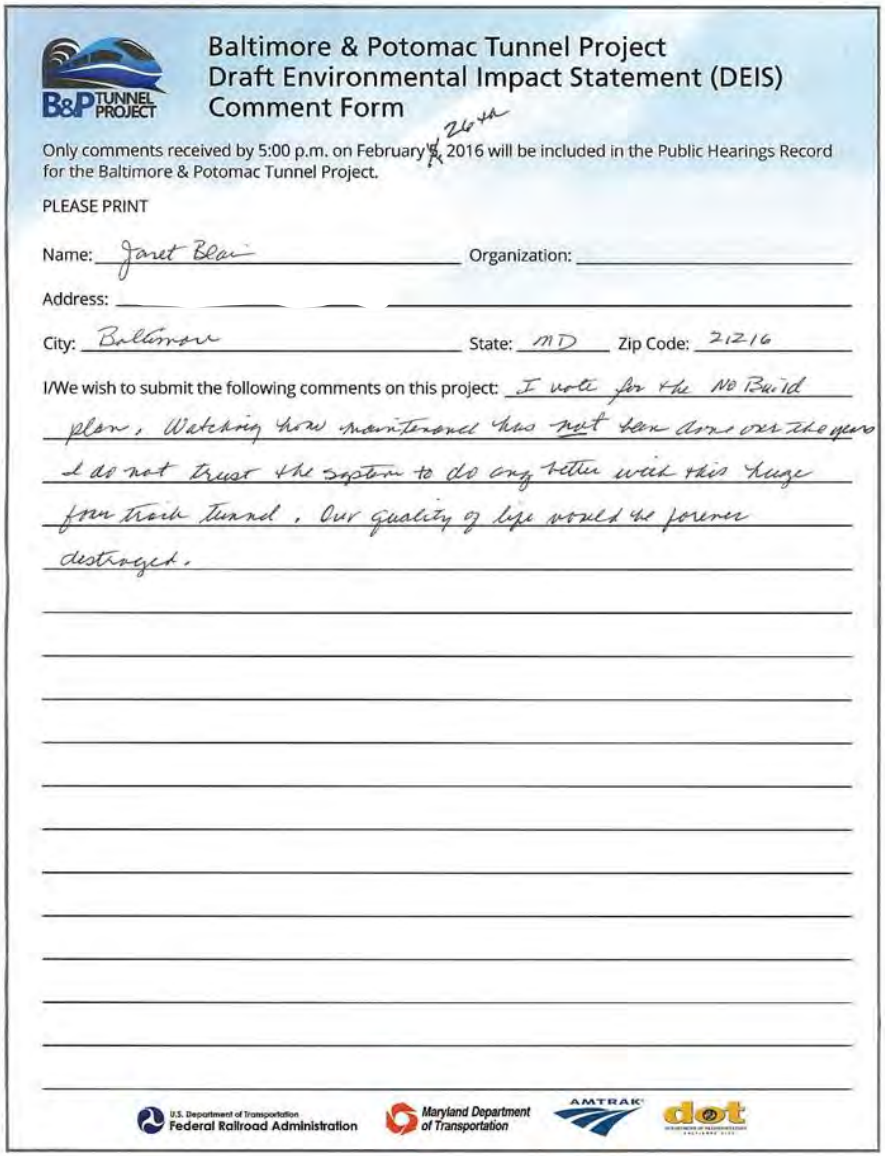
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 4:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

COMMENTS	RESPONSES
	For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**. The economic market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

DEIS Comment 9:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 26th 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Janet Blair Organization:

Address:

City: Baltimore State: MD Zip Code: 21216

I/We wish to submit the following comments on this project: I vote for the No Build plan. Watching how maintenance has not been done over the years I do not trust the system to do any better with this huge from train tunnel. Our quality of life would be forever destroyed.

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

1

RESPONSES

Response to Comment 1:
The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS

DEIS Comment 10:

Brittany Rolf

From: field blauvelt
Sent: Thursday, February 25, 2016 9:56 AM
To: BPTunnel Information
Subject: DEIS COMMENT
Attachments: RRs in Baltimore.pdf; Untangling Baltimore's rail lines.pdf

1 There is NO question that the B&P tunnel project as currently proposed will do irreparable damage and some destruction to the Reservoir Hill area. There is NO question that the residents strongly object. The ONLY question is whether anyone with any power cares. We insist that these alternate plans be considered.

Field Blauvelt

RESPONSES

Response to Comment 1:
For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.More information about potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI, Section A** of the FEIS.

The Project Team has engaged in extensive public outreach throughout the development of the Project including three Public Open Houses, as well as ten community meetings where the public was given the opportunity to learn about project development and engage in discussion with the Project Team. In addition to these meetings, Mitigation Working Groups comprised of community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI**, as well as **Chapter VIII.**

A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

COMMENTS



Figure 1
Baltimore area railways

RESPONSES

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 11:

1

A Proposal to Unravel Baltimore's Tangled Rail Lines
Joint Open Infrastructure Subcommittee of the
MTA Citizens Advisory Committee;
MTA Citizens Advisory Committee for Accessible Transportation;
MARC Riders Advisory Committee
10 September 2015
Final Draft

In April of 2002 the I-95 Corridor Coalition released its "Mid-Atlantic Rail Operations Study" which identified many choke points and decaying infrastructure throughout New Jersey, Pennsylvania, Delaware, Maryland, and Virginia that prevent expansion of rail capacity that the rest of the system could otherwise accommodate. These include the Howard Street Tunnel, the B&P Tunnels, and the Union Tunnels in Baltimore as well as several bridges in Maryland.

The study divided the projects into near, medium, and long-term time frames.
The near term projects (5 years or done by 2007) included:
Design for reconstruction of the Howard Street Tunnel and approaches
Design for reconstruction of Amtrak's Union Tunnels and the B&P Tunnels.

The Medium Term projects (5 to 10 years or 2007 to 2012) included:
Reconstruct the Howard Street Tunnel and approaches
Reconstruct Amtrak's Union Tunnels and the B&P Tunnels.

The long term projects listed in the I-95 Corridor Coalition study are not part of this report and so are not listed here in.

In November 2005, the U. S. Department of Transportation Federal Railroad Administration issued "Report to Congress: Baltimore's Railroad Network: Challenges and Alternatives" (The FRA 2005 report) that says

> In the end, each of the competing carriers built its own, inferior right-of-way, compromising even the then-prevailing standards for gradient, curvature, and operating efficiency. Despite subsequent improvements, today's network — still reliant on the Baltimore & Potomac (B&P), Union, and Howard Street Tunnels for connectivity — is essentially the same as the geometrically compromised and operationally handicapped system cobbled together during the post-Civil War decades.
>
> Although convoluted and antiquated, Baltimore's railroads have strategic importance far beyond the confines of their immediate region. Originating and terminating rail freight traffic in the Baltimore region remains significant, largely due to the Port — which ranks fourth among Atlantic Coast ports, and is the closest Atlantic port to

Draft N 1

RESPONSES

Response to Comment 1:
The report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding the purpose and need of the Project, please see **Chapter II** of this FEIS.

COMMENTS

RESPONSES

> major Midwestern markets — and the region's remaining industrial base. Through freight traffic is important on the CSXT's traffic lanes traversing Baltimore between the Northeast on the one hand, and the Midwest and South on the other, despite restrictions due to clearance limitations. Indeed, CSXT owns no alternate north-south route east of the Appalachian Mountains. With respect to intercity passenger service, one-fifth of Amtrak's passenger-trips, one-quarter of its passenger-miles, and one-third of its ticket revenues depend on travel over Baltimore's railways. For all these reasons, the condition, capacity, efficiency, and effectiveness of the Baltimore region's rail network affect the performance of the national transportation grid — as became graphically evident in the massive traffic dislocations caused by the 2001 fire in the Howard Street Tunnel. (Page ES-2)

Both of these reports state that congestion of Baltimore's Rail infrastructure has national significance; therefore, it would seem reasonable that significant Federal assistance should be available for these projects.

A problem with past and current transportation planning methods is that they are project focused. The projects that get done first are the ones with the greatest political muscle, and not necessary the projects that make the most engineering, operational, fiscal, or financial sense. Generally, construction of new service receives the political support while maintenance is underfunded and the existing systems slowly decay.

As indicated by the FRA report, Baltimore's rail problems are a tangled mess built project by project, each compromising performance to fit the then achievable project constraints. Perhaps the tangle is best demonstrated by the east end of the B&P Tunnels, which has been described as one of the densest transportation points in the region with the CSX tracks passing right above the B&P tunnels, and the Central Light Rail squeezed between the CSX tracks, Howard Street, North Ave, and I-83. Both the freight and Central Light Rail were built with grades that exceeded the recommended maximum. It is necessary to take a full system approach to this problem and "unpack" the conflicts. By doing things in the correct order, the total construction costs will be reduced by several billion dollars and the final system performance significantly enhanced, with reduced operating costs, over what can be achieved using a project by project approach.

The most important projects (the tunnels) have been too large to attempt within a reasonable "project" budget. Therefore, there have been minor efforts to "modernize" the system, such as single tracking the CSX line to accommodate taller trains, which actually reduced capacity, while not addressing the fundamental problems. There have also been minor repairs and maintenance such as to the B&P Tunnels, which prevent them from falling down but don't solve the underlying problems. Meanwhile, the years go by and the structures deteriorate. When they become unusable, there will not be sufficient time to replace them and the service will be disrupted for an extended time. However, a comprehensive examination of the infrastructure needs, with a commitment

Draft N 2

COMMENTS

RESPONSES

to implementing it, is three quarters of a century overdue.

The proposal here is primarily one for preservation of current rail capacity (intercity passenger and freight service through Baltimore) designed and phased in such a way as to set the stage for future expansion. It is our view that the shape of the intercity rail system (track, tunnel, and station locations) should be established before significant investment is made in local service because the available and appropriate local routes and destinations may change depending on major rail system structure. In many cases, work on intercity lines will disrupt existing local service. Therefore, some local projects are phased ahead of the intercity projects either to clear space for future construction or to provide alternate travel options during disruptions so as to avoid any Title 6 issues.

While we are only recommending an order of construction, and not a construction schedule, the condition of the existing rail tunnels and their critical importance to the local and national economies should impel us to build these as soon as we can finance them.

This report focuses only on heavier radial systems (mainline freight, Maglev, high-speed rail, Amtrak international service, and automated heavy metro.) No lighter system (light metro, aerial tramway, people mover, light rail, street car, trackless trolley or exclusive busway) should be planned or funded until all heavier system are completed first. This means that all crosstown, cross-county, feeder, supplemental, short lines, and local service lines involving fixed guideway infrastructure should be delayed indefinitely. All lighter systems require space and funds. Implantation of these types of lines will certainly delay and may prevent construction of heaver systems. The serious accidents, congestion and delay during the testing of the H Street street car in Washington DC illustrates the danger of trying to do the job of heavier systems with lighter infrastructure in highly congested areas.

In the 21st century, there will be a renewed interest in rail travel. The proposal described here sets the stage for the eventual reestablishment of rail service from Baltimore west through Westminster to western Maryland and the Midwest, north to York and central Pennsylvania, New York, and Ontario, and southeast to Annapolis and the Eastern Shore. (These routes are described in more detail at the end of this proposal.)

To untangle the rail transportation mess and set the stage for the intercity lines described above, the following projects should be done in this precise order:

0) Extending MARC service to Wilmington.

1) Automation and extension of the existing Baltimore Metro Subway from Johns Hopkins Hospital (JHH) along the south side of the Amtrak right-of-way (North East Corridor or NEC) to Orangeville, and on to the Travel Plaza with a yard, bus depot, and MARC connection at Orangeville. A junction at I-895, near Bayview yard, will permit a

Draft N 3

COMMENTS

RESPONSES

branch to North Point Blvd during Phase 3. Eventual extensions could go as far as Fort Howard to the southeast and Oliver Beach to the east. By using the exiting cross-town subway tunnel, and extending the line east then west, cross-town rail service can be built in three or more phases, each of which is a cost effective, affordable, minimally operable segment.

2) Construction of a freight tunnel from Marley Neck to Sparrows Point. As part of this project, MDOT would acquire title to some CSX tracks no longer needed for national freight movement.

Planning and commitment of funds for these two projects only could be completed in the short term.

3) Addition of a new branch to the current subway from a junction between Lexington Market and State Center west to FredHilton (Frederick Avenue and Hilton Street) and an east side extension to North Point Blvd. Later, the west side extension would go on to Edmondson Village, Westview, and, eventually, Columbia Mall and the Maryland School for the Deaf. The east side extension would travel parallel to NEC to Martin Airport Rail Station and Oliver Beach.

4) Tunnel for high speed, intercity rail under Fayette Street with a station at Charles Center Plaza.

5) In order to clear track space for Item 6, below, automated subway bypassing Howard Street, the Central Light Rail must be split at Camden Station and rerouted along the Camden Line and Curtis Bay rights-of-way between Camden and Westport Stations, and should be converted to MARC service south of Camden Station. Eventually MARC and Amtrak could go to Annapolis and, perhaps eventually, Ocean City.

6) Construction of an automated subway from Westport Station, under Howard, Pratt, Light, and St. Paul Streets through Charles Center, to Penn Station. Future southern extensions would go to UMBC and Lake Shore Plaza (east of Marley Station Mall). Eventual northern extensions would go through Towson and Hunt Valley to Sparks and through White Marsh to Martin Airport MARC Station.

7) Once there is an alternative intercity passenger route through Baltimore, rebuild the B&P and Union Tunnels for MARC access to Penn Station with several new stations along the line.

8) Once freight traffic no longer runs through it, the southern end of the Howard Street Tunnel can be rebuilt with a lower tunnel for Maglev (station at Baltimore Street) and an upper tunnel for Amtrak and MARC Camden line service to a Market Center Station. Eventual Maglev and Amtrak extensions could go west to Cumberland, Pittsburgh, Chicago, Detroit, or St. Louis, and north to Harrisburg, and points north to Ontario. An

Draft N 4

COMMENTS | **RESPONSES**

eventual MARC extension would branch to go to Penn Station or north to York or Hanover and Gettysburg, or west to Westminster, Hagerstown, and Cumberland. MARC and Amtrak train sections from the west would use the Western Maryland, Greenspring Valley branch right of way with MARC stations serving Stevenson University and Greenspring Station.

Note: it is necessary to increase the Howard Street east side setback for the new "super block" to 25 plus feet from the tunnel to permit expansion and reconstruction of the tunnel. The foundations of the Read's Drug Store at Lexington and Howard would need to be stabilized as part of tunnel construction.

Items 3 through 8 should be added to the Consolidated Transportation Plan (CTP) during Governor Hogan's term in office.

Explanation of construction order:
Item 1, conversion of the existing subway to an automated line with an east side extension of the Metro from JHH to the Travel Plaza with a proposed Metro rail yard on the Armco Specialty Steel brownfield site at Orangeville must be done in phase 1 as later work will cut the Subway line (between Lexington and State Center stations) for a west side branch. The Orangeville yard will permit service east from Lexington Market during the later west side branch construction, and the length of the line will justify continued eastside operation. This line, with the west side extension, will provide a rail bridge around Penn Station for MARC passengers to/from Harford and Cecil Counties while the B&P and Union Tunnels are rebuilt during phase 7.

This alignment would be far less costly and provide much better service than the proposed Red Line east side. The direct connection from I-95 and I-895 to the Travel Plaza with its ample free parking and short rail travel time (about 10 to 12 minutes) to downtown will attract a significant amount of traffic from I-95 and I-895. Unlike the Red Line, there will be no temptation for commuters to park on the streets of Canton to avoid downtown parking fees. This subway extension will reduce congestion in the Fort McHenry Tunnel because some fraction of the cars from the north that use the tunnel to access downtown by way of I-395 will switch to the automated metro. Eastside subway service will permit restructuring of the east side bus lines. This will increase bus reliability, reduce bus operating costs, increase the number of buses available for use on over crowded bus lines, and reduce rider travel times. By being farther from the harbor, and higher than Boston Street, this alignment will be immune to the coastal surge flooding that makes a Red Line Boston Street portal risky with sea levels rising. This line would likely increase MARC ridership from northeast of Baltimore by providing a quick connection at Orangeville to JHH and the development around it, downtown, and University Center (from Lexington Market Station).

Draft N 5

COMMENTS

RESPONSES

An automated line may be economically operated on much shorter headways than if motormen need to be paid. For example, 2 car trains every 2 minutes yields the same hourly line capacity as 6 car trains every 6 minutes but with one-third the waiting time. Shorter waiting times attract more riders, improve connections with feeder bus lines, increase the transit impact and lower the operating cost per passenger mile.

This project requires about 1.15 miles of new tunnel and cost less than half of what the Red Line would cost.

Item 2, the freight tunnel, is necessary to remove freight traffic from the Howard and B&P and Union Tunnels before any other work can be done on them. (Before this tunnel is done, any work on or near the Howard Street tunnel risks a complete shut down of East Coast freight traffic, with huge port access, national freight movement, and liability issues for the state.) Unlike the current freight alignment and the other alignments proposed in the FRA report, the alignment proposed here keeps hazardous material (Hazmat) freight out of downtown and densely residential West Baltimore and provides the most direct east coast route. Without this improved rail access, especially given the cancelation of the Morrell Park intermodal transfer terminal, the Port of Baltimore will continue to suffer and lose business to other east coast ports, because of the slow continuing loss of competitive rail access and increased transportation costs required to serve the Port of Baltimore. A Norfolk Southern vice president has already said that the railroad would be willing to negotiate a per car toll to use this tunnel, which would permit the construction to be funded by bonds. Toll rates charged to CSX could depend on how quickly it signs onto the deal. The state owned Patapsco and Back River Railroad could guarantee both CSX and Norfolk Southern access to Bayview yard and Sparrows Point. The tunnel should be owned by MDOT. As part of the deal, MDOT would obtain title to the Howard Street Tunnel and the belt line from Russell Street to Bayview yard, the CSX Sparrows Point branch, the Hanover Sub, the Old Western Maryland and Maryland and Midland rights of ways including the Bear Creek trestle. Some of these rights of way will eventually be used for the Baltimore Metro Subway, and others for MARC and/or intercity passenger service.

Item 3 is construction of a branch from the current subway west to near the West Baltimore MARC station and on to the intersection of Frederick Avenue and Hilton Street (FredHilton), which provides a location with sufficient auto catchment (Frederick, Wilkens and I-95 access) to make the line cost effective. The line would eventually be extended northwest under Loudon Park cemetery to Edmondson Village, Westview, Normandy, Columbia Mall, and the Maryland School for the Deaf. (See Item 4 for notes about the portal for this.)

During construction, subway service can be provided from Owings Mills to State Center and from Lexington Market to the Travel Plaza. The Central Light Rail, augmented by

Draft N 6

COMMENTS

RESPONSES

bus service, will provide bridge service between the two stations. As part of this project, the Metro Subway on the east side is branched to a station at North Point Boulevard on the Northeast Corridor to provide a layover spot for east/west trains. Subway service between Orangeville and West Baltimore Stations is required to provide a MARC rail service bridge during reconstruction of the B&P and Union tunnels in phase 7.

There is infrastructure built into the Lexington Market Station which would permit a west side rail transit line to terminate underground there, which some have recently suggested for a west side light rail instead of the Red Line. That proposal is inferior to branching the current line as proposed here for several reasons. Trains operating north of Lexington Market Station must be run at a higher frequency so as to be well below capacity in order to accommodate passengers transferring at Lexington Market for travel to other downtown stations with higher ridership. The excessive frequency drives up operating costs. The east side is proposed to branch and if the west side doesn't branch, its service frequency would be twice that of the east side (half the headways). While some trains could be short turned at Rogers Station, 5.5 miles beyond Lexington Market Station, there would still be significant overcapacity and increased operating expense. Branching the west side balances the load on each end of the line, and provides operating flexibility.

Without a through connection between Orangeville and West Baltimore MARC Stations, there is no MARC rail bridge during reconstruction of the B&P and Union tunnels during phase 7 below.

A Light Rail in West Baltimore will reduce street capacity, which will increase congestion and reduce air quality. It will have insufficient rider capacity because the trains must be short to fit on city blocks and will have limited operating speeds, which increase operating costs and reduces rider attractiveness. A West Baltimore Light Rail will almost certainly have safety issues involving frequent collisions with crossing vehicle traffic. (A quick search on Washington H Street Trolley accidents indicates that it hit several cars during its test phase. The Central Light Rail is involved in a vehicle collision about every ten days.) In addition to the liability, injury, and property loss these cause, the resulting delays reduce operational reliability and reduce rider attractiveness. The relatively low speed of the Red Line (18.8 MPH average speed) compared to the Metro Subway (30.2 MPH average) greatly narrows the angular width of the effective service sector because it limits the number of transfers that can provide rider benefit vs. a through bus trip. For these reasons, a west Baltimore Light Rail would provide inferior service compared to the west side branch proposed here.

By using the existing subway tunnel, this east/west alignment can be financed over multiple funding and construction cycles for an initial cost significantly less than the proposed Red Line while providing better service to more people along a similar corridor.

Draft N 7

COMMENTS

RESPONSES

This west side project requires about 0.75 miles of new tunnel.

Items 1 and 3 should be proposed as two phases of a minimum operable segment for a project that eventually could provide service from Oliver Beach to the Maryland School for the Deaf and Fort Howard to Glyndon. Together, they initially require less than 2 miles of new tunnel to provide significantly superior service and service growth to most of the corridor of the proposed Red Line. By using the existing downtown subway tunnel we can avoid the need to construct a new tunnel parallel to an existing one. Total costs would be much less than the Red Line for the same amount of track. This single transit project can be divided into two segments each meeting Federal funding cost effectiveness requirements and can be spread over two Federal funding cycles, which should make project financing much easier.

Item 4 is construction of a tunnel under downtown for high speed Amtrak rail travel across the city under Fayette Street with a station at Charles Center Plaza. In order to build this alignment, the line would need to be deep bored under the Howard Street and future Maglev tunnels; making it the "bottom layer" there. Unlike other proposed high speed alignments, placement of the station at Charles Center Plaza provides rail system connectivity to all subway lines at Charles Center, the MARC Camden Line at Howard and Baltimore, the Maglev, and future Amtrak service towards the Midwest and Canada. This high speed alignment eliminates the need for the great circle tunnel into Penn Station because the B&P tunnels would be rebuilt for MARC service in the phase 6. The high speed tunnel is for Amtrak only. No freight or MARC trains would use it. At Charles Center Station, eastbound and westbound trains would be on different levels, one above the other. Each track would be split into 3 station tracks. The south-side platform would service all trains with baggage cars. High speed trains stopping in Baltimore would be served by the north-side platform. The north-side and south-side tracks would be separated by walls from the center track, which would carry only high speed through trains. All platforms would be side platforms. There will be no island platform at either Charles Center Station or Market Center Station. Norfolk Southern trains will be restricted to the Northern Central Line, the Hanover Sub, the Freight Tunnel, the Curtis Bay Branch, and lines owned by MDOT. No freight will be permitted in the B&P, Howard Street, or Amtrak-owned high speed tunnels. This means no freight trains will pass through underground stations. Non-hazmat freight will still be permitted to pass through Penn Station and the Union Tunnels.

The west end high speed tunnel should start from the center two tracks on the Northeast Corridor near Stafford Street, and it go deep enough to pass under the Gwynns Falls. The high speed south portal is located very close to the east portal for the subway extension west from FredHilton Station under Loudon Park Cemetery to the next station at Irvington. These two portals are so close together, they need to be planned, and likely built, as a single engineering project. Boring of the subway tunnel westward toward Westview and extension of the automated metro line from Oliver

Draft N 8

COMMENTS

RESPONSES

Beach to Columbia would occur in a later phase. The east side tunnel portal is in Bayview Yard and directs Amtrak service onto the northern pair of tracks (tracks 2 and 3) so that MARC can operate on the southern pair (tracks A and 1).

After this project, MDOT would obtain title to the current Penn Line between the two portals of the high speed tunnel, including the B&P and Union Tunnels, Penn Station, and all current and future MARC stations between the portals. In addition, MDOT would obtain title, northeast of Bayview Yard at least as far as Oliver Beach, to the east (south) pair of tracks (tracks A and 1) for MARC service with space for parallel Metro service beside or above those tracks. Amtrak would own the high speed line, Charles Center Station, and tracks 2 and 3 east of Bayview.

Item 5, is reconfiguration of the Central Light Rail south of Camden Station to make room for an automated subway line in phase 6. Light Rail service would terminate at Camden Station, with MARC operated commuter service consisting of electric multiple unit (EMU) trains operating from Camden Station along the Curtis Bay Freight lines to Westport, Cherry Hill, and points south. Crossover tracks would allow the trains to switch over to the existing central light rail track serving Cherry Hill and points south to Cromwell Station. The trains would use battery packs, as is currently being tested by British Rail (see links below or search on "Prototype-battery-powered-train-carries-passengers") for operation on the Curtis Bay Branch, where overhead wires would interfere with double-stacked freight operations. (Search for "Battery powered passenger trains or see the following web sites.)

http://networkrailmediacentre.co.uk/News-Releases/Batteries-included-Prototype-battery-powered-train-carries-passengers-for-first-time-2230.aspx
http://www.greenoptimistic.com/battery-powered-trains-uk/
http://www.reuters.com/video/2015/02/02/space-age-swedish-shower-cuts-water-cons?videoId=363072111&videoChannel=74&channelName=Environment
http://www.railway-technology.com/news/newsuks-first-battery-powered-train-enters-revenue-service-4489154

Item 6, construction of an automated subway line from Westport to Penn Station, is required to provide a rail bridge for the Central Light Rail between Camden and Penn Stations while the Howard Street Tunnel is rebuilt as item 8. Operating on the current light rail tracks north from Westport, the line enters a portal south of Camden Station imbedded in a raised berm and elevated to protect the tunnel from storm surge flooding. This requires a new Ostend Street Station to replace the one at Hamburg Street. The subway tunnel would run under Howard, Pratt, Light, and St. Paul Streets, through Charles Center and north under St. Paul. The north end of the tunnel is at Chase Street and Fallsway (east of the Jones Falls). The subway will elevate over the Penn Line to the north side of Penn Station. From Penn Station, the line would continue west with a service track crossing the Jones Falls to use the current Light Rail yard, and an eventual

Draft N 9

COMMENTS

RESPONSES

route north under Maryland Avenue. The Guilford Avenue Bridge would need to be replaced by a pedestrian passerelle with elevators at each end. Once construction is finished, traffic impacts should be minimal.

Item 7: Once all traffic has been removed from the B&P and Union Tunnels, they can be rebuilt for MARC Penn Line access to Penn Station. All current Amtrak trains would permanently switch over to the high speed tunnel. The project would move the current West Baltimore MARC station south to between Mulberry Street and Calverton Road (because the track is sufficiently straight to allow loading full length trains) and aligns well with the subway station. In addition to Penn Station, new MARC stations would be at Relay, Pineheights (Wilkens Avenue), Sandtown/Winchester between Monroe and Gilmor Streets (the west end of the B&P Tunnels), at Pennsylvania Avenue (over and connecting with the subway underground at Upton Station), Orangeville (with a subway transfer and possible MARC maintenance facility), Chesaco Park, Perryman, Havre De Grace, Charlestown, Northeast, and Elkton.

Note that there is no station at Bayview or Washington Street. Bayview is too remote from roadways, has no ramp access for wheelchairs in the event of a power outage, has no access for emergency vehicles, and the catenary wires prevent any helicopter evacuations. The proposed Washington Street MARC Station on the North East Corridor S turn is too curvy and too close to Penn Station (less than 1.5 miles), Orangeville (less than 1.3 miles), and the Bond Street portal. The area will be served by the Patterson Park Metro Subway Station.

Item 8: Once all of the train traffic has been removed from the Howard Street Tunnel and there is an automated Metro rail bridge in place for the Central Light Rail between Penn and Camden Stations, the Howard Street Tunnel can be rebuilt for MARC and Amtrak service between Washington DC, the new Market Center Station, York, Cumberland, the midwest, and, eventually, Penn Station. A deep tunnel for Maglev service, between Washington DC, and the Jones Falls Valley, would be concurrently built below a tunnel for conventional MARC and future Amtrak service on the Camden Line, with a station (temporarily a terminal station) at the site of the Royal Farms Arena at Howard and Baltimore Streets. [There is currently a proposal to build a new arena at Conway and Charles Streets.] This MARC/Amtrak station would connect underground to a local and regional bus station built at the current arena location above the Maglev station, as well as to the high speed station at Charles Center Plaza and to all subway lines at Charles Center and Lexington Market Stations.

Because Maglev stations must be off line, there must be four guideways on two levels. Levels under Howard Street are from bottom to top:

1) Crossing Amtrak NEC with high speed (one direction),
2) Crossing Amtrak NEC high speed (opposite direction),

Draft N 10

COMMENTS

RESPONSES

3) Maglev bypass tracks,
4) Maglev station platform level,
5) Crossing Metro level and pedestrian crosing,
6) Amtrak and MARC Market Station platform level and Charles Center Station ticket and service level,
7) Street level station entrances, and other station ticking and service levels (Market Center Station ticket service level is at Fayette and Howard Streets),
8) Central Maryland bus station, ticketing, and service level,
9) Bus station boarding level, and
10) Bus storage level.

Later, the Maglev and MARC service in the Howard Street Tunnel can be extended northward up the Jones Falls Valley to Pennsylvania. When I-83 needs to be rebuilt or replaced, MARC tracks can be constructed to permit access from the Howard Street Tunnel into Penn Station.

In the end, there will be a freight tunnel under the harbor south of Baltimore. There is a rebuilt Howard Street tunnel that will eventually be able to connect Penn Station to the Camden Line. The rebuilt B&P and Union Tunnels provide MARC service into/from Penn Station. Trains from Penn Station will be able to serve all MARC stations. There is a downtown integrated Maryland Transportation Center with underground connections between a high speed intercity station at Charles Center, a MARC and Amtrak station at Market Center, Metro Stations at Lexington Market and Charles Center containing all four automated metro routes, and a Maglev Station at the current Royal Farms Arena site with an MTA and intercity bus station above it.

Initially, there are three Metro Subway lines: the current Red Line operating from Owings Mills to the Travel Plaza, the Green Line operating from FredHilton to North Point Blvd and sharing the tunnel with the Red Line, and the Blue Line operating from Penn Station to Westport. There is an in system vertical transfer between the two sets of lines at Charles Center.

By proper timing of the trains, there are two "virtual" subway lines. One line is between Owings Mills and FredHilton. The second line is between Northpoint Blvd and the Travel Plaza. This is achieved by scheduling the trains on the Red and Green lines traveling in opposite directions to arrive at Lexington Market and Orangeville Stations at the same time for cross platform, no wait transfers. In the same way, two more virtual lines would eventually be created by the Orange and Blue lines with cross platform transfers at Camden and 25th Street Stations. By constructing three new lines worth of track, Baltimore ends up with 8 functional service routes. The four virtual lines are constructed and operated for free.

Eventually each line can be extended as described below. Each endpoint, except for UMBC, is about 15 miles, as the crow flies, from Penn Station, creating a balanced

COMMENTS

RESPONSES

system. Each Metro Subway line has a connection outside downtown to a parallel MARC passenger line. All extensions but two can be built with no additional tunneling. Construction of each Metro Subway line should be done before restoration of intercity and commuter passenger rail in each of the rail corridors to prevent service losses and reduce disruptions during the construction of the heavier rail systems.

The Blue and Orange Lines can be extended north under Maryland Avenue to a junction at 26th Street where the Orange Line branches to follow the belt line to Clifton Park and then goes northeast to Martin Airport Rail Station while the Blue Line goes north to Towson and, eventually, Sparks. Proper timing of train arrivals at the 25th Street Station creates a virtual line between Northeast Baltimore and North central Baltimore. At the south end, the Blue and Orange lines split south of Camden Stadium with the Blue Line going to Lake Shore Plaza and the Orange line going to UMBC.

The Red and Green lines can eventually be extended. The Red Line could be extended northwest from Owings Mills to Glyndon with a transfer to four MARC and two Amtrak lines. It could be extended southeast to Sparrows Point and Fort Howard. The Green Line can be extended west to Columbia Mall and the Maryland School for the Deaf. From Savage Station a Camden line spur would connect to the Green Line at Columbia Gateway. It could be extended east to Martins Airport Rail Station and on to Oliver Beach with a connection to the NEC at Martins Airport.

This proposal eliminates the need for the Red Line Light Rail downtown tunnel and the Great Circle Tunnel into Penn Station. Cost savings to the state would be in the billions of dollars. The extended map should be incorporated into the long-term state rail plan, but be constructed beyond the CPT's time frame. By mapping it now, we ensure economical, integrated future expansion rather than haphazard, costly, inefficient, and ineffective, project focused expansion.

Future Intercity (Amtrak) passenger routes.
This is a list of future possible passenger routes through Maryland. The order is roughly in the temporal order of implementation. Intrastate service would be provided by MARC.

A) North from Baltimore along the Northern Central Railroad right of way to Timonium, New Freedom, York, and Harrisburg. Long distance trains could travel to Williamsport, Buffalo, and Toronto, or to Williamsport, Elmira and Rochester, or to Scranton, Syracuse, and Ottawa. This route would permit direct passenger service from Toronto to Miami. MARC commuter service along this route from York to Baltimore would likely reduce traffic on I-83 as 21% percent of the labor force of York and Adams Counties commutes to work in the Washington-Baltimore CSA (BMC data). Pennsylvania has long expressed interest in restoring this service.

B) Future MARC service branching off the Penn Line west of Sandtown/Winchester

Draft N 12

COMMENTS

RESPONSES

Station at Fulton Junction would run along the Western Maryland right of way serving Coppin State University, Northern Parkway, Owings Mills, Glyndon, Hampstead, Manchester, Hanover, and Gettysburg. Implementation of this MARC service north of Glydon would be concurrent with the state of Pennsylvania rebuilding a railroad trestle across the Susquehanna River at Columbia to establish Amtrak service from Washington through Baltimore, York, Lancaster, Reading, Allentown, Morristown, to Newark, and either Hoboken or Pennsylvania Station New York. This route will expand Amtrak service to new cities and provide an alternative route to the crowded NEC for trains coming from south of Washington. MARC service south of Glydon can be initiated when the Western Maryland Greenspring Valley branch opens to Owings Mills.

Amtrak service would operate to the west along the Western Maryland right of way to Westminster, Hagerstown and Cumberland extending west to Pittsburgh, Cleveland, Detroit and Chicago; or Columbus, Indianapolis, St. Louis, and on to Denver and points west. MARC service would connect Cumberland, Hagerstown, Thurmont, Westminster, Glyndon (with a connection to the Baltimore Subway), Owings Mills, Stevenson, Northern Parkway (in the Jones Falls valley), and intermediate stations to Market Center Station and on to Annapolis.

A new track through Parr's Ridge from Finksburg to New Windsor, bypassing Westminster, under Catoctin Mountain (avoiding Camp David) and South Mountain between Thurmont and Smithburg could carry mainline freight between Chicago and the Port of Baltimore. Baltimore does not get freight from the mid-west anymore because steep grades and sharp curves make the routing unsuitable. This bypass track would change that. Our port is closer to Chicago than any other Atlantic port, and it is the most efficient port in the nation. By eliminating these grades and curves, we could expect a large increase in port traffic. This, in turn, could attract new factories in our region, as manufacturing has been increasing again in the United States. MARC and Amtrak would serve Westminster along the existing Maryland and Midland track, and would not use the Parr's Ridge cut.

If and when a bridge is built across the Chesapeake Bay at Hart-Miller Island, it should be provided with space for a rail component that would service Chestertown and Dover.

C) When I-83 needs to be rebuilt or replaced, it will be possible to connect Penn Station to the Howard Street Tunnel,. This would permit MARC trains to run from Penn Station through the Howard Street tunnel to the Old Main Line and west with service to Lansdowne, Ellicott City, Sykesville, Mt Airy, Monocacy, Frederick, and intermediate points. Intercity passenger traffic could go farther west to Cumberland; Cincinnati; St. Louis; Springfield, Missouri; and westward to Tulsa, Oklahoma City; and El Paso.

D) Intercity passenger service can be extended from the Northeast Corridor at Perryville northward along the Susquehanna River (Port Road) to Columbia, Pennsylvania, and with a rebuilt junction, on to Lancaster, Reading, and Allentown.

Draft N 13

COMMENTS

RESPONSES

E) When the Bay Bridges are rebuilt/replaced, space for a rail line on them must be included that would permit future train service from Baltimore to Kent Island, and points on the lower Eastern Shore such as Easton, Cambridge, Salisbury, and Ocean City. The railroad right of way still exists here. A future MARC line connecting Annapolis and Bowie Junction on the Penn Line would allow for Amtrak and MARC service between Annapolis and Washington DC.

F) Washington to Brunswick along a line through Keedysville to Hagerstown then along the Western Maryland to Cumberland and west, including St. Louis, Springfield Missouri, and on to Tulsa, Oklahoma City, and El Paso. MARC service from Washington to Waynesboro and Chambersburg could be accommodated if it were built by Pennsylvania north of the Mason-Dixon Line.

Draft N 14

COMMENTS

RESPONSES

Maps

Current Baltimore Metro Subway Line



Downtown part of the current Baltimore Metro Subway Line



Draft N 15

COMMENTS

RESPONSES

Proposed Phase 1, eastside extension of current line to the Travel Plaza. The hexagon at Orangeville denotes a subway/MARC connection. Orangeville would also be the location of a subway rail yard. These maps are to the same scale until noted.



Metro Subway after Phase 3 with Green Line between North Point Blvd and FredHilton. There is a second Metro Subway/MARC connection at West Baltimore Station. The Green Line will provide a rail bridge for MARC passengers around Penn Station while the B&P and Union Tunnels are rebuilt. There is a virtual line between Owings Mills and FredHilton connecting MARC service to northwest Baltimore.



Draft N 16

COMMENTS

RESPONSES

Metro Subway after Phase 6, construction of the Blue Line between Penn Station and Westport. There are two new Metro Subway/MARC connections at Camden and Penn Stations. The Blue Line will provide a rail bridge for Light Rail passengers while the Howard Street Tunnel is rebuilt.



Downtown view of the finished Metro Subway system.



Draft N 17

COMMENTS

RESPONSES

Map of the proposed, complete Metro Subway system. On average, each line extends about 15 miles from Penn Station; about the same geographic extent as the Washington DC Metrorail system.



Draft N 18

COMMENTS

RESPONSES

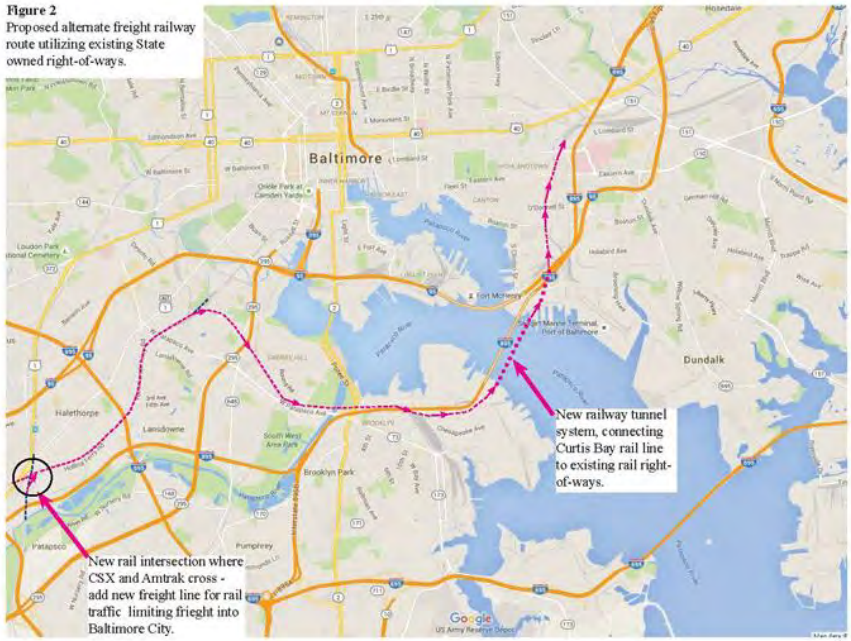
Regional view of the proposed, expanded intercity (Amtrak) and commuter (MARC) passenger routes in the Baltimore Region. Current lines are in wide, bright green. Proposed lines are in a light green (Amtrak and MARC) and purple (MARC only). Shown in black is a new freight tunnel under Baltimore Harbor (connecting freight routes are currently in service but are not shown) and new freight lines Parr's Ridge and South Mountain. See text for a description of routes and destinations. The new, high-speed trackage through Charles Center is shown in dark green with cross hatches. See text for a description of routes and destinations.



Draft N 19

COMMENTS

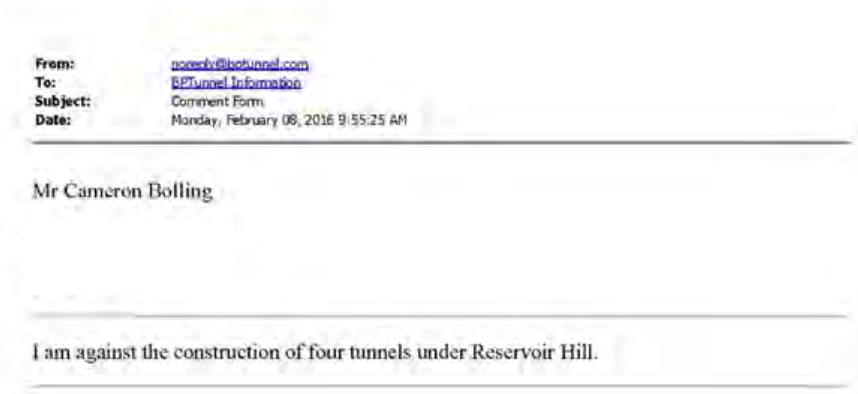
RESPONSES



COMMENTS

RESPONSES

DEIS Comment 12:



From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Monday, February 08, 2016 9:55:25 AM

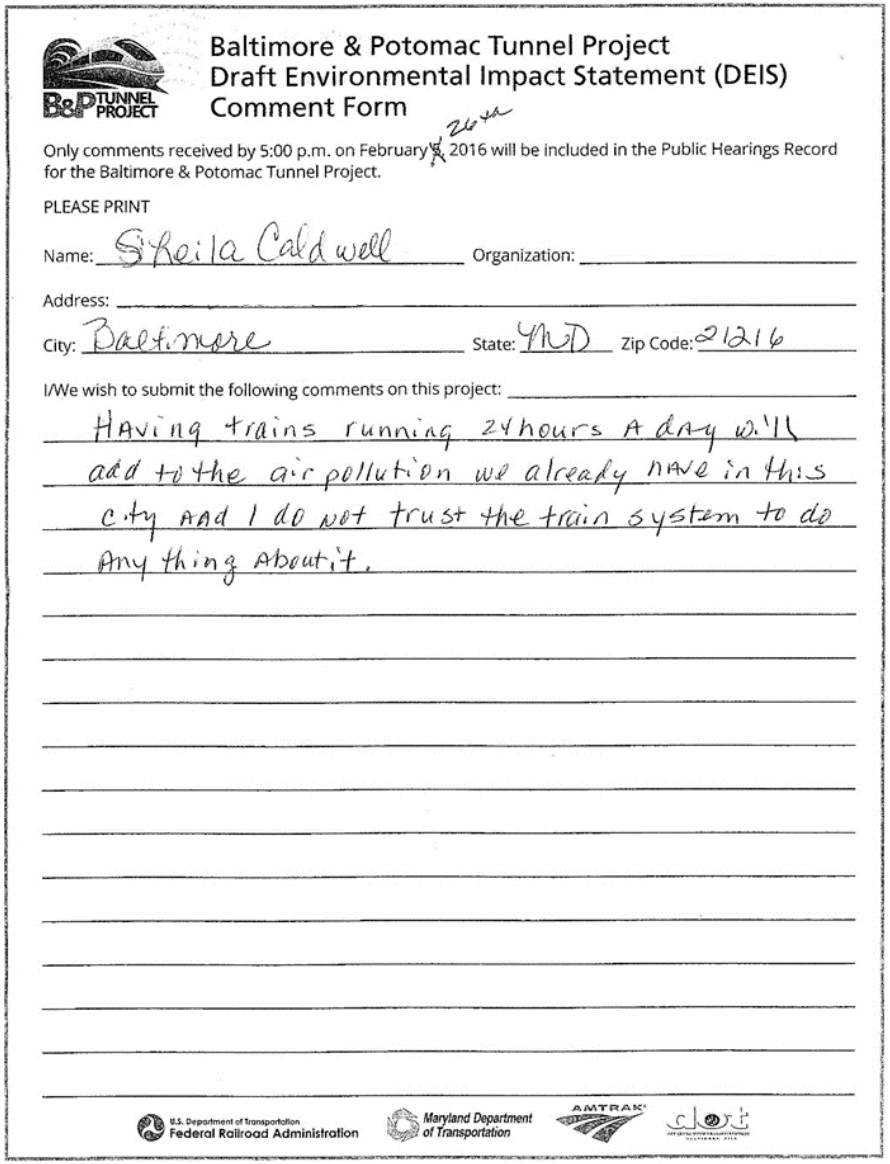
Mr Cameron Bolling

1 I am against the construction of four tunnels under Reservoir Hill.

Response to Comment 1:
Thank you for your comment.

COMMENTS

DEIS Comment 13:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 26th 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Sheila Caldwell Organization:

Address:

City: Baltimore State: MD Zip Code: 21216

I/We wish to submit the following comments on this project:

Having trains running 24 hours A day will
1 add to the air pollution we already have in this
city And I do not trust the train system to do
2 Any thing About it.

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK

RESPONSES

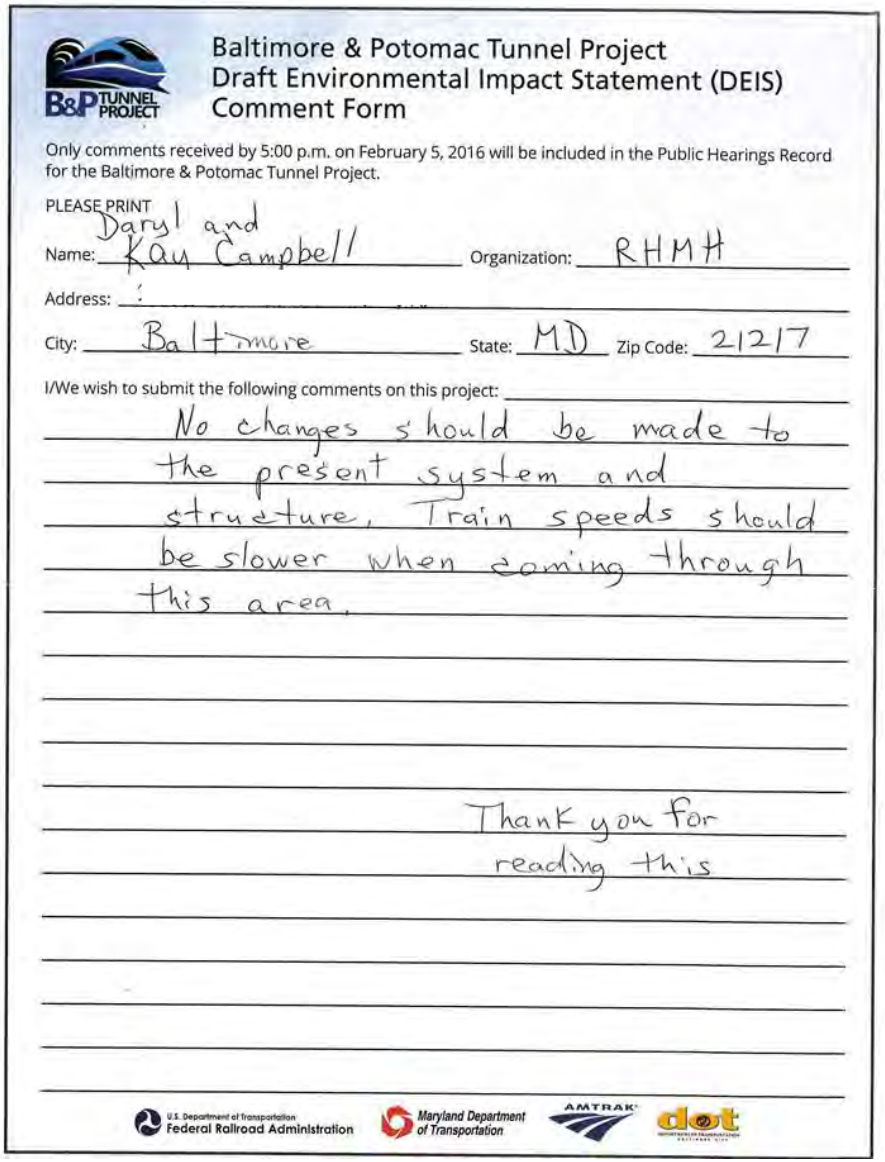
Response to Comment 1:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

Response to Comment 2:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 14:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Daryl and Kay Campbell Organization: RHMH

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project:

No changes should be made to the present system and structure. Train speeds should be slower when coming through this area.

Thank you for reading this

U.S. Department of Transportation Federal Railroad Administration · Maryland Department of Transportation · AMTRAK · dot

1

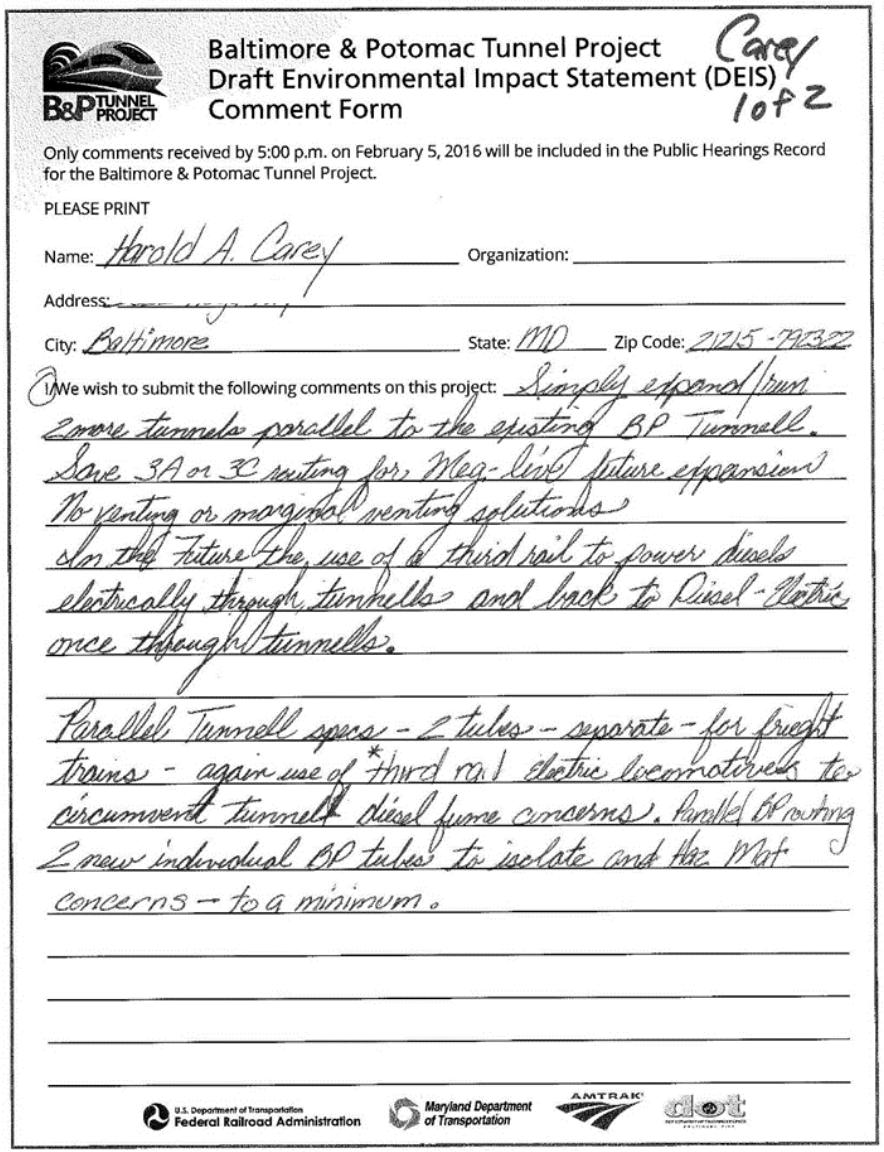
RESPONSES

Response to Comment 1:
Alternative 1: No-Build does not meet the Project Need or goals of the Project; therefore, it is not identified as the Preferred Alternative in this FEIS. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

The existing B&P Tunnel is not suited for modern high-speed usage due to the horizontal and vertical track alignments. The build alternatives would allow trains to travel at higher speeds, and due to its updated design and modern construction, it would improve travel times, capacity, reliability, and safety. The tunnel would be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and freight trains within the tunnel.

COMMENTS

DEIS Comment 15:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Carey 1 of 2

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Harold A. Carey Organization:

Address:

City: Baltimore State: MD Zip Code: 21215-7832

I/We wish to submit the following comments on this project: Simply expand/run
1 2 more tunnels parallel to the existing BP Tunnell.
Save 3A or 3C waiting for Meg-lev future expansion
2 No venting or marginal venting solutions
In the future the use of a third rail to power diesels
3 electrically through tunnells and back to Diesel-Electric
once through tunnells.

Parallel Tunnell specs - 2 tubes - separate - for freight trains - again use of *third rail electric locomotives to circumvent tunnell diesel fume concerns. Parallel routing 2 new individual BP tubes to isolate and Haz Mat concerns - to a minimum.

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

Response to Comment 1:
The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

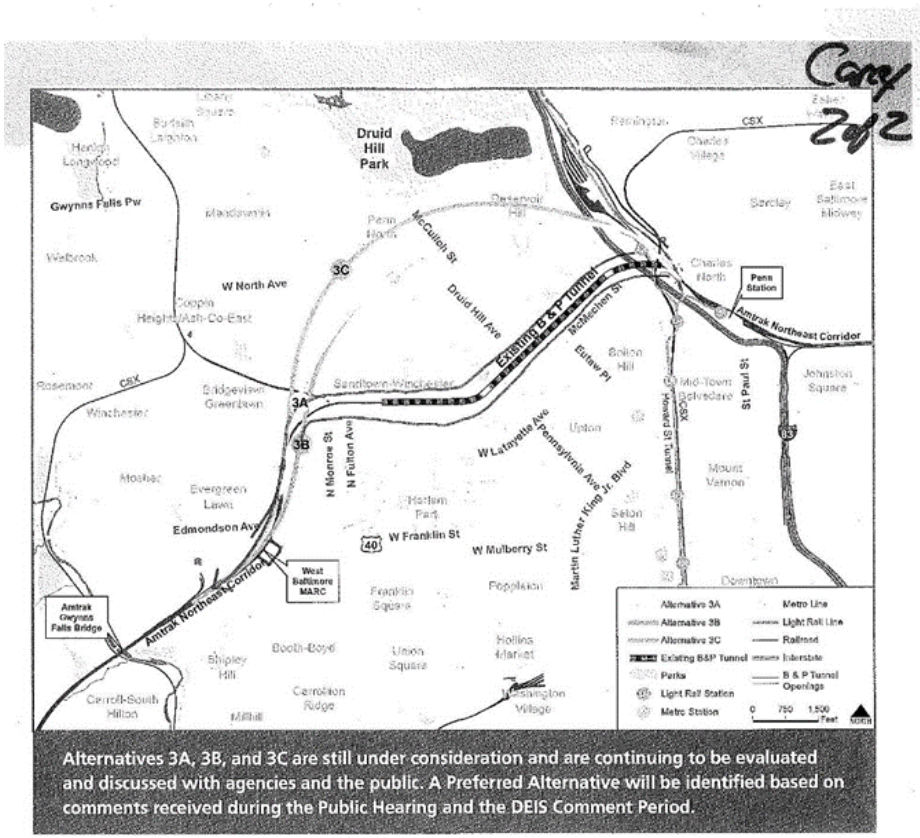
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

A Maglev train would not utilize existing or planned Amtrak infrastructure. The design of such a system requires significantly different rights-of-way and infrastructure. The design criteria for Maglev are extremely restrictive and would only be achievable on new alignments.

Response to Comment 2:
Ventilation facilities are required in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facilities is to pull fresh air into the tunnel and ventilate the tunnel air to the outside.

Response to Comment 3:
The type of locomotive traveling through the B&P Tunnel is determined by the train service operator. As per the 2040 projections, of the 388 daily vehicles running through the tunnel, 222 would be electric (Acela, NE Regional, and Metropolitan) and 166 would be diesel (2 freight and 164 MARC). Please refer to **Chapter VI** for additional information. Installing a third electrified rail in the new tunnels would add a third energy delivery system to the tunnel design and require MARC to procure a fleet of custom dual-powered locomotives. Addition of the third rail system would add another layer of complexity (and expense) to ongoing maintenance to the tunnels and custom locomotives. Freight locomotives, to the extent they are used, would also need to be dual powered.

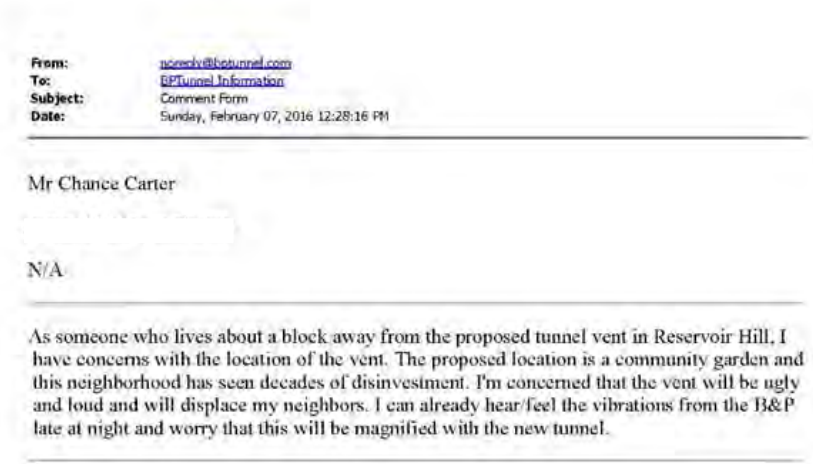
COMMENTS



RESPONSES

COMMENTS

DEIS Comment 16:



From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Sunday, February 07, 2016 12:28:16 PM

Mr Chance Carter

N/A

As someone who lives about a block away from the proposed tunnel vent in Reservoir Hill, I have concerns with the location of the vent. The proposed location is a community garden and this neighborhood has seen decades of disinvestment. I'm concerned that the vent will be ugly and loud and will displace my neighbors. I can already hear/feel the vibrations from the B&P late at night and worry that this will be magnified with the new tunnel.

1

2

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The three ventilation facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use. The design standard for the ventilation facilities would limit the outdoor noise level, when the fans are in operation, to L_{max} 50 dBA at the facility property lines. 50 dBA is approximately the noise produced by an indoor air conditioner at a distance of three feet.

Response to Comment 2:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM

COMMENTS

RESPONSES

would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

COMMENTS

RESPONSES

DEIS Comment 17:

From: Phillip, Odessa
To: Brittany Rolf; Anthony Brown; Eric Almquist
Cc: Jacqueline Thorne;
Subject: FW: RE: B&P Tunnel Project: Public Hearing Dates and DEIS Availability
Date: Tuesday, January 26, 2016 10:05:52 AM

FYI

Regards
Odessa

Odessa L. Phillip, PE
Environmental Project Manager
for the Baltimore and Potomac (B&P) Tunnel Project
Baltimore City Department of Transportation
417 East Fayette Street, 7th Floor, **Room 747**
Baltimore, Maryland 21202
Phone: 410-396-6856

DOT Meeting Cancellation Policy: *If Baltimore City Schools have a delayed start or are closed due to inclement weather, the meeting will be rescheduled.*

From: Dr. Marvin L. 'Doc' Cheatham, Sr.
Sent: Wednesday, January 20, 2016 5:24 PM
To: Phillip, Odessa; civilrights@verizon.net
Subject: Re: RE: B&P Tunnel Project: Public Hearing Dates and DEIS Availability

I am honored that you would reach out to me in this appreciated and accepted manner.

My responsibility as community president is to be the eyes, ears and mouth of my residents in their absence. Leave no question unanswered and do all that I can to protect the lives and lifestyle.

Thank you for communicating. I don't think I will be attending your Saturday meeting. lol S N O W.

If we had a preference - it would be that this project go through another community. We are in a totally neglected community and this project will just load on to a burden and disparity that we already have.

Thanks for communicating.

Dr. Marvin L. 'Doc' Cheatham, Sr.
Civil Rights & Election Law Consultant
Pres. - Matthew A. Henson Neighborhood Association
CEO - Matthew Henson Community Development Corporation

Please refer to response from Odessa Phillip below.

COMMENTS

RESPONSES

On 01/20/16, Phillip, Odessa<Odessa.Phillip@baltimorecity.gov> wrote:

Good afternoon Dr. Cheatham

Thank you very much for your active participation in this process as our team moves forward with the evaluation of various alternatives in the study of the Baltimore and Potomac Tunnel. We have been working closely with you and other community leaders to ensure that we clearly understand the concerns of the various stakeholders, especially as they relate to the quality of life and other environmental concerns you identified in your correspondence.

As you are aware, our work on this project gathers data on the impacts that each alternative could have on the natural and human environment. We then compile this information in a matrix that allows us to compare the impacts of various alternatives. All of this information is then relayed to the public in our Draft Environmental Impact Statement - which has recently been released on our website and at several sites around the City - for review and formal comment by the public. You requested that our team perform a study of the environmental impacts of this project and the DEIS is our method of doing so. Your letter and participation in this public process has highlighted additional studies that have been prepared by ancillary agencies regarding the healthcare concerns that have been identified in this area of Baltimore City. This information can become an important element for our team as we move forward into the Final Environmental Impact Statement phase of the project. During the development of the FEIS, our team begins the process of identifying mitigation strategies to address impacts of the project that have not been avoided or minimized.

Our team will continue the coordination with you and other stakeholders to ensure that concerns such as this are incorporated into this process to help lead to a better overall solution for the B&P tunnel project. Again, thank you very much for your participation in this process.

Regards
Odessa

Odessa L. Phillip, PE
Environmental Project Manager
for the Baltimore and Potomac (B&P) Tunnel Project
Baltimore City Department of Transportation
417 East Fayette Street, 7th Floor, **Room 747**
Baltimore, Maryland 21202

COMMENTS

RESPONSES

Phone: 410-396-6856

DOT Meeting Cancellation Policy: *If Baltimore City Schools have a delayed start or are closed due to inclement weather, the meeting will be rescheduled.*

From: Dr. Marvin L. 'Doc' Cheatham, Sr.
Sent: Friday, December 18, 2015 5:51 PM
To: info@bptunnel.com;
Cc: Wen, Dr. Leana; Savage, Tony; White, Tony

I requested at your last meeting at Perkins Square Baptist Church a full review and report on the 2008 and 2011 Health Disparity Profiles of Sandtown/Winchester - Harlem Park done by the Baltimore City Health Department and Johns Hopkins University and what impact this project will additionally have on us.

Our communities are already suffering far too many disparities to have yet another health and environmental bolder dropped on us. Haven't Matthew A. Henson Neighborhood Association and other adjoining communities suffered enough?

This project has just as much as admitted that there will be an environmental impact on us.

We demand that a full and immediate study be made on the continued environmental negative impacts that are being suffered by us and the additional negative environmental impact that we will suffer with this Project.

Dr. Marvin L. 'Doc' Cheatham, Sr.
Civil Rights & Election Law Consultant
Pres. - Matthew A. Henson Neighborhood Association
CEO - Matthew Henson Community Development Corporation
www.mahna.co - 501(c)(3)

Please see previous page for response from Odessa Phillip.

COMMENTS

DEIS Comment 18:

Brittany Rolf

From: Dr. Marvin L. 'Doc' Cheatham, Sr.
Sent: Wednesday, February 03, 2016 3:51 PM
To: BPTunnel Information
Cc:

Subject: Train Horns - Environmental

Follow Up Flag: Follow up
Flag Status: Completed

Today, Wednesday, February 3, 2016, from 4:20 a.m. until 5:35 a.m. we heard continuous train horns in our community. Of course this is a period of time in the day when many are still sleep.

Yes, I know this has nothing to do with the B&P Tunnel Project presently, but we and I are hoping you can direct us to the proper place and people.

We hear horns all the time such as right now while I am typing this email at 3:43 p.m. The sounds appear to be coming from the Monroe Street & Winchester Street bridge area. Continuous sleep interruption cannot be positive.

What is the purpose and why so long?

1 Please, when considering where to send trains that certain communities are already experiencing hearing affects all hours of the morning, noon and night.

Thanks for reading and see you Saturday.

Dr. Marvin L. 'Doc' Cheatham, Sr.
Civil Rights & Election Law Consultant
Pres. - Matthew A. Henson Neighborhood Association
CEO - Matthew Henson Community Development Corporation

1

RESPONSES

Response to Comment 1:
The Project has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. As a result, the Project will design and implement noise barriers to mitigate these anticipated operational noise impacts. Ventilation facilities will be designed with noise attenuation measures.

COMMENTS

From: Dr. Marvin L. "Doc" Cheatham, Sr.
To: BPTunnel Information;
Cc:

Subject: Re: B&P Tunnel Project: Public Hearing Dates and DEIS Availability
Date: Friday, December 18, 2015 5:51:25 PM

I requested at your last meeting at Perkins Square Baptist Church a full review and report on the 2008 and 2011 Health Disparity Profiles of Sandtown/Winchester - Harlem Park done by the Baltimore City Health Department and Johns Hopkins University and what impact this project will additionally have on us.

Our communities are already suffering far too many disparities to have yet another health and environmental bolder dropped on us. Haven't Matthew A. Henson Neighborhood Association and other adjoining communities suffered enough?

This project has just as much as admitted that there will be an environmental impact on us.

We demand that a full and immediate study be made on the continued environmental negative impacts that are being suffered by us and the additional negative environmental impact that we will suffer with this Project.

Dr. Marvin L. 'Doc' Cheatham, Sr.
Civil Rights & Election Law Consultant
Pres. - Matthew A. Henson Neighborhood Association
CEO - Matthew Henson Community Development Corporation

On 12/18/15, B&P Tunnel Project Team<info@bptunnel.com> wrote:

RESPONSES

This comment has been repeated as part of an email chain. Please refer to response from Odessa Phillip in **DEIS Comment #17**.

COMMENTS

MATTHEW A. HENSON NEIGHBORHOOD ASSOCIATION D/B/A
MATTHEW HENSON COMMUNITY DEVELOPMENT CORPORATION
P. O. BOX 23761 – BALTIMORE, MARYLAND 21203
– WWW.MAHNA.CO
A 501 (c)(3) Non-profit organization

B&P TUNNELL PUBLIC HEARING
SATURDAY, FEBRUARY 6, 2016
FREDERICK DOUGLASS HIGH SCHOOL
2301 GWYNNS FALLS PARKWAY - BALTIMORE, MARYLAND 21217

TESTIMONY FROM
MATTHEW A. HENSON NEIGHBORHOOD ASSOCIATION

We would like to thank you for this very brief, but important, opportunity for us to share with you our concerns regarding this project.

Please accept this as our significant opposition to what we contend will just be another added on negative affect to our community and its residents, especially our children, seniors and disabled, especially in the area of environmental impact.

The Matthew A. Henson Neighborhood Association has attended a significant number of these meetings as your records will accurately reflect.

We, again, strongly reiterate our request that a full review and study be done regarding the documented various disparities already being suffered by our community as reflected in the 2008 and 2011 Baltimore City Health Disparities Report of the Sandtown-Winchester/Harlem Park communities written by the Baltimore City Health Department and Johns Hopkins University. 2

We close with this question. When will ONE BALTIMORE end this very discriminatory and racist practice of continuing to bring harm and challenges to a significant number of predominantly African American communities, in general, and poorer, black, white and brown communities, in specific?

Matthew A. Henson Neighborhood Association vehemently opposes!

Submitted by:
Dr. Marvin L. 'Doc' Cheatham, Sr.
President
Matthew A. Henson Neighborhood Association.

'BE CONCERNED, GET INVOLVED & STAY COMMITTED!'

RESPONSES

Response to Comment 2:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three public open houses and ten community meetings were held where the public was given the opportunity to learn about the project development, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter Claver Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

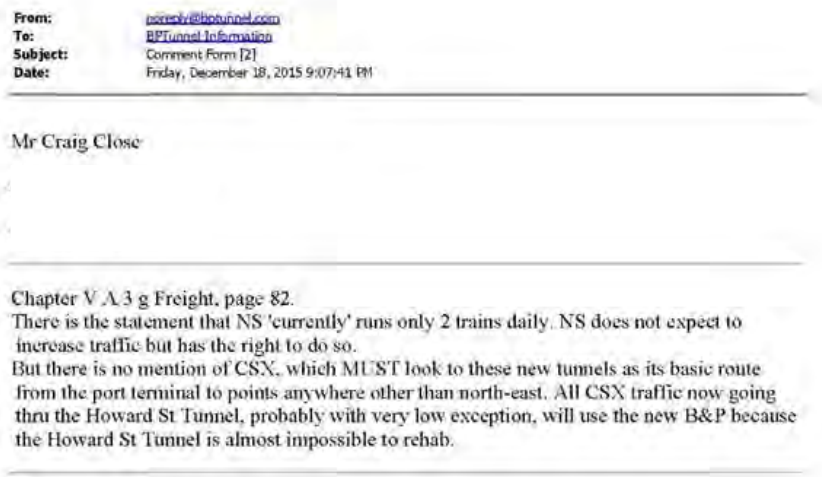
Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

COMMENTS	RESPONSES
	Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings. As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

COMMENTS

DEIS Comment 19:



From: [redacted]
To: BPTunnel Information
Subject: Comment Form [2]
Date: Friday, December 18, 2015 9:07:41 PM

Mr Craig Close

Chapter V A 3 g Freight, page 82.
There is the statement that NS 'currently' runs only 2 trains daily. NS does not expect to increase traffic but has the right to do so.
But there is no mention of CSX, which MUST look to these new tunnels as its basic route from the port terminal to points anywhere other than north-east. All CSX traffic now going thru the Howard St Tunnel, probably with very low exception, will use the new B&P because the Howard St Tunnel is almost impossible to rehab.

1

RESPONSES

Response to Comment 1:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic is planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

COMMENTS

RESPONSES

DEIS Comment 20:

b'more mobile

DEIS COMMENT submitted by Art Cohen
for *b'more mobile*
on the B&P Tunnel Project

February 26, 2016

[as a component of the Public Hearing Process held in February 2016]

COMMENTS **RESPONSES**

PAGE

TABLE OF CONTENTS

AN INITIAL DECEPTION	1
WHY ARE RAILROADS NECESSARY?: Introduction	2
I - THAT OLD TUNNEL: The Northeast Corridor and the Baltimore Bottleneck	3
II - FOR FREIGHT OR NOT FOR FREIGHT, THAT IS THE QUESTION: Existing Use of the B&P Tunnel for freight trains	6
III - THE TUNNEL MENU - AS IT IS NOW BEING SERVED: What are the principal elements of the B&P Tunnel Project proposal?	10
IV - WHO AND WHAT WILL BE IMPACTED BY THE NEW TUNNELS?: A detailed look at the B&P Tunnel Project Study Area	12
V - MORE TUNNELS MEAN MORE FREIGHT: How is freight rail traffic likely to increase with the construction of any one of the three new alternatives (3A, 3B, or 3C) of the B&P Tunnel Project?	15
VI - FREIGHT ACCIDENTS ARE TOO OFTEN "GREAT" ACCIDENTS: Hazards to the public's health and safety resulting from freight train accidents	19
VII - BETTER CHOICES: AN OUNCE OF PREVENTION IS WORTH IT!: Where can hazardous freight cargo be routed or re-routed in and around Baltimore City so as to avoid densely-populated urban areas such as the B&P Tunnel Project Study Area?	23
BIBLIOGRAPHY	29

COMMENTS

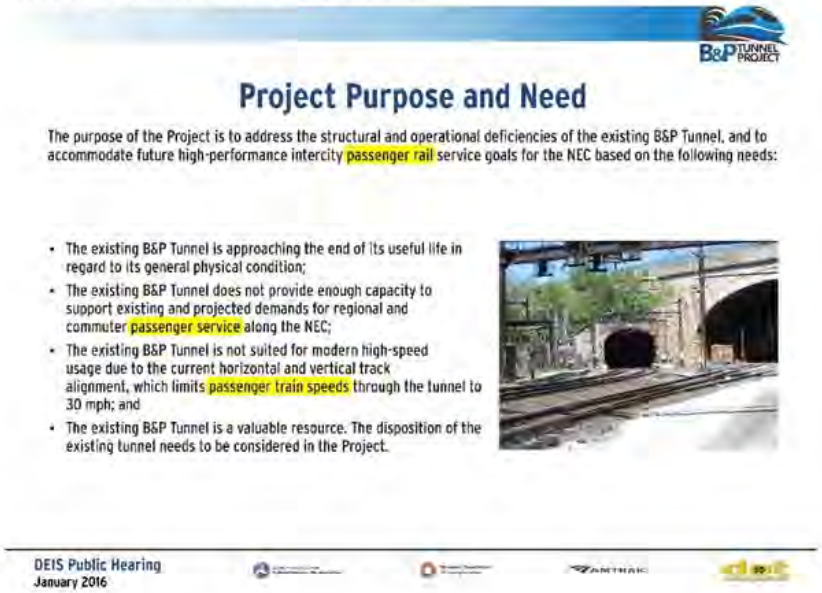
RESPONSES

b'more mobile

DEIS COMMENT submitted by *b'more mobile*
on the B&P Tunnel Project – February 26, 2016

We must begin by calling the readers' attention to AN INITIAL DECEPTION by the B&P Tunnel Project planners, which we will address and dispose of here at the very beginning of this comment:

It is significant and disturbing that the display board officially used for the February 2016 Public Hearings on the B&P Tunnel Project to show "Purpose and Need" includes references only to passenger service along the Northeast Corridor (NEC) through Baltimore as justification for the project, with no mention whatsoever of freight traffic. See a copy of the display board below, with highlighting in yellow added to emphasize the pertinent references:



- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 1 of 31 -

Response to DEIS Comment 20:
This comment includes a summary of the B&P Tunnel Project purpose and need, as well as some if its principal elements and impacts. However, the comment is primarily focused on the future of freight traffic in the City of Baltimore, which includes speculation regarding how freight could make use of the B&P Tunnel and concerns associated with that use. The comment also briefly focused on Alternatives development, and summarized recent local policy and public outreach efforts associated with freight movement in Baltimore.

In regards to Project Purpose and Need, the comment is accurate. 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.

In addition, the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Regarding section IV of this comment, who and what will be impacted by the new tunnels, potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated

COMMENTS

The only reasonable reading of the board above is that the B&P Tunnel Project is intended to serve passenger trains exclusively. This is a deception, and hardly could have happened due to a mistake in preparation of this board by the FRA/USDOT, MDOT, AMTRAK, and BDOT. It would be fair to conclude that this deliberate omission of any reference to freight in this Public Hearing display board above was intended to downplay and steer attention away from the very real and significant implications of the B&P Tunnel Project for increasing freight traffic along the NEC through Baltimore. Why? Probably because freight cargo has become a cause for alarm in recent years with the widespread tanker car transport of Bakken crude oil, accompanied by some recent derailments and destructive fires (see pages 22-23 below). The very definite intention of the B&P Tunnel Project to increase freight train traffic along the Northeast Corridor line through Baltimore will become clear upon reading the comment to follow directly below.

WHY ARE RAILROADS NECESSARY?: Introduction

Railroads have played a central role in building and sustaining the American economy over the past 200 years. The American economy today depends upon an extensive and well-functioning railroad system.

The purposes of railways are to transport either people or cargo. The passenger lines transport people. Amtrak and MARC represent such passenger lines.

The freight lines transport cargo, usually of three general types: solid materials and manufactured items; animals, livestock or plant material; and liquid or gaseous materials. Different types of rail cars are used for transporting these different cargoes. For instance, there are flat cars for containers, other flat cars for vehicles, box cars, uncovered and covered hopper cars, stock cars, tank cars and others. As stated in detail in the 2009 Study of Mid-Atlantic Rail Operations:

> [Freight] Rail services fall into three distinct categories:
>
> • BULK RAIL SERVICE. Bulk services are dedicated unit trains hauling a single bulk commodity such as coal moving from mines to power plants or grain moving from farms to ports. Commodity flows tend to be one-way, with cars (usually hopper cars) moving loaded from shipper to receiver and returning empty from the receiver to the shipper. ...
>
> • GENERAL MERCHANDISE/CARLOAD RAIL SERVICE. General merchandise or mixed carload trains move a diverse set of commodities, including chemicals, food products, forest products, metals, auto parts, waste and scrap using boxcars, gondolas, tank cars, and other specialized rail equipment. …

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 2 of 31 -

RESPONSES

displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Displacement and community facility impacts have been minimized with the selection and refinement of the Preferred Alternative. Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state, and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Regarding Alternative analysis, as described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

In **Section VII** of this comment, regarding better choices for tunnel locations, there was disagreement with the decision to use the condition of existing infrastructure (specifically Penn Station) as a basis to exclude Alternatives from further study. The constraints and requirements used in the evaluation of Alternatives were created to ensure that the Alternatives that advanced to further study would be both feasible and reasonable to implement. The continued use of assets such as Baltimore Penn Station and the Gwynns Falls Bridge ensure that additional funds are not spent rebuilding functional infrastructure

COMMENTS

> • INTERMODAL RAIL SERVICE. Intermodal services, as defined by the rail industry, are trains hauling international and domestic containers and trailers. Intermodal trains move trailers and containers packed with finished consumer goods, refrigerated foods, parts and tools for manufacturing, raw materials, post-consumer scrap—almost anything that can be packed into a container or truck trailer. Unlike unit train and general merchandise/carload traffic, intermodal traffic is typically two-way. … [Source: **I-95 Corridor Coalition – Mid-Atlantic Rail Operations (MAROps) Phase II Study *Final Report* – December 2009**, pages 2-7 and 2-8.] [Upper case and underlining added for clarity and emphasis.]

Included among the liquid and gaseous cargoes are materials which can be extremely hazardous if, as a result of a rail accident, they are spilled, escape, burn, or explode under pressure. Fire can be a risk regardless of the type of cargo.

The chief purpose of this comment is to address the potential for increased risk from such hazardous and other freight cargoes as a result of the B&P Tunnel Project.

As regards the movement of rail freight through the existing B&P Tunnel:

> g. Freight
>
> Currently, 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. There are no regulations or restrictions, however, which would preclude other forms of freight cargo on these trains, providing the material is moved in accordance with federal transportation rules. [Source: **DRAFT ENVIRONMENTAL IMPACT STATEMENT & SECTION 4(f) EVALUATION BALTIMORE & POTOMAC TUNNEL PROJECT BALTIMORE, MARYLAND – December 2015** [hereinafter "***B&P DEIS***"], Chapter V – Affected Environment, pages 82-83.]

I - THAT OLD TUNNEL: The Northeast Corridor and the Baltimore Bottleneck

The Northeast Corridor (NEC) extends from Richmond, VA at its south end to Boston, MA at its north end, with side lines to Harrisburg, PA; Albany, NY; and Springfield, MA. It represents a major passenger and freight route in the United States today, serving a total extremely dense urban and suburban population of over 50,000,000.

As stated definitively in 2013 by the Northeast Corridor Infrastructure and Operations Advisory Commission:

> Baltimore's B&P Tunnels are some of the oldest structural assets on the Corridor and a major capacity bottleneck for both passenger and freight trains. The tunnels were constructed in 1873 – just eight years after the end of the Civil War. A series of three narrow profile tunnels in a more than one-mile stretch, they were originally constructed out of brick and stone masonry,

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 3 of 31 -

RESPONSES

and that communities and the local economy are not disrupted with unnecessary construction.

Regarding freight, the build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

As correctly stated in **Section II** of this comment, Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two freight trains through the existing B&P Tunnel daily.

The statutory and contractual obligations referred to above include a Common Carrier Obligation, which prohibits the railroads using the B&P Tunnel from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

COMMENTS

though repairs through the years have introduced additional building materials. With just two tracks, the B&P Tunnels west of Baltimore Penn Station and the Union Tunnel to the east force the NEC to constrict down from four tracks as it passes through downtown Baltimore. Due to its tight curvature and aged structural conditions, the tunnel limits train speeds to 30 mph – down from 60 mph or higher on its approach tracks – and due to its height, the tunnel precludes the use of double-stack freight cars. The B&P Tunnels underwent rehabilitation in the 1980s, but that effort was not intended to be a permanent fix and the tunnels continue to require ongoing maintenance. High saturation of water in the soil beneath the tunnels, for example, causes its aging floor slabs to sink, forcing Amtrak to repeatedly make repairs. [Source: "Critical Infrastructure Needs on the Northeast Corridor" - Northeast Corridor Infrastructure and Operations Advisory Commission – January 2013. page 20.]

And as later stated in the B&P Tunnel Project DEIS:

The existing B&P Tunnel is located beneath the West Baltimore neighborhoods of Bolton Hill, Madison Park, Sandtown-Winchester, and Upton as shown in **Figure 1**. The existing tunnel is currently used by Amtrak, MARC, and NS. Built in 1873, the existing tunnel is one of the oldest structures on the NEC. It is approximately 7,500 feet (1.4 miles) long, and is comprised of three shorter tunnels and two daylighted sections....

The existing tunnel is a crucial link in the greater NEC, which runs through eight states and Washington, DC. The NEC is the nation's most congested rail corridor, and one of the highest volume corridors in the world. The NEC moves over 259 million passengers and 14 million car miles of freight cargo each year. The NEC and tunnel are owned and maintained by Amtrak, and are also used by eight commuter rail operators and four freight railroads. [Source: ***B&P DEIS***, Executive Summary, pages ES-1-ES-2.]

Also according to the B&P Tunnel Project DEIS:

3. **Bottleneck in NEC Operations**

...Due to the age of the existing B&P Tunnel and the technological advancement of the rail system in the more than 140 years since it was built, the existing B&P Tunnel limits the functionality of railroads through Baltimore and along the NEC. The existing B&P Tunnel is "a major chokepoint for intercity, commuter, and freight operations in the northeast" (Amtrak, 2010a). The tunnel creates a bottleneck in NEC operations due to its reduced travel speeds. The NEC, which has active use of three and four tracks elsewhere, has only two tracks through the existing B&P Tunnel, which must accommodate a mixture of regional and commuter passenger trains and freight service. [Source: ***B&P DEIS***, Chapter II– Purpose and Need, page 9.]

According to *America 2050* [a national initiative to meet the infrastructure, economic development and environmental challenges of the nation - see www.America2050.org], the Northeast encompasses two percent of the U.S. land mass and houses 18% of the Nation's population.

After decades of population decline, the trend since 2000 suggests that

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 4 of 31 -

RESPONSES

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak does not anticipate increases in freight traffic in the foreseeable future.

Section VII of this comment addresses local policy and advocates for legal changes. This is beyond the purview of the B&P Tunnel Project.

This comment also references the MTA Citizen Advisory Committee's report *A Proposal to Unravel Baltimore's Tangled Rail Lines.* The report argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel. As stated above, the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding The Purpose and Need for the Project, please see **Chapter II** of this FEIS. To review the September 2015 report in its entirety, please refer to **DEIS Comment #11**.

COMMENTS | **RESPONSES**

population growth is returning to many of these urban areas....

> More than two-thirds of Northeast counties with rail service experienced population grown between 2000 and 2008. According to a recent study prepared by the Coalition of Northeastern Governors, "The Northeast's population settlement patterns have been influenced by the transportation corridors shaped by geography and history," with 80 percent of the region's residents living within 25 miles of an existing or proposed multi-state rail service." America 2050 forecasts that the Northeast mega-region population will reach 58 million by 2025 and that employment will increase from 29 million in 2000 to 36 million in 2025.
> [Source: **Northeast Corridor Infrastructure Master Plan - 2010**, Part I, pages 2-3.] [Italics added for clarity.]

The NEC passes directly through the center of Baltimore City in the Baltimore and Potomac (B&P) Tunnel as the railroad line moves between Washington DC and Philadelphia. As stated in 2010:

> South of the [Baltimore Penn] station, the two-track Baltimore and Potomac B&P Tunnels are beyond their useful life and cannot adequately serve the mix of trains currently operating in the tunnel. A new community and intercity rail tunnel will replace the B&P tunnels. Freight traffic will benefit from a new freight tunnel connection through Baltimore with connections north and south.
> [Source: **Northeast Corridor Infrastructure Master Plan - 2010**, Part II, page 40.]

Parenthetically, it should be noted here that the above-quoted Northeast Corridor Infrastructure Master Plan contains not a single reference to "hazard", "hazardous", "fire" or even "accident." This comment will address those issues below.

So, the B&P Tunnel occupies a crucial position along the Northeast Corridor infrastructure.

> Following a July 18, 2001 fire from a CSX train derailment that occurred in the nearby Howard Street Tunnel, Congress mandated that FRA provide a comprehensive assessment of the region's complex rail system. In response to the Congressional mandate, FRA completed two studies, *Baltimore's Railroad Network: Challenges and Alternatives* (FRA, 2005) and *Baltimore's Railway Network: Analysis and Recommendations* (FRA and MDOT, 2011). The 2005 report characterized the state of the rail network and the demands placed on it. The study evaluated the existing B&P Tunnel, as well as other components of Baltimore's rail network, and underscored the importance of the B&P Tunnel to the NEC. The study also recommended potential actions that could improve passenger and freight railway capabilities in the Baltimore region, which included replacement of the existing B&P Tunnel. The 2011 report supplemented the findings of the 2005 report and evaluated passenger and freight alternative routes through Baltimore. The 2011 report states that "the physical condition of the [existing B&P

COMMENTS | **RESPONSES**

Tunnel] requires that it be rebuilt or replaced within the next 10-20 years." In addition, "the conditions in the [existing] B&P Tunnel—as well as its criticality to the protection of a reliable passenger service—preclude its expanded use for most freight and constrain the flow of commerce to and through the Baltimore region" (FRA and MDOT, 2011). [Source: ***B&P DEIS***, Chapter II – Purpose and Need, page 3.] [Underscoring added for emphasis.]

Based on all of the above, there can be little dispute about the need to replace the current B&P Tunnel in Baltimore, which is 143 years old.

II - FOR FREIGHT OR NOT FOR FREIGHT, THAT IS THE QUESTION: Existing Use of the B&P Tunnel for freight trains

Despite the need to replace the B&P Tunnel for passenger rail traffic, serious questions remain about use of its replacement for freight rail purposes.

This comment will address concerns with the proposed new B&P Tunnel's implications for the increase of freight traffic through Baltimore City along the Penn Line. It will not address the increase in passenger train traffic.

Here is a Baltimore City map inset from the map published by the Maryland Department of Transportation (MDOT), with the red oval added to show the area for the B&P Tunnel Project:

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 6 of 31 -

COMMENTS



[Source: "Freight Rail Map" of the Maryland Department of Transportation (MDOT) - accessed February 16, 2016 from the internet: http://www.mdot.maryland.gov/Office%20of%20Freight%20and%20Multimodalism/railmap.pdf]

It is very clear, looking at the above map, that the Baltimore City area is laced by a number of rail lines, all of which are used for freight (three of these lines are also used for passengers - AMTRAK and the two MARC lines). The two major freight lines in Baltimore City are nationally prominent - they are the Norfolk Southern Railway line (NSC on the map - the purple lines) and the CSX Transportation line (CSXT on the map - the green lines). Norfolk Southern has its own track, and also currently shares the track with AMTRAK through the study area of the B&P Tunnel. CSXT also can share the same track, but does not use it as frequently as NSC.

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 7 of 31 -

RESPONSES

COMMENTS

RESPONSES

Norfolk Southern Corporation and CSX Corporation have rights to operate on the Northeast Corridor per "trackage-rights agreements" that date back to Amtrak's acquisition of the Northeast Corridor on April 1, 1976 as part of the Railroad Revitalization and Regulatory Reform Act of 1976 (see end note for more discussion regarding dates). Per these agreements, Amtrak must make reasonable efforts to accommodate freight rail operations on the Northeast Corridor, and freight rail companies must be equally accommodating in accepting off-hour track assignments for the movement of goods (nights, weekends), when passenger trains operate less frequently and the insertion of freight trains will not delay them. While these agreements guarantee private rail freight companies access to the Northeast Corridor, these rail freight companies have other route options around Baltimore that make it unlikely that the B&P Tunnel route would be more attractive as a major through route across or around the city. [Source: ***B&P DEIS***, Chapter V – Affected Environment, pages 82-83.]

According to Reuters (U.S. Edition), NYSE stock exchange for NSC and NASDAQ stock exchange for CSX (all accessed February 13, 2016) :

1) Norfolk Southern [NYSE] operated in 2014 approximately 20,000 miles of road in 22 states and the District of Columbia. In terms of cargoes, NSC includes, among many others, "*...chemicals, which includes sulfur and related chemicals, petroleum products (including crude oil), chlorine and bleaching compounds, plastics, rubber, industrial chemicals and chemical wastes....*" [Italics added for emphasis.]

2) CSXT [NASDAQ] provides links to the transportation supply chain through its approximately 21,000 route mile rail network, which serves 23 states east of the Mississippi, the District of Columbia, and the Canadian provinces of Ontario and Quebec. CSXT includes cargoes, among several others, of "*phosphate, fertilizer ... and chemical products.*" [Italics added for emphasis.]

Each railway lists the other as its main competitor.

It is clear that any of the cargoes listed above could, if involved in an accident, subject the surrounding area to extremely hazardous risks.

The alignments for the existing B&P Tunnel and the three proposed alternatives (3A, 3B, and 3C) are each just under four miles long. The tunnels themselves are each less than 2½ miles long [see ***B&P DEIS***, Section IV, Table 9, page 66].

The following table shows the frequency of freight rail traffic through the existing B&P Tunnel.

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 8 of 31 -

COMMENTS

RESPONSES

Table 5: NEC Trips through the Existing B&P Tunnel Corridor

	Number of Trains (2014)		Number of Passengers (2014)	
Types of Service	Daily	4-Hour PM Peak Period	Daily	4-Hour PM Peak Period
Intercity	88	18	17,000	3,400
MARC Commuter Rail Service	57	17	4,600	1,900
NS Freight	2	0	N/A	N/A
TOTAL	145	35	21,600	5,300

Source: (Amtrak, December 2013 and 2014)

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. ***Currently, NS operates two trains through the existing B&P Tunnel daily for freight purposes***, none of which travel through the tunnel during the four-hour peak evening period, as shown previously in **Table 5**. Due to the tunnel clearances, freight usage is limited and most freight on the NEC is routed around the existing B&P Tunnel. [Source: B&P DEIS - Chapter II - Purpose and Need, page 15.] [Bolding, italics, underscoring and red lining added for emphasis.]

As stated in the planning process for the Northeast Corridor:

> ***Freight Benefits*** - The Northeast Corridor is ... a critical transportation corridor for rail freight.... Freight plays a significant role in promoting the economic development of the NEC states. Freight rail provides goods necessary for many industries and communities in the region to thrive. Because the use of rail lowers transportation costs, the region's industries are in a better position to effectively compete with international rivals in a global marketplace. Railroad freight rates measured in constant dollars are lower than they were in 1980. These savings go directly to the region's shippers and consumers.
>
> For these reasons, it is in the public interest to not only preserve freight rail capacity on this corridor, but to enhance its presence even as Amtrak and transit agencies increase their own service. The infrastructure improvements recommended by the Master Plan are intended to do just that. [Source: **Northeast Corridor Infrastructure Master Plan - 2010**, Part I, page 42.] [Underscoring added for emphasis.]

The importance of freight rail to Baltimore is eloquently stated as follows:

> Approximately 50 Class 1 and regional freight trains use the NEC each day to serve industries, power plants and ports in the Northeast and Midwest. This heavy volume of freight traffic reinforces the NEC's role as a vital link in the national freight network. However, due to capacity, speed, and loading

COMMENTS

RESPONSES

constraints, all rail freight movements between the northeast and southwest parts of the Port of Baltimore are difficult and costly to accomplish. ***Due to clearance limitations in the B&P Tunnel, NS cannot route many types of shipments to the southwest part of the Port and CSX cannot route many shipments to the northeast part of the Port. This lack of connectivity and routing flexibility diminishes the Port's efficiency and attractiveness.*** The Port is a major economic player in the Baltimore region and generates $1.5 billion in business revenue annually (Amtrak, 2010a). [Source: B&P DEIS - Chapter II - Purpose and Need, page 15.] [Bolding, italics, underscoring and red lining added for emphasis.]

III - THE TUNNEL MENU - AS IT IS NOW BEING SERVED: What are the principal elements of the B&P Tunnel Project proposal?

1) *Alternative 1: No-Build* - Keep the current 143-year old two-track tunnel and repair it again with routine maintenance.

2) *Alternatives 3A, 3B, or 3C* - Replace the current 143-year old two-track tunnel with four single-track tunnels, each of them able to accommodate double-stack freight trains. Three "great-circle" routes are proposed for these alternatives, to be sited north of the location of the current B&P Tunnel. Each of these three alternative would include a north portal, a south portal, and an intermediate ventilation plant. [Source: ***B&P DEIS***, Chapter IV, "Alternatives Still Under Consideration", pages 35-71]

One of the clearest map graphics showing the retained alternatives is the following:

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 10 of 31 -

COMMENTS | **RESPONSES**



[Source: Baltimore & Potomac Tunnel Project, October 2015 Community Meetings [PowerPoint] Presentation - Targeted Meetings 10-08-2015, page 33. - also the graphic on a meeting display board used for the February 2016 public hearings: **"Alternatives Evaluated in DEIS"**]

One can see how these three alternatives to the current no-build "Existing B&P Tunnel" above were in the mind of officials reviewing the problems of moving freight in and around Baltimore City as early as the first part of the last decade.

In the wake of the Howard Street Tunnel derailment and fire, the US Congress ordered "a comprehensive assessment of the region's complex rail system" (see the first reference to that here above at page 6). The resulting reports were as follows:

1) In **Report to Congress: Baltimore's Railroad Network: Challenges and Alternatives** - U. S. Department of Transportation, Federal Railroad Administration - November 2005 at pages 7-8 to 7-9, where there is the first reference to a "Great Circle Passenger Tunnel (GCPT)," and then at pages 8-1 to 8-2 where there is a first reference to "a Great Circle Freight Tunnel (GCFT), similar in concept to the Great

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 11 of 31 -

COMMENTS

RESPONSES

Circle Passenger Tunnel (GCPT) broached earlier."

2) In **BALTIMORE'S RAILROAD NETWORK: ANALYSIS AND RECOMMENDATIONS - U.S. Department of Transportation, Federal Railroad Administration and the Maryland Department of Transportation** - January 2011. There is reference there to the Great Circle Passenger Tunnel (GCPT) and the Great Circle Freight Tunnel (GCFT). The first reference to the GCPT is at page ES-4 of the Executive Summary, and the first reference to the GCFT is on the next page at ES-5, where it is written: "The study team developed two land-based tunnel alternatives, both of which would employ a Great Circle Freight Tunnel (GCFT) similar in concept to the GCPT."

Both the GCPT and GCFT greatly resemble Alternatives 3A, 3B, and 3C proposed by the DEIS for the B&P Tunnel Project - nine years after the 2005 Report and three years after the Railroad Network Report. So, it is clear these three tunnel Alternatives have been intended to carry both passenger and freight trains from the beginning!

IV - WHO AND WHAT WILL BE IMPACTED BY THE NEW TUNNELS?: A detailed look at the B&P Tunnel Project Study Area

The Study Area is located within the black dashed lines on the two maps directly below.

COMMENTS

RESPONSES



The Study Area is home to 65,762 people [see ***B&P DEIS***, Chapter V, Table 10, page 75].

Other human institutions which are located within the study area include:

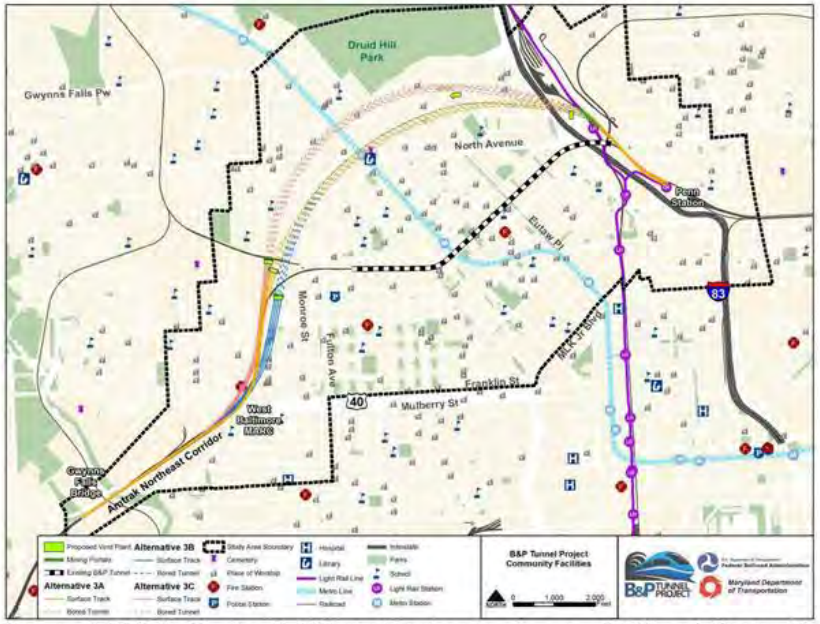
Neighborhoods - 30
Schools - 11 Elementary, 4 Elementary-Middle, 1 Middle, 1 Middle-High, 3 High, 2 Public Charter schools, 2 Academy schools.
Educational and Cultural Institutions - University of Baltimore, MICA, Lyric Opera House, Meyerhoff Symphony Hall, Station North Arts & Entertainment District.
Religious Institutions - 37, of all faiths
Business Establishments - 4,185
Fire and Rescue Facilities - 3
Public Recreation Centers - 6
Public Pools - 3
City Park and Reservoir - 1
Major Passenger Railroad Station - 1

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 13 of 31 -

COMMENTS

RESPONSES

The following map shows many of these institutions along with some other ones:



[Source: ***B&P DEIS***, Chapter V, "Affected Environment", pages 85-95; and Chapter VI, "Environmental Consequences", pages 162 +163]

The Study Area is located directly contiguous to a major shopping center (Mondawmin Mall) and also to Coppin State University.

It should be abundantly clear that the Study Area includes many people and human institutions which could be seriously impacted by a hazardous rail accident within any of the three tunnel alternatives proposed.

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 14 of 31 -

COMMENTS

RESPONSES

V - MORE TUNNELS MEAN MORE FREIGHT: How is freight rail traffic likely to increase with the construction of any one of the three new alternatives (3A, 3B, or 3C) of the B&P Tunnel Project?

> Some 50 Class I and regional freight trains use the NEC each day to service industries, power plants, and ports in the Northeast and Midwest. This heavy volume of freight traffic reinforces the NEC's role as a vital link in the national freight network and an important component of future regional and national economic growth. [Source: **Northeast Corridor Infrastructure Master Plan - 2010, Part I, page 26.]**

> NS has no plans to increase or change its B&P Tunnel freight operation in the near future. NS has, however, restated its contractual right to increase freight operations in the future should it see value in doing so. In addition, the agreements provide that Amtrak cannot take any action that may restrict future growth in freight traffic through the B&P Tunnel.

> Amtrak's first priority is to its passenger services. Therefore, although Amtrak must accommodate requests from NS or other freight operators with trackage rights agreements for additional train moves on the Northeast Corridor, Amtrak need only schedule such moves as space between passenger trains can be made available. Where the freight operator and Amtrak have a dispute about scheduling of freight moves, the Surface Transportation Board (STB) adjudicates trackage rights agreements. [Source: ***B&P DEIS***, Chapter V – Affected Environment, page 83.]

The B&P Tunnel Project DEIS is a bit duplicitous in its reference to potential increase in freight rail traffic in the event of a new tunnel being constructed along the NEC. For instance, it is stated in the Executive Summary that:

> As shown, the proposed Project would not have any effects on operational emissions due to no projected increase in diesel freight train operations and no significant air emissions generated by trains propelled by electric locomotives. [Source: ***B&P DEIS***, Executive Summary, under "Air Quality", page ES-16.]

Similarly, in the body of the DEIS itself, in the detailed discussion of Environmental Consequences under "H. Air Quality" and "I.Noise", there is no increase in freight traffic projected by the year 2040 shown in Tables 58, 59, and 63 from today's current level of two (2) freight trains per day. Tables 58 and 59 (for the 2040 No-Build and Build Years) are shown directly below [red lining added for emphasis]:

COMMENTS

RESPONSES

Table 58: Tunnel Operating Characteristics in the No-Build Year (2040)

Train Service	Locomotive Type	Total Bi-directional Frequencies		Consist Data		Speed N/S* (mph)
		Daily	Peak Hour	# of Locos	# of Cars	
MARC (Regional)	Diesel	82	7	1	8	30/30
Acela (Intercity Express)	Electric	58	4	N/A	14	30/30
NE Regional (Intercity Corridor)	Electric	52	3	1	8	30/30
Metropolitan	Electric	0	0	N/A	N/A	30/30
Freight	Diesel	2	0	1	30	30/30
Total	**All**	**194**	**14**			

*Note: Average train speed entering and exiting the North Portal (N) and South Portal (S).
Source: Federal Railroad Administration NEC FUTURE Project: Tier I DEIS Alternatives (Alternative 1)

Table 59: Tunnel Operating Characteristics in the Build Year (2040)

Train Service	Locomotive Type	Total Bi-directional Frequencies		Consist Data		Speed N/S* (mph)
		Daily	Peak Hour	# of Locos	# of Cars	
MARC (Regional)	Diesel	164	15	1	8	30/70
Acela (Intercity Express)	Electric	82	8	N/A	14	30/70
NE Regional (Intercity Corridor)	Electric	48	4	1	8	30/70
Metropolitan	Electric	92	8	N/A	14	30/70
Freight	Diesel	2	0	1	30	30/70
Total	**All**	**388**	**35**			

*Note: Average train speed entering and exiting the North Portal (N) and South Portal (S).
Source: NEC FUTURE Project (USDOT, Accessed September 8, 2014)

In the DEIS itself, in Chapter VI - "Environmental Consequences," under Section A. Socioeconomics, Subsection 3 - Transportation, it is repeatedly stated in reviewing Alternatives 3A, 3B, and 3C that:

> "Additionally, this alternative would add rail capacity to the NEC, which, subsequently, could allow for additional rail freight service; however, *specific changes to freight operations cannot be determined and therefore are assumed to remain the same as existing conditions* [i.e. a mere two freight trains per day along the NEC in Baltimore] based on current track agreements. Further discussion of potential impacts to freight rail in included in Section VI.M [i.e. "Indirect and Cumulative Impacts"]. [Source: "***B&P DEIS***", Chapter VI - Environmental Consequences, pages 142 and 143.] [Italics added for emphasis.]

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 16 of 31 -

COMMENTS

RESPONSES

In fact, the discussion states explicitly that: "...the Build Alternatives (3A, 3B, and 3C) would have no effects on operational emissions, due to no projected increase in diesel freight train operations...."[Source: ***B&P DEIS***, Chapter VI - Environmental Consequences, page 223.]

Similarly, in Chapter VI under Section K. Energy, it is stated that:

> The number of forecasted daily freight trains traveling through the B&P Tunnel is not expected to increase under any of the Build Alternatives; therefore, no change in energy consumption by freight in the Study Area would occur. [Source: ***B&P DEIS***, Chapter VI – Environmental Consequences, page 238.]

However, construction of the new tunnels to replace the existing B&P Tunnel will provide new opportunities for freight rail to travel through and under the residential areas of Penn-North, Reservoir Hill, Sandtown-Winchester, Easterwood, Bridgeview-Greenlawn, and other center-city communities. As stated in 2010:

> A new commuter and intercity rail tunnel will replace the B&P Tunnels. Freight traffic will benefit from a new freight tunnel connection through Baltimore with connections north and south. [Source: **Northeast Corridor Infrastructure Master Plan - 2010**, Part II, page 40. And see also Part III, page 18.]
>
> The future freight picture for the NEC looks substantially different from today. A national increase of 44% to 888 million tons is projected by 2030, with a commensurate increase expected on the NEC. According to the Mid-Atlantic Rail Operations Study (MAROps) performed for the I-95 Corridor Coalition, the traffic volume on the freight rail network in New Jersey, Pennsylvania, Delaware, Maryland and Virginia is anticipated to grow by 79%, equivalent to more than 60,000 trucks per day.
>
> On the NEC, the most critical freight need is to provide improved freight capacity to the Port of Baltimore and between Newark, DE and Perryville, MD. [Source: **Northeast Corridor Infrastructure Master Plan - 2010**, Part I, page 27.] [Underscoring added for emphasis.]

There is clear implication in Section VI.M that increased freight is in the future of the NEC improvements along Baltimore's B&P Tunnel Project Study Area. Here are the quotes to prove it [NOTE: all underscoring below has been added for emphasis whenever freight rail has been mentioned]:

> While there are no specific plans in place to establish a double-stack (Plate H) freight corridor through Baltimore City, either by CSX, NS, or others, it is reasonably foreseeable that future efforts could be made to establish one. A stated objective of *Baltimore's Railroad Network* study (FRA and MDOT,

COMMENTS

RESPONSES

2011) is "Provide tri-level auto carrier clearance (Plate H) routes through Baltimore for both NS and CSXT freight trains." It is considered highly desirable by freight rail carriers to connect the Port of Baltimore with inland markets via a double-stacked Baltimore freight line. Both NS and CSX have expressed interest in the B&P Tunnel Project; correspondence from both railroads is provided in **Appendix B.**

... Therefore, while the proposed B&P Tunnels themselves will be tall enough to accommodate double-stack trains, virtually none of the trackage north or south of the tunnel in the vicinity of Baltimore can accommodate the extra height, and, without additional investment in the hundreds of millions of dollars, it is unlikely that double-stack trains will operate through Baltimore on the Northeast Corridor in the near future. Any potential freight corridor improvements, if they were to move forward, would be completed wholly independently of the B&P Tunnel Project.

... If greater volumes of freight traffic are allowed through the Northeast Corridor in the Study Area in the future, due to increased throughput capacity and operational flexibility, increased air quality impacts from diesel freight trains would need to be assessed in accordance with Clean Air Act requirements. Any increase in future air emissions would be in compliance with applicable air quality regulations. Similarly, greater volumes of freight traffic could result in increased severity of noise and vibration impacts relative to those described in **Section VI.I.** and **Section VI.J.** due to diesel freight trains traveling through the corridor more frequently. Although not determined and not currently planned as part of the B&P Tunnel Project, increased capacity for freight traffic through the Study Area could result in additional indirect noise and vibration impacts. Any potential noise and vibration impacts would likely occur near portals and at open sections.

... Each of the Build Alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the proposed tunnels, or the existing B&P Tunnel, without construction of additional connections as part of a separate project from the B&P Tunnel Project. While no specific increases in freight traffic are planned or proposed with the B&P Tunnel Project, increased capacity and operational flexibility on the NEC could allow an option for Amtrak to route more freight trains through the Study Area without impeding their passenger operations. Each of the Build Alternatives could also include repurposing of the existing B&P Tunnel into a singletrack, double-stack dedicated freight tunnel. ***The demand for, and feasibility of, freight traffic along Amtrak's NEC through the Study Area will ultimately be determined by market conditions.*** Any increases would need to be determined via agreement with Amtrak. The new tunnels will feature relatively steep grades that may not be desirable for freight carriers. Impacts from any future increases in freight volume resulting solely from B&P Tunnel Project improvements are considered potential indirect impacts and are qualitatively assessed in this section. [Bolding, italics, and underscoring added for emphasis.]

...A review of master plans, transportation plans, and planned development projects in the analysis area does not indicate any reasonably foreseeable projects or plans that would result in increased noise or vibration near the Build Alternative impacts. Therefore no cumulative noise and vibration impacts are currently anticipated. However, increased noise and vibration impacts could potentially occur if additional projects, none of which are currently planned, establish additional freight rail connections to allow CSX to route double-stack freight trains through the proposed tunnels or a repurposed B&P Tunnel. Any noise impacts from other projects would be subject to local noise regulations, as well as federal noise requirements if completed as part of a USDOT action.

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 18 of 31 -

COMMENTS

RESPONSES

... Potential increases in freight traffic occurring as a result of other, independent projects not directly associated with the B&P Tunnel project are recognized as reasonably foreseeable. Although no such projects are currently planned, efforts to establish a double-stack freight corridor through Baltimore City could potentially result in greater volumes of freight traffic through the Study Area.

All of the Build Alternatives would be designed to accommodate double-stack (Plate H) freight clearance in the new proposed tunnels, but restrictions would still exist to the north and south along the NEC. Each could also include repurposing the existing B&P Tunnel into a dedicated double-stack, single-track freight tunnel (as described in **Section IV.G**) [see Table 9 there in the DEIS at page 66]. While no projects are currently planned or underway that would allow freight carriers such as CSX and NS to establish double-stack corridors through Baltimore, it is reasonably foreseeable that future efforts, independent of the B&P Tunnel Project, could lead to a double-stack corridor. The additional capacity and clearance would potentially make the proposed corridor a desirable route for freight operators, allowing a double-stack connection between the port of Baltimore and inland markets. Other projects would require evaluation through separate environmental analyses.
[Source: ***B&P DEIS***, Chapter VI – Environmental Consequences, pages 246-251.]

VI - FREIGHT ACCIDENTS ARE TOO OFTEN "GREAT" ACCIDENTS: Hazards to the public's health and safety resulting from freight train accidents

A derailment or crash of a freight train is always a serious matter, but it becomes highly dangerous when the cargo includes flammable liquids or gases, toxic or caustic chemicals, or explosive and other hazardous materials. [definition of "hazardous"?]

The hazardous cargo can include materials from the following broad categories (taken from the US DOT's Hazardous Materials Table:

Hazard Class 1 - Explosives
Hazard Class 2 - Compressed Gases
Hazard Class 3 - Flammable Liquids
Hazard Class 4 - Flammable Solids
Hazard Class 5 - Oxidizers and Organic Peroxides
Hazard Class 6 - Toxic Materials
Hazard Class 7 - Radioactive Material
Hazard Class 8 - Corrosive Material
Hazard Class 9 - Miscellaneous

[Source: Northeastern University - Office of Environmental Health and Safety - "Hazardous Materials Definition" - accessed February 23, 2016 from the internet: http://www.ehs.neu.edu/hazardous_material/hazardous_material/]

The construction of a new set of tunnels and the use of them for freight will expose

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 19 of 31 -

COMMENTS | **RESPONSES**

the people and human institutions located within the B&P Tunnel Project Study Area to much greater risks as a result of any increases in freight rail traffic. What would be the specific nature of these risks? Fire, explosion, corrosive or toxic liquids or solids, toxic fumes, temporary or permanent displacement of persons from homes or businesses.

Some significant risks result from inherently dangerous materials (hazardous, toxic, caustic, explosive, etc.).

Others risks include fire, which can consume all sort of other, normally non-hazardous cargo and people and property in the area adjacent to a train derailment or collision.

It is of the greatest importance and relevance that Baltimore City has itself had very recent experience with a freight train derailment, which resulted in the release of hazardous cargo. This was the Howard Street Tunnel Derailment and Fire involving a CSX train on July 18, 2001 - less than fifteen years ago. The official National Transportation Safety Board (NTSB) Railroad Accident Brief stated, in pertinent part as follows:

The 2001 Howard Street Tunnel Derailment and Fire

Synopsis

On Wednesday, July 18, 2001, at 3:08 p.m., eastbound CSX1 freight train L-412-16 derailed 11 of its 60 cars while passing through the Howard Street Tunnel in Baltimore, Maryland. Four of the 11 derailed cars were tank cars: 1 contained tripropylene, a flammable liquid; 2 contained hydrochloric acid; and 1 contained di(2-ethylhexyl) phthalate, which is a plasticizer and an environmentally hazardous substance. The derailed tank car containing tripropylene was punctured, and the escaping tripropylene ignited. The fire spread to the contents of several adjacent cars, creating heat, smoke, and fumes that restricted access to the tunnel for several days. A 40-inch diameter water main directly above the tunnel broke in the hours following the accident and flooded the tunnel with millions of gallons of water. Five emergency responders sustained minor injuries while involved with the on-site emergency. Total costs associated with the accident, including response and clean-up costs, were estimated at about $12 million. [At page 1]

Transportation of Hazardous Materials Through the Tunnel

During the derailment, a tank car released more than 28,600 gallons of tripropylene. The flammable tripropylene was ignited, and the subsequent fire led to the ignition of paper and wood products in adjacent freight cars. The burning wood and paper products sustained the fire over the next several days. The release of the tripropylene initiated the fire and increased the severity of the accident.

Immediately behind the ruptured tripropylene car were two tank cars containing hydrochloric

COMMENTS

RESPONSES

acid and one tank car loaded with di(2-ethylhexyl) phthalate, which is an environmentally hazardous substance. Exposure of the hydrochloric acid tank cars to high temperatures for the duration of the fire resulted in thermal degradation of the cars' rubber linings and corrosive penetration of one of the cars by the acid.

The CSX route through Baltimore and the Howard Street Tunnel is a major rail artery and is a designated hazardous materials key route for all types and classes of hazardous materials. Congress recognized the significance of this rail route when it mandated that the DOT conduct a rail infrastructure study[17] for passenger and freight routes in the Baltimore corridor. Although the FRA had not completed the final report for the study as of August 2004, it has indicated that three options for improving the freight infrastructure through Baltimore have been considered. All three options involve the construction of new, modern tunnels with estimated costs ranging from $1 billion to $3 billion. Because of the scope and expense of these options, replacement of the Howard Street Tunnel is not assured, and at best, several years will be required to complete such a project.

Given these factors, improving the safety of the transportation of hazardous materials through the Howard Street Tunnel and minimizing the potential for more serious hazardous materials incidents in the tunnel will, in the Safety Board's view, depend upon shared communication and coordination between CSX and the city of Baltimore about the volumes and types of hazardous materials that are transported through the tunnel, anticipation of the types of incidents that might occur, and the capabilities and/or limitations of the city to access the tunnel and respond to any hazardous materials incident in it. The desired level of communication and coordination can be achieved through comprehensive emergency preparedness planning, including joint drills and exercises. [At page 16.]

[17] U.S. Department of Transportation's *Baltimore, Maryland, Freight and Passenger Infrastructure Study*, per Public Law 107-87. [at page 18] [Underscoring added for emphasis.]

As can be seen in the NTSB Accident Brief above, there is reference made to plans which are underway for "improving the freight infrastructure through Baltimore." These plans are mentioned above at page 6.

What about the accident records for the two principal freight carriers which pass through Baltimore City: CSX and Norfolk Southern? Here are the details from the official numbers about their freight accidents from the website of the Federal Railway Administration of the US Department of Transportation. The period covered is the last fifteen years - 2001 to 2015 - the period of time since the Howard Street Tunnel derailment took place here in Baltimore City.

COMMENTS

RESPONSES

NATIONAL Data for CSX and NS from the website of the Federal Railroad Administration - Office of Safety Analysis - USDOT

--- accessed by Art Cohen on February 24, 2016 from: http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/rrchart.aspx

Type of Chart / Year:	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
CSX															
1-Derailments	239	226	323	347	313	270	221	208	191	165	152	136	136	145	135
2-Collisions	76	43	24	32	68	50	53	48	25	21	22	24	18	32	34
3-Human Factor Caused	156	152	222	241	205	141	119	100	76	89	89	85	68	87	80
4-Deaths – All Accidents/Incidents	130	114	130	131	108	131	122	116	97	112	114	92	112	96	109
5-Total Train Accidents on Main Track	95	89	116	125	110	112	96	81	68	65	54	47	53	43	41
6-Train Accidents	355	326	472	481	449	377	315	300	240	242	231	197	188	233	216
NORFOLK SOUTHERN															
1-Derailments	183	155	223	225	216	168	154	149	140	139	143	126	135	151	151
2-Collisions	22	26	29	26	38	28	26	29	22	15	7	14	17	9	17
3-Human Factor Caused	69	71	114	92	106	87	95	98	81	81	64	62	86	79	91
4-Deaths – All Accidents/Incidents	115	120	97	120	134	112	103	122	76	73	80	81	87	99	110
5-Total Train Accidents on Main Track	61	55	82	82	72	71	66	54	47	59	39	33	47	43	30
6-Train Accidents	226	210	298	294	300	231	227	224	205	189	156	158	181	179	180

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 22 of 31 -

COMMENTS

RESPONSES

The data provided in this spreadsheet for these two freight rail companies, CSX and Norfolk Southern, are national and not local. However, even as such, they are useful for drawing some general conclusions about the dangers and hazards which attend the hourly and daily movement of freight trains around Baltimore City. As with all transportation, freight rail transportation can be expected to have its accidents, with their respective consequences in terms of death, injury, and destruction of property. CSX and Norfolk Southern are the two principal rail freight lines serving the Baltimore region.

VII - BETTER CHOICES: AN OUNCE OF PREVENTION IS WORTH IT!: Where can hazardous freight cargo be routed or re-routed in and around Baltimore City so as to avoid densely-populated urban areas such as the B&P Tunnel Project Study Area?

With recent derailments of Bakken formation crude oil tanker cars in Lac Mégantic, near Lynchburg, Virginia, and in other locations, the public concern about freight rail safety has greatly increased. Here in Baltimore, recent developments have included the following:

1) Baltimore Circuit Court Judge Lawrence P. Fletcher Hill's ruled in August 2015 that Norfolk Southern Railway Company cannot legally block the Maryland Department of the Environment (MDE) from releasing to the public information about the volume and frequency of its crude oil shipments. [Source: Norfolk Southern Railway Company vs. Maryland Department of the Environment and Maryland Emergency Management Agency - in the Circuit Court of Baltimore City, Case No. 24-C-14-004367]

2) In January 2016, Baltimore City Council President Bernard "Jack" Young introduced an ordinance (Council Bill 16-0621) "Transport of Crude Oil by Rail" which would require that both a health impact assessment and a risk assessment be conducted "of the transportation of crude oil by rail in or through Baltimore City or within 10 miles of the City's boundaries." Council President Young was joined by thirteen of the fourteen other Council members in sponsoring the bill, which was introduced at the request of the Chesapeake Climate Action Network (CCAN).

3) Finally, on February 11, 2016, just two weeks ago, a large public meeting was held by CCAN to introduce the Baltimore City public to Marilaine Savard, a young mother from Lac Mégantic in Quebec Province, Canada, who was a witness to the devastating crude oil fire there on July 6, 2013 when a 74-car freight train carrying Bakken Formation light crude oil derailed, crashed, exploded and burned for nearly two days. Forty-two people were confirmed dead, with five more missing and presumed dead. More than 30 buildings in the town's centre, roughly half of the downtown area, were destroyed and all but three of the thirty-nine remaining downtown buildings are to be demolished due to petroleum contamination of the

COMMENTS

townsite. Initial newspaper reports described a 1-kilometre (0.6 mi) blast radius. 115 businesses were destroyed, displaced, or rendered inaccessible. [Source: Lac-Mégantic rail disaster - WIKIPEDIA - accessed on February 24, 2016 from the internet at: https://en.wikipedia.org/wiki/Lac-M%C3%A9gantic_rail_disaster]

So, here in Baltimore City, Maryland, there is growing public concern and sensitivity about the hazard and risks attendant from freight rail transportation of crude oil and other hazardous cargoes.

One way to reduce the risk and hazard is to route such dangerous cargo around dense urban settlements such as Baltimore City.

As stated in the Freight Railroad Realignment Feasibility Study completed in 2007 by the National Capital Planning Commission (NCPC):

> A security risk assessment consists of three primary components: threats, vulnerabilities, and consequences. Although all hazmats on the rail line are a concern, the transport of toxic inhalation hazard (TIH) materials and ***their potential impact on dense population and economic centers*** warrant the greatest attention. [Source: Freight Railroad Realignment Feasibility Study, NCPC, 2007, Section 2, page 23.] [Bolding, italics, and underscoring added for emphasis.]

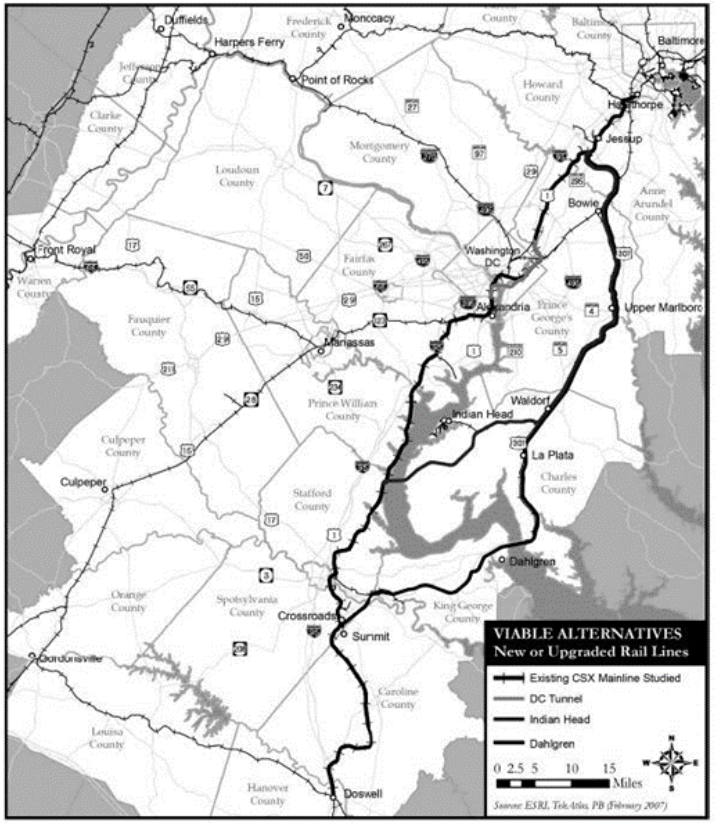
In 2009, a major article was written in the Journal of Transportation Safety and Security entitled "**Routing Hazardous Materials around the District of Columbia Area.**" This article based its research on, among other things, the NCPC's Freight Railroad Feasibility Study quoted above.

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 24 of 31 -

RESPONSES

COMMENTS

RESPONSES



The 2009 article evaluated alternate rail routes around the Washington, DC area. A map of such routes is shown below (from page 300 of the Journal).

If this can be suggested for the District of Columbia, surely it can be considered as well for the equally population-dense areas of Baltimore City, just a few miles to the northeast of DC.

The principal danger to the people of the B&P Tunnel Project Study Area is from the transportation of hazardous freight through any one or more of the proposed four

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 25 of 31 -

COMMENTS

RESPONSES

tunnels projected to pass under and through the Study Area (Alternatives 3A, 3B, or 3C) [or, in the re-purposed old existing B&P Tunnel, which will not be discussed here]. The danger lies in the nature of the transported hazard itself, as well as in its capacity to ignite other cargo on the same train to increase the risk of a fire and heat hazard to people and property in the area of derailment or collision.

Because of the great risk to people and human institutions which exist within such areas, hazardous freight cargo and any other freight cargo subject to ignition by burning hazardous cargo should not be permitted to go by rail through densely-populated urban areas.

As demonstrated under Section IV above, almost 66,000 people live in the Study Area for the B&P Tunnel Project, and many human institutions exist and flourish within the boundaries of the Study Area. Any and all of these could be seriously impacted by a derailment of a freight train carrying hazardous cargoes through any of the four proposed tunnels - leading to injury or death of persons living and working within the Study Area's boundaries.

While it makes sense for Amtrak's and MARC's passenger rail services to pass through densely-populated urban areas such as Baltimore City where they can discharge and pick up passengers, it makes much less sense for freight rail service.

It may eventually be decided, in light of the B&P Tunnel Project plans, that many more passenger trains should move through the four projected tunnels than currently are able to pass through the old existing B&P Tunnel.

However, that same possibility should be clearly and permanently eliminated for freight trains carrying any kind of cargo. Even if freight trains were permitted only to carry non-hazardous cargo through the new B&P tunnels, under competitive market conditions, the temptation would be too great to also carry hazardous cargoes over the same freight route.

The Federal Railroad Administration's regulations explicitly require all environmental impact statements (EISs) to consider both public health and public safety (see 64 Federal Register pages 28550 and 28555 - May 26, 1999). From policy and planning points of view, to preserve public health and public safety, it makes much more sense to insist that any freight trains, with or without hazardous cargoes, be required to travel along a Baltimore City route that would completely bypass any densely-populated areas within the City.

If such a bypass requirement were adopted, this might also reduce the need for four tunnels as part of the three alternatives proposed for the B&P Tunnel Project. It might also reduce the need to make any or all of these tunnels of the double-stack

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 26 of 31 -

COMMENTS

RESPONSES

variety to accommodate Plate H freight. If this need reduction were to happen, the price tag for the new passenger tunnels might become significantly lower and more affordable for the local, state, and federal governments responsible for implementing rail transportation plans.

In any case, the B&P Tunnel Project DEIS has already done some analysis of "Avoidance Alternatives" pursuant to the requirements of Title 23 US Code PART 774 –PARKS, RECREATION AREAS, WILDLIFE AND WATERFOWL REFUGES, AND HISTORIC SITES (Section 4(f)); and the Federal Railroad Administration's own procedures for considering environmental impacts (64 Federal Register pages 28545-28556). to assess the possibility of bypassing the Study Area altogether. [Source: ***B&P DEIS***, Chapter VI - Environmental Consequences, pages 195-198.]



It is significant that the above analysis of "Avoidance Alternatives" refers to the Preliminary Alternatives Screening Report (PASR) process in building its case for excluding both Alternatives 6 and 7 (Locust Point and the Sports Complex, respectively). Furthermore, as regards the Sports Complex Alternative (#7), the

COMMENTS

December 2014 PASR states that the alternative "would have to be coordinated with a potential Red Line Corridor transit alignment" (at page 28). With the demise of the Red Line last June, this is no longer a requirement with which to have to reckon.

However, a closer examination of this PASR reveals a different picture. We are told that for both alternatives, "[a] detailed description including alignment segments, evaluation, advantages and disadvantages ... is provided in the *2011 Baltimore's Railroad Network: Analysis and Recommendations* report." [Source: Draft PASR, pages 20 and 21; and PASR, page 28.]

That thorough 2011 report contains detailed discussion of both alternative 6 and 7 as its Chapter 7 "Passenger Alternatives", following each discussion with a table (Table 7-5 at page 7-19) which applies screening criteria to the respective alternatives, and includes a "Pass/Fail" rating. Whereas the Locust Point Alternative (#6) received a "Fail" grade both for Functional Design and External Impact Screening Criteria, the Sports Complex Alternative (#7) received a "Pass" grade for both sets of Screening Criteria. This difference between the two alternatives may be significant, even though it is passenger service rather than freight which is being discussed. [Source: BALTIMORE'S RAILROAD NETWORK: ANALYSIS AND RECOMMENDATIONS - USDOT, FRA and MDOT - January 2011, pages 7-14 to 7-19.]

Even more significant, however, is that the consideration of these two alternatives, as with the remaining thirteen (13) alternatives, was based primarily on the rationale of using the tunnel for passenger rail, with freight not being overtly considered in the analysis, other than as a remote future possibility. As a consequence, the present location of Penn Station, which serves passengers exclusively (and no freight rail), became a pivotal basis for excluding many alternatives, including specifically Alternatives 6 and 7 (Locust Point and the Sports Complex, respectively).

Accordingly, it is important to now take a second look at these two bypass alternatives (#6 and #7) exclusively in terms of their potential as the best-located lines for any increased freight cargoes, with passenger service remaining on the NEC line to the north which goes through Penn Station using the three other alternatives which include that station (3A, 3B, or 3C).

In Chapter 8 "Freight Alternatives" of the "BALTIMORE RAILROAD NETWORK: ANALYSIS AND RECOMMENDATIONS" of 2011, the analysis also includes two other freight tunnel possibilities: Locust Point-Canton and Sparrows Point. Both of these options received "Pass" grade in Table 8-3 at page 8-28. [Source: BALTIMORE'S RAILROAD NETWORK: ANALYSIS AND RECOMMENDATIONS - USDOT, FRA and MDOT - January 2011, pages 8-21 to 8-28.]

- b'more mobile Comment on DEIS for the B&P Tunnel Project: Page 28 of 31 -

RESPONSES

COMMENTS | **RESPONSES**

Another possibility for an exclusively freight rail line would be the suggestion from Edward Cohen and the MTA's Citizen Advisory Committee (CAC) and the MTA's Citizens Advisory Committee for Accessible Transportation CACAT) contained in "A Proposal To Unravel Baltimore's Tangled Rail Lines." This was presented as comment at the Monday, February 1, 2016 public hearing at on the B&P Tunnel Project held at Douglass High School. The freight line tunnel suggested by CAC and CACAT would have to be constructed, and would be located further south than Alternatives #6 and #7, proceeding from Marley Neck to Sparrows Point. This suggestion resembles the Sparrows Point option discussed by the "BALTIMORE RAILROAD NETWORK: ANALYSIS AND RECOMMENDATIONS" of 2011, which is mentioned directly above.

In any case, it is clear that there are freight rail alternatives for the Baltimore City area which can bypass entirely the more densely-populated areas of the City and thus pose much less risk of fire and explosion to the people, businesses, and property of Baltimore. Some effort is justified immediately in exploring as many of these alternatives as possible, in order to prevent the kind of disaster which happened less than three years ago at Lac Mégantic and over fourteen years ago in Baltimore's Howard Street Tunnel. There have been too many deaths and injuries from these causes in recent years. As improvements are planned for the NEC, we should all now learn from those recent local disasters, and do what is necessary to prevent recurrences of them. Planning of improvements now offers us an unique opportunity to do so. This is the time to face up to the risks resulting to dense urban populations from hazardous freight cargoes. THE TIME FOR PREVENTIVE ACTION AND PROMOTING FREIGHT BYPASSES IS NOW!

BIBLIOGRAPHY

64 Federal Register pages 28550 and 28555 - May 26, 1999

"A Proposal to Unravel Baltimore's Tangled Rail Lines" from the MTA Citizens Advisory Committee (CAC), adopted October 20, 2015 and the MTA Citizens Advisory Committee for Accessible Transportation (CACAT) adopted October 16, 2015 - 22 pages.

America 2050 - The Healdsburg Research Seminar on Megaregions • April 4-6, 2007, 76 pages

America 2050 - "Defining U.S. Megaregions" by Yoav Hagler, November 2009, 8 pages.

COMMENTS

RESPONSES

B&P Tunnel Project - Baltimore, Maryland - Draft Preliminary Alternatives Screening Report (Draft PASR) - October 2014

B&P Tunnel Project - Baltimore, Maryland - Preliminary Alternatives Screening Report (PASR) - December 2014
Baltimore & Potomac Tunnel Project, October 2015 Community Meetings [PowerPoint] Presentation - Targeted Meetings 10-08-2015

Baltimore City Council - Council Bill 16-0621 - "Transport of Crude Oil by Rail"

BALTIMORE'S RAILROAD NETWORK: ANALYSIS AND RECOMMENDATIONS - U.S. Department of Transportation, Federal Railroad Administration and the Maryland Department of Transportation [shortened in text source references above to USDOT, FRA and MDOT] - January 2011

Chin, S., H. Hwang, B.E. Peterson, L.D. Han, and C. Chin. "Routing Hazardous Materials around the District of Columbia Area," Journal of Transportation Safety & Security, Vol.1, No.4, 2009, pp.296-313.

"Critical Infrastructure Needs on the Northeast Corridor" - Northeast Corridor Infrastructure and Operations Advisory Commission - January 2013

DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) & SECTION 4(f) EVALUATION BALTIMORE & POTOMAC TUNNEL PROJECT BALTIMORE, MARYLAND - December 2015

Federal Railroad Administration, USDOT - Office of Safety Analysis - accessed February 24, 2016 from the internet at:
http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/rrchart.aspx

"Freight Rail Map" of the Maryland Department of Transportation (MDOT) - accessed February 16, 2016 from the internet:
http://www.mdot.maryland.gov/Office%20of%20Freight%20and%20Multimodalism/railmap.pdf

Freight Railroad Realignment Feasibility Study, National Capital Planning Commission (NCPC), 2007 - 5 sections and 3 appendices.

I-95 Corridor Coalition - Mid-Atlantic Rail Operations (MAROps) Phase II Study *Final Report* - December 2009

COMMENTS

RESPONSES

Lac-Mégantic rail disaster - WIKIPEDIA - accessed on February 24, 2016 from the internet at:
https://en.wikipedia.org/wiki/Lac-M%C3%A9gantic_rail_disaster

National Transportation Safety Board - Railroad Accident Brief for Howard Street Tunnel Derailment - July 18, 2001 - NTSB/RAB-04/08

Norfolk Southern Railway Company vs. Maryland Department of the Environment and Maryland Emergency Management Agency - in the Circuit Court of Baltimore City, Case No. 24-C-14-004367 (accessed on February 24, 2016 from the internet at: http://www.mcclatchydc.com/news/nation-world/national/economy/article31322213.ece/BINARY/Norfolk%20Southern%20Railway%20Company%20v.%20MDE,%20et%20al%20-Memorandum%20Opinion%20&%20Order)

Northeast Corridor Infrastructure Master Plan - 2010, Parts I , II, and III

Report to Congress: Baltimore's Railroad Network: Challenges and Alternatives - U.S. Department of Transportation, Federal Railroad Administration - November 2005

Reuters (U.S. Edition), NYSE stock exchange for NSC and NASDAQ stock exchange for CSX (all accessed from the internet on February 13, 2016)

Title 23 US Code PART 774—PARKS, RECREATION AREAS, WILDLIFE AND WATERFOWL REFUGES, AND HISTORIC SITES (Section 4(f)

* * *

COMMENTS

DEIS Comment 21:

Brittany Rolf

From: Liz Cornish
Sent: Thursday, February 25, 2016 3:48 PM
To: BPTunnel Information
Subject: DEIS Comment

While generally supportive of the tunnel project, and any of the proposed alternatives (3A, 3B, or 3C), I am concerned that all three alternatives plan to place the venting facility on the city parcel that currently is home to the neighborhood's community garden.

1

You also don't list this loss as a loss of community asset, in the same category as churches or schools. Which I would argue is an incorrect assessment of it's impact on public health in the neighborhood.

I feel this misrepresents the project, rather than making it clear that no other "alternative" locations of the venting facility was considered. Meanwhile, renovating vacant buildings to house it and designing it in a way that blends with the neighborhood is certainly an option. Given the economic imperative this tunnel presents to the Eastern Railway Corridor, it would seem foolish to not explore options that retain or even improve the neighborhood that stands to be disrupted the most.

A project of such significance shouldn't limit itself by not presenting the community with creative solutions that improve a neighborhood. This comes across as flippant, and will undoubtably face community opposition.

Liz Cornish
Executive Director
facebook | twitter | linkedin

Support better biking in Baltimore by making a donation today.

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 22:

Brittany Rolf

From: noreply@bptunnel.com
Sent: Friday, February 26, 2016 2:28 PM
To: BPTunnel Information
Subject: Comment Form

Ms Amelia Cox

1 I strongly oppose the construction of the tunnel as pertains to its impacts both on my own neighborhood (Reservoir Hill) and those of my friends (Sandtown-Winchester).

2 The five-story venting tower proposed for Reservoir Hill is an industrial application in the heart of a residential community. Through its shadow and its fumes it will immediately kill the vibrant community farm (Whitelock Farm) and neighborhood garden that have flourished on Whitelock and symbolize the revitalization of the neighborhood. The venting tower means we will have fumes instead of fresh food, an industrial tower instead of historic architecture, and shade where there was sunshine and a community gathering space.

3 And that's if everything goes well. In the event of an accident in the tunnel, however, what would the impact be on the neighbors who live by the venting tower? Where do smoke and toxic fumes go except around our beautiful neighborhood, including just two blocks down to the John Eager Howard Elementary School the reservoir at Druid HIll Park, and the nearby Maryland Zoo?

It's inconceivable to me that the residents will accept a plan by which random strangers get a faster commute and industrial shippers get a more direct route, at the cost of a city's beautiful neighborhood, elementary school children, and zoo.

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 3:
To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training

COMMENTS

RESPONSES

in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

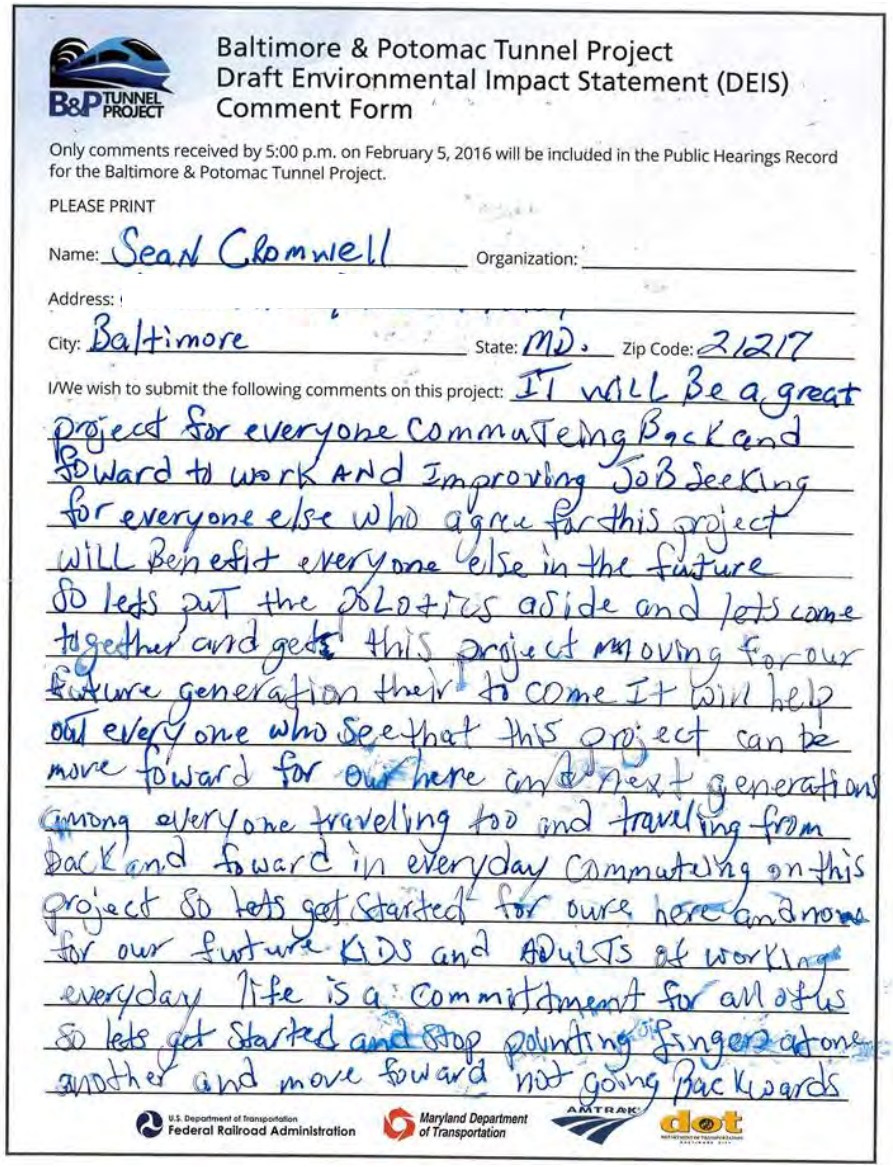
Regarding concerns for siting the ventilation facility near the elementary school, **Chapter VI** of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

COMMENTS	RESPONSES
	While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason that the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS. Regarding your comments on industrial shipping, while it is not a primary goal associated with the Project Purpose and Need, the build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.** Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

COMMENTS | **RESPONSES**

DEIS Comment 23:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Sean Clomwell Organization:

Address:

City: Baltimore State: MD. Zip Code: 21217

I/We wish to submit the following comments on this project: IT will Be a great project for everyone commuteing Back and Foward to work AND Improving JoB Seeking for everyone else who agree for this project will Benefit everyone else in the future So lets put the politics aside and lets come together and get this project moving for our future generation their to come It will help out everyone who See that this project can be move foward for our here and next generations among everyone traveling too and traveling from Back and foward in everyday commuteing on this project So lets get started for ours here and more for our future KIDS and ADULTS at working everyday life is a commitment for all of us So lets get started and stop pointing fingers at one another and move foward not going Backwards

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

Thank you for your comment.

COMMENTS

DEIS Comment 24:

Brittany Rolf

From: John Cutonilli
Sent: Friday, February 26, 2016 2:07 PM
To: BPTunnel Information
Subject: DEIS COMMENT

1 The Environmental Impact Statement (EIS) has not looked at all reasonable alternatives. It has used an improper methodology to restrict and predetermine the outcome of the process. This is evidenced by the NEC Futures Title I EIS, which studied an alternative (alternative 5) that was rejected by this EIS. It also does not address the disposition of the existing tunnel, which is listed as a need of the project.

2 This methodology restricts the study area based on two artificial means, which were not identified in the purpose and need of the project. These means are the West Baltimore MARC station and Penn Station. Neither of these stations in their present locations are required to fulfill the purpose and need of the project, yet were the primary reasons for rejecting most of the alternatives.

Both of these locations have potentially very negative consequences to the project. Penn Station does not have the Plate H clearances (according to previous FRA studies) and may need to be torn down/moved to accommodate these clearances. The EIS appears to ignore the impacts that the station itself may cause to the future use of the project. The West Baltimore MARC station presents negative environmental impacts due to the surrounding community and is not served by Amtrak. The Title I EIS and the elimination of alternative 11 demonstrate this. MARC could make operational changes to negate the need to require the West Baltimore MARC to be an end point of the tunnel.

Additionally the EIS also fails to properly understand the needs for the number of tracks. It derives the need from the Title I EIS. This need is based on the projected rail capacity and the need for MARC to make intermediate stops (interfering with) that Amtrak does not. In the case of the existing B&P Tunnel, only two tracks are needed because there are no intermediate stops. The EIS alternatives do not address the fact that the purpose and need of the project may be met with less than 4 new tracks based on this fact. The EIS should properly evaluate the minimum needed base on each alternative.

3 There are numerous reasonable alternatives that have not been evaluated. The following alternatives are a non exhaustive list. Many of the rejected alternatives are actually reasonable alternatives when the station location requirements are eliminated. Additionally, the Howard St tunnel should also be evaluated as an alternative with CSX using a rehabbed B&P tunnel with plate H clearance.

The EIS demonstrates that the rehabilitation of the existing tunnel is significantly cheaper than building two tunnels. While this is not a reasonable alternative on its own, it can be combined with other alternatives. This alternative should include a double wide tunnel as well as a single track tunnel with plate H clearance. Building one or two plate H clearance tunnels may eliminate the need to create two additional tunnels with plate H clearances since Amtrak does not need such large tunnels saving money.

Alternative 11 may be viable if the West Baltimore tunnel entrance and tunnel is extended farther down the track towards DC. The West Baltimore station can be accommodated either by an underground station or operationally (e.g through reverse train moves or serving as an end of line station). It may be possible to make underground sidings at the West Baltimore MARC to eliminate the interference with Amtrak. Another possible location for a ventilation plant for option 11 is over the existing B&P tunnel opening around Pennsylvania and

1

RESPONSES

Response to Comment 1:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

The Project is proposed in order to address the deficiencies of the existing tunnel. Alternative 5 does not address deficiencies of the tunnel, and is therefore not a feasible alternative. For more information regarding the Project Purpose and Need, as well as the Alternatives Development process, please refer to **Chapters II and III** of this FEIS.

The disposition of the existing tunnel is explored in **Chapter II**. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 2:
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, which include eliminating impediments to existing and projected operations along the NEC. The alternatives considered were developed to complement existing operations at the existing Penn Station.

COMMENTS

Wilson Streets (with a short tunnel). This location would be able to serve Alternative 11, the rehabbed B&P tunnel as well as the existing Metro. This alternative should also be evaluated with less than 4 new tracks.

John Cutonilli

2

RESPONSES

Using existing infrastructure was a necessary condition for an Alternative to be considered feasible and/or reasonable. Utilizing Baltimore Penn Station was one such condition. Utilizing the existing West Baltimore MARC station, however, was not a condition, and the existing station will be replaced.

Amtrak is in the early planning stages of developing a master plan for the future needs at Baltimore Penn Station (Amtrak, 2015). The plan will outline a series of incremental and phased improvements to the station facility and select land assets to guide the station's future development. The master plan will build off three studies: The Operations and Facilities Study, which will assess long-term operational and facility requirements for Baltimore Penn Station to meet growing capacity demands; the State of Good Repair Study; and the Commercial Development Study. Early coordination between the Project Team and Baltimore Penn Station representatives indicated that neither project would impact the other. Planned high level platforms at Baltimore Penn Station would not have any material effect on the alternatives considered for the Project.

Regarding the minimum appropriate number of tracks, consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Response to Comment 3:
The constraints and requirements used in the evaluation of Alternatives were created to ensure that the Alternatives that advanced to further study would be both feasible and reasonable to implement. The continued use of assets such as Baltimore Penn Station and the Gwynns Falls Bridge ensure that additional funds are not spent rebuilding functional infrastructure and that communities and the local economy are not disrupted with unnecessary construction.

As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;

COMMENTS

RESPONSES

- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- eSevere impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 25:

From: Katherine Davis Ziombra
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Friday, February 05, 2016 4:07:45 PM

To Whom It May Concern-

As a resident of Reservoir Hill, I oppose Alternatives 3A, 3B, and 3C. The site of the proposed ventilation plant is in an area of Reservoir Hill that is finally seeing revitalization. The residents in the area immediately surrounding the site are mostly minority and either live at or below the poverty line. The addition of the ventilation plant would be an eyesore and further disenfranchise a community that has been working hard to make Reservoir Hill a viable place to live. Our first café recently opened and there is more potential development at the corner of Park Ave. and Whitelock St. The ventilation plant would discourage potential business owners from coming into Reservoir Hill because no one wants to open a business by something that could potentially be unsafe during an accident in the tunnel. Also, in the event of a disaster, the area is not easily accessible. Crews would have to travel down narrow residential streets which are cumbersome to navigate. 1 2

The location of the current proposed ventilation plant serves as an area for community gathering. In the past year, Reservoir Hill has utilized that space during at least four community festivals. When that space is lost, will FRA, MDOT, and Amtrak build a community park for Reservoir Hill to replace what was taken away from us? Unfortunately given the current funding situation, I find that highly unlikely. 1

The executive summary states that there would be minimal environmental impact from the ventilation plant. While the current train traffic might not significantly increase the particulate matter, Alternatives 3A, B, and C were chosen because of the decreased travel time. The decreased travel time only encourages more train traffic, thus increasing emissions of particulate matter and fuel emissions. How much money does it cost to maintain these ventilation plants? When the plant malfunctions, the concentration of particulate matter and emitted into the atmosphere could increase exponentially. What plans are in place for preventative maintenance and disaster recovery? 3

It would be better for the residents of Reservoir Hill and the rest of West Baltimore if the old tunnel was repaired and a new tunnel was not built. 4

Sincerely,

Katherine Ziombra MSc.

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 2:
The economic market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

Response to Comment 3:
Regarding environmental impacts from the ventilation facilities, the emissions associated with the proposed facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

COMMENTS

RESPONSES

The cost of maintaining the systems are factored into the overall life cycle costs of the Project.

The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

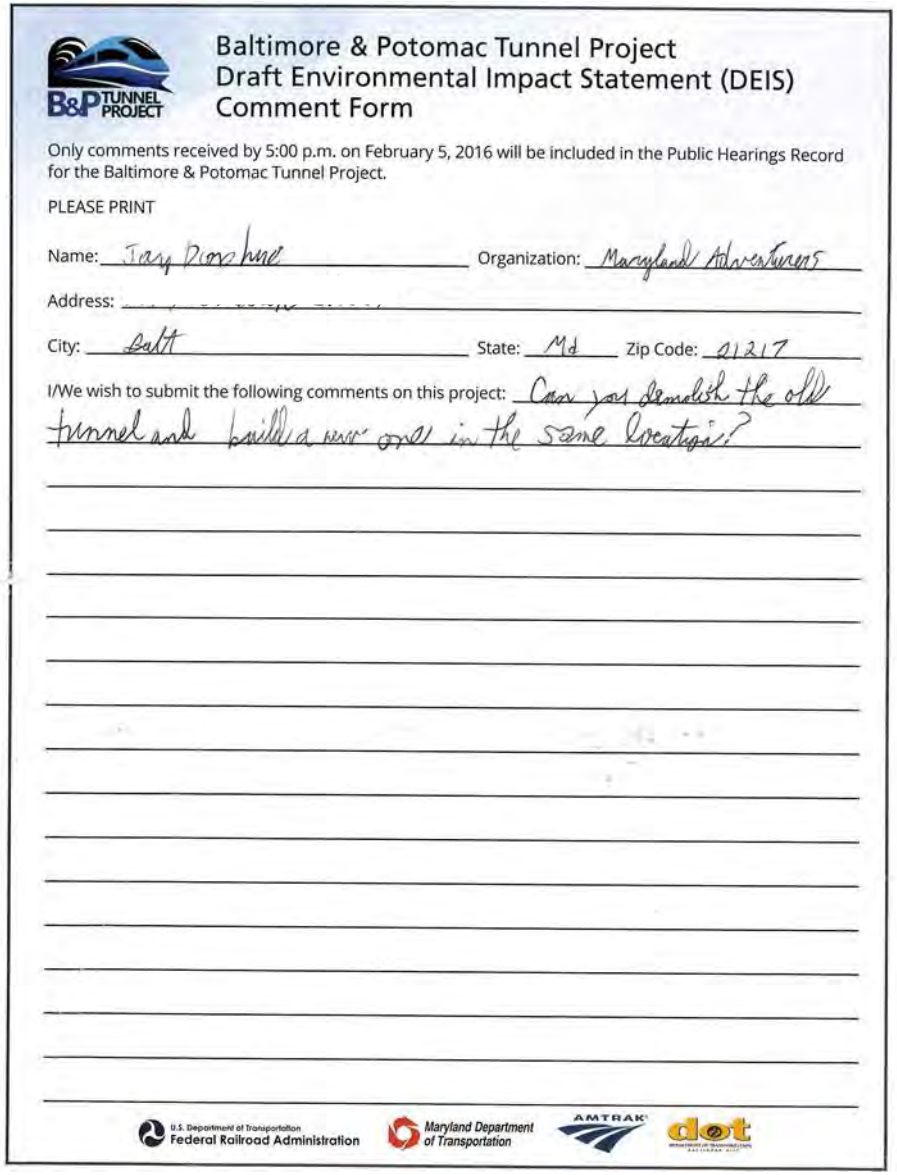
Response to Comment 4:
As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

COMMENTS

DEIS Comment 26:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Tony Donohue Organization: Maryland Adventures

Address:

City: Balt State: Md Zip Code: 21217

I/We wish to submit the following comments on this project: Can you demolish the old tunnel and build a new one in the same location?

U.S. Department of Transportation Federal Railroad Administration · Maryland Department of Transportation · AMTRAK · dot

1

RESPONSES

Response to Comment 1:
As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 27:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Monday, February 15, 2016 10:44:57 PM

Ms Sarah Edelsburg

N/A

Dear BP Tunnel company,

The neighborhood residents of Reservoir Hill strongly oppose the building of a gigantic tunnel in our community. We will do everything that we can to prevent this from happening. Some of our neighbors have done a great job so far at attending your "community meetings" and learning about the project. They are spreading the word through the neighborhood about how horrible this project is for our community, and mobilizing lots of community members. We have learned several things so far: 1) That there is a way to build your tunnel *without* a gigantic 5-story ventilation shaft in the middle of Reservoir Hill - but your company is just not willing to spend the money to do that. 2) Bolton Hill was considered as a spot for the ventilation tunnel, but was eventually NOT chosen as an option because of the affluence in that neighborhood. 3) Money will be offered to people in the community to avoid any liability - which shows very questionable intentions on your part. 4) The project will cost millions of dollars, only for the purpose of "improving" the speed of commutes by 2 minutes. 5) The tunnel is being marketed for commuter trains, but freight train tracks are being added as well.

This project will have a horrible environmental impact on the entire area, but more so, it will destroy decades of effort that were put in to rebuild the Reservoir Hill community. We, the residents of Reservoir Hill, will do everything we can to prevent this project from happening. We will get every elected official involved, because this project will have a ripple effect on the entire development of the West Side of the city. Please consider another more commercial, non-residential area for your tunnel building plans, as we will make it very difficult for this project to move forward. Thank you.

1
2
3
4
5
6
7

RESPONSES

Response to Comment 1:
As described in **Chapter III** of the FEIS, the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
An Area of Consideration for the Intermediate Ventilation Facility of each build alternative was identified as part of the preliminary engineering, based on considerations previously described. As described in **Chapter III**, the three overlapping Areas of Consideration (corresponding with Alternatives 3A, 3B, and 3C) were all located in the Reservoir Hill neighborhood.

Response to Comment 3:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

The Project would provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. Payment to those not relocated would be offered in the event that structural damage to houses or other buildings is determined to have been

COMMENTS

RESPONSES

caused by the Project construction activities. The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 4:
While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason that the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 5:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

COMMENTS

RESPONSES

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

Response to Comment 6:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 7:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

DEIS Comment 28:

Brittany Rolf

From: Edwards, John, V (Planning) <
Sent: Thursday, February 25, 2016 2:53 PM
To: BPTunnel Information
Subject: Comments on the B&P Tunnel DEIS
Attachments: February 25 2016 comments on the DEIS.pdf

Please see the attached letter.

John V. Edwards
General Director Passenger Policy
Norfolk Southern Corporation

COMMENTS

RESPONSES

NORFOLK SOUTHERN

Norfolk Southern Corporation
Three Commercial Place
Norfolk, VA 23510

John V. Edwards
General Director
Passenger Policy

February 25, 2016

Ms. Michelle W. Fishburne, PE

Washington, DC 20590

Sent electronically to info@bptunnel.com

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

Dear Ms. Fishburne:

On December 18, 2015 the Federal Railroad Administration, the Maryland Department of Transportation, Amtrak and the Baltimore City Department of Transportation publicly released the Draft Environmental Impact Statement & Section 4(f) Evaluation for the Baltimore & Potomac Tunnel Project (B&P DEIS). Norfolk Southern (NS) appreciates the opportunity to supplement its July 24, 2014 comments.

Our earlier comments focused on NS's interest and concerns regarding the scope of the B&P DEIS, and specifically noted the importance of ensuring side and overhead clearances in the proposed tunnel infrastructure. When dealing with replacing infrastructure that was built in 1873, it almost goes without saying that what is done now with the B&P Tunnel will affect rail transportation along the east coast of the United States for decades into the future. It is important to eliminate what in the future could be a significant chokepoint in this high traffic section of the Northeast freight and passenger rail corridor.

1 The potential for clearing the B&P Tunnel for high and wide loads 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 final environmental impact statement. Unfortunately, although overhead clearances are specifically dealt with in the B&P DEIS, we do not believe that side clearances are. In addition, grades should be kept to a minimum to enable fluid freight movements.

Again, Norfolk Southern appreciates the forum for making comments on the B&P Tunnel DEIS. We look forward to remaining involved in this process.

Sincerely,

John V. Edwards

Response to Comment 1:
Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the build alternatives propose a total of four tracks which will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040.

The build alternative tunnels would have clearances to accommodate double stack container freight cars, known as AAR Plate H. The operating envelope for Plate H clearance is generally, 10 feet 8 inches wide by 20 feet 3 inches tall.

The internal diameter of the tunnel is nominally 30 ft with an internal configuration to accommodate AAR Plate H and Plate K equipment. The existing B&P Tunnel is not on the current Strategic Rail Corridor Network (STRACNET). Neither the Federal Railroad Administration nor the Department of Defense (DOD) have identified the need to place the B&P Tunnel or its replacement on the STRACNET; therefore, the replacement tunnel(s) have not been designed to accommodate the DOD Clearance Profile for STRACNET. Also, please note that there are many other restrictions north and south of the proposed tunnel preventing achieving STRACNET clearances along the length of the NEC. For some of these restrictions, no feasible solution has yet been identified.

COMMENTS

DEIS Comment 29:

Brittany Rolf

From: Kathryn Epple <
Sent: Thursday, February 25, 2016 11:59 PM
To: BPTunnel Information
Cc: Gary Messman; George Epple; Bill Lee; Kathryn Epple; 'Kylis Winborne'; Laura Amlie; Mark F. West; Remington Stone; Russ Moss; Soledad Salame; Stephen & Rebecca Arthur
Subject: DEIS COMMENT
Attachments: MTA CACAT, CAC proposal.pdf

B&P Tunnel Project,

1 In case you have not already received it, I am forwarding this document as an example of a more comprehensive proposal for Baltimore's rail lines. This proposal was developed as a collaboration between MTA's Citizen's Advisory Committee for Accessible Transportation (CACAT) and the Citizen's Advisory Committee (CAC). I understand this is an unofficial independent document that is not approved or endorsed by MTA.

I believe this type of comprehensive plan is needed.

Kathryn Epple
President, Residents Against the Tunnels

RESPONSES

Response to Comment 1:
The report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding the purpose and need of the Project, please see **Chapter II** of this FEIS.

To review the September 2015 report in its entirety, please refer to **DEIS Comment #11**.

COMMENTS

RESPONSES

DEIS Comment 30:

Brittany Rolf

From: Clare Gorman
Sent: Friday, February 26, 2016 3:09 PM
To: BPTunnel Information
Subject: Comments on the B&P Tunnel
Attachments: Healthy Neighborhoods Comments_B&P Tunnel 2.26.16.pdf

Attached are Healthy Neighborhoods' comments on the B&P Tunnel. A hard copy will be sent in the mail.

Thank you.

Clare Gorman
Chief Administrative Officer

www.healthyneighborhoods.org

COMMENTS

Healthy Neighborhoods

February 26, 2016

B&P Tunnel Project

Baltimore, MD 21217

Attn: Ms. Odessa Phillip, PE
Environmental Project Manager
Baltimore City Department of Transportation

Re: Proposed B&P Tunnel Project through Reservoir Hill Community

Dear Ms. Phillip:

1 I am writing to express the grave concerns of Healthy Neighborhoods, Inc. ("HNI") about the proposed Baltimore and Potomac (B& P) Tunnel Project that would construct four tracks underneath the historic Reservoir Hill Community as well as the Midtown Edmondson Historic District. The construction of the tunnels will do damage to historic homes in historic districts. These tunnels would increase considerably the number of trains passing through the west Baltimore communities and accommodate double-stack freight trains. As proposed, there 2 could be two trains in each tunnel (eight under the Reservoir Hill neighborhood) 3 at any given time causing severe impacts to the quality of life throughout the neighborhood and concerns about noise and vibration. In addition to the underground construction, a ventilation shaft measuring approximately 4 100'x200'x50' would be constructed in the heart of the Reservoir Hill Historic District on land now used for the Whitelock Community Farm. The farm is a unique meeting place in a very diverse community. It grows produce in a 5 community which needs access to healthier food products. No assurance has been given that dangerous chemicals and oil and gas will not be carried through the tunnels.

Healthy Neighborhoods is a partnership of banks, foundations, government and community organizations that helps strong but undervalued neighborhoods increase home values, market their communities, create high standards for property improvement and forge strong connections among neighbors. The revitalization of Reservoir Hill has been one of Baltimore's success stories. We have financed $23 million of neighborhood improvements that include purchase and rehab of homes, loans and matching grants to homeowners for home improvements, as well as capital improvements and block level neighborhood enhancements. Most recently, the Maryland Department of Housing and Community Development awarded a grant of over $750,000 to HNI to continue rehabilitation of vacant homes on the 2200-2300 blocks of Callow Avenue and to make capital improvements at the Whitelock Farm. HNI investments in Reservoir

Robert A. DeAlmeida, Chair
Mark Sissman, President
Timothy D. Armbruster
Douglass Austin
Andrew M. Bertanini
George L. Bunting, Jr.
Kevin G. Byrnes
Cheryl A. Casciani
Robert C. Embry, Jr.
Donald C. Fry
Matthew D. Gallagher
Paul T. Graziano
Thomas R. Jones
Jon M. Laria
Louis P. Mathews, Jr. (Pete)
Elizabeth B. Minkin
Theo C. Rodgers
Patrick G. Tehan

RESPONSES

Response to Comment 1:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

Response to Comment 2:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;

COMMENTS

Hill have leveraged additional public and private support for the neighborhood. Plans for new investment include renovation of the John Eager Howard Elementary School (among the first financed by the state) and the transformation of the vacant Madison Park North housing site into a new mixed-use, mixed-income development.

Reservoir Hill is a beautiful, historic residential neighborhood adjacent to Druid Hill Park. It is home to stately Victorian town homes, restored apartment buildings, and a diverse mix of residents from all backgrounds and all walks of life who together function as a unified community. About 30% of the housing remains affordable to low-income families as a result of public sector use restrictions. The proposed B&P Tunnel threatens this community and the housing market with potential for community disruption, noise and vibrations, damage to homes, as well as environmental and related health impacts of train traffic in the residential areas. 6

Our concerns include:

Damage to historic homes

Reservoir Hill boasts one of the most diverse, intact collections of late 19th and early 20th century urban architecture in Baltimore City; and borders the second largest urban park in the country, Druid Hill Park. The community is an important part of the Jewish and African-American history of Baltimore. The neighborhood is one of the largest areas of historic homes on the East Coast, consisting primarily of two to three story brick houses, generally 100-150 years old. There are also large historic apartment buildings as well as historic synagogues and churches. The 20 or so remaining vacant homes are particularly vulnerable. 7

Homeowners are concerned about the construction impacts and the effect of noise and vibrations on their homes. They are concerned about the depth of the tunnel and the potential for structural damage, even collapse of houses during and after tunnel construction due to earth settling, flooding as well as earthquake. On Callow Avenue several long vacant homes are under redevelopment for sale to homeowners earning less than 120% of the Area Median Income. The architect and contractor believe that the vibrations during construction alone will cause shifting of the foundations, nail pops and cracks in dry wall or plaster. That was the experience during the construction of Baltimore's subway.

Damage to the mixed-income housing market

After years of disinvestment, Reservoir Hill has begun to see a comeback. Vacant homes have been rehabbed and grand homes that had been subdivided and neglected by outside investors have now been transformed with single family owner-occupants that are new to the neighborhood. Long-term homeowners have also benefited with increased home values and renewed confidence in the neighborhood to make interior and exterior home improvements. As values increase so too do state and local tax bases.

As always in Baltimore, improving neighborhoods and the housing market is fragile. The tunnel proposal rightfully has residents concerned about noise and vibration. They worry that infrastructure -- roads, gas lines, water mains, power grid systems – may become compromised due to construction and train activities. Discussions of the proposed tunnel and the negative impact have sparked concern as well as talk about potential plans to leave the neighborhood. Project management's references to evacuation plans fuel concerns. 8

RESPONSES

- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

Response to Comment 3:
The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM

COMMENTS

Harm to one of the few diverse communities in Baltimore

Residents value Reservoir Hill for its diversity – as one resident wrote on the Live Baltimore website: *I love my neighborhood of Reservoir Hill because it brings together so many across race, class and religious lines - plus, one of the city's greatest gems: Druid Hill Park!* In markets where there is significant property appreciation there is a risk of losing affordable housing units and concerns that lower income households will get pushed out but not in Reservoir Hill. In a comprehensive study that was commissioned by HNI in 2006, the Community Law Center found that Reservoir Hill had over 945 income-restricted units. Although the period the units must be maintained as both income and rent restricted truly varies, the study found that most of the units carry use restrictions that require they be preserved for at least the next 20-30 years.

If disruptions from construction and concerns about noise and vibration drive out the middle class or upper-income homeowners, the diversity of the community will be lost. Those left behind, mostly will suffer the most from any of the negative consequences that the B&P Tunnel project may pose.

9

Harm to one of the first newly built 21st Century Schools

Plans are underway to rebuild John Eager Howard Elementary School located just one full block away from the proposed site of the tunnels and ventilation shaft. This is one of the first schools to be renovated under the $1.1 billion investment in schools construction and renovation through the 21st-Century Schools Buildings planning process, a partnership of the state and city. The investment represents a once-in-a lifetime opportunity to drive improvement not only for schools in Baltimore City, but also for their surrounding neighborhoods including Reservoir Hill.

Design development has been completed and construction documents are being developed. The architects for the new school have not been directed to take into account the impacts of construction or vibrations from trains in the design of the new school. The schematic design has ball fields, a playground, basketball courts and community garden space along Brookfield Avenue, Ducatel Street, and Linden Avenue – the area of the school site closest to the proposed ventilation shaft. To state the obvious, the school and recreation center will be central meeting places for the community's youth.

Location of the ventilation shaft / Loss of the Whitelock Community Farm

There are significant concerns about the environmental and related health impacts of train traffic in the residential areas. This concern is exacerbated by the site and size of the proposed ventilation shaft directly across the street from the Whitelock Community Farm. The proposed location of the ventilation tower, at the south side of the intersection of Brookfield Avenue and Whitelock Street, is currently used by the Reservoir Hill neighborhood as an extension of the Whitelock Community Farm.

10

Whitelock Street, once a neighborhood commercial corridor, suffered years of disinvestment and became the center of a thriving drug trade drawing negative attention and crime to Reservoir Hill with easy access on and off major thoroughfares. In recent years, the community has begun to attract new investment, reclaiming vacant land for positive neighborhood activity. The Whitelock Community Farm has grown over the past few years, providing fresh produce to the community and a community gathering place. Recognizing this positive activity, HNI has made a recent commitment to the farm for capital improvements. It is a meeting place for young and old and families and gardeners.

The location of the ventilation shaft threatens the farm's existence and its important role as a community gathering place and in providing fresh food to Reservoir Hill residents. The ventilation shaft also threatens other centers of community life including the St. Francis Neighborhood Center, John

RESPONSES

would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 4:

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 5:

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper

COMMENTS

Howard Eager Elementary School, a new revitalized playground that received significant investment from the Baltimore Ravens, and Linden House, a historic renovation into apartments for formerly homeless women and their children. Residents are concerned about dangerous diesel fumes and other emissions that could significantly impact air quality in the neighborhood. As you know full well, there is a history of fire in Baltimore's old railroad tunnels. 11

Safety and danger from explosion and fires

Residents want to feel safe in their homes and neighborhoods and are concerned about the potential dangers if freight trains transport hazardous materials or chemicals under their homes. There is a well-documented history of accidents and fires in tunnels in Baltimore City. The Lake Megantic, Quebec crude oil explosion is cited as a worst case scenario. Residents have been informed that the B&P Tunnel Project could include hazardous materials such as petroleum (crude oil), chemical (propane, chlorine, etc.) and nuclear products. Residents are rightly concerned about the potential hazards from fire, explosion, and poison. They also worry that the tunnel could be a target for terrorism. Baltimore city and the federal government are making plans to protect Lake Montebello and Druid Hill Park from terrorists. 12

Thank you for the opportunity to share these concerns. We know that there are better alternatives that can be explored and that the B&P Tunnel will not proceed as currently proposed with its potential to harm Reservoir Hill or other West Baltimore communities.

Very truly yours,

Mark Sissman
President

RESPONSES

labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 6:
The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS

RESPONSES

Response to Comment 7:
For information regarding the impacts to homes in the historic district, please refer back to the response to Comment 1**.**

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 8:
Construction of the build alternatives would cause major utility relocations that would extend significant distances outside of the tunnel portal areas. Utility locations would be identified as the Project advances and relocations would take place to permit the reconstruction to advance as quickly as possible with minimal inconvenience to those living adjacent to the work areas.

The Project sponsor will develop and implement a Hazardous Spill Prevention Plan, a Hazardous Materials Remediation Plan, and an Emergency Management Plan to be implemented in the event of a tunnel emergency.

Response to Comment 9:
As stated in Comment 3, the impacts of construction noise and vibration will be mitigated.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

RESPONSES

Response to Comment 10:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 11:
The St. Francis Neighborhood Center, German Park, and the Linden House (also known as the David Bachrach House) would not be impacted by the Project. The John Eager Howard Elementary School would be closer to the site of the Intermediate Ventilation Facility located at 900-940 W North Ave. than it was to the Whitelock Street site; however, other than a visual change, would not be impacted.

Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards

COMMENTS

RESPONSES

(NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

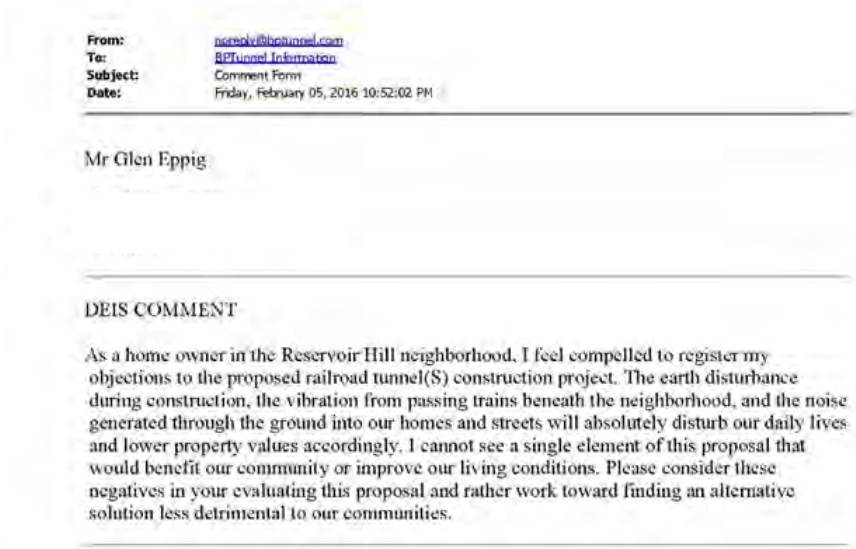
Response to Comment 12:
To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than an above-ground track running through the neighborhood The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

COMMENTS

DEIS Comment 31:



From: nsreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Friday, February 05, 2016 10:52:02 PM

Mr Glen Eppig

DEIS COMMENT

As a home owner in the Reservoir Hill neighborhood, I feel compelled to register my objections to the proposed railroad tunnel(S) construction project. The earth disturbance during construction, the vibration from passing trains beneath the neighborhood, and the noise generated through the ground into our homes and streets will absolutely disturb our daily lives and lower property values accordingly. I cannot see a single element of this proposal that would benefit our community or improve our living conditions. Please consider these negatives in your evaluating this proposal and rather work toward finding an alternative solution less detrimental to our communities.

1
2
3
4

RESPONSES

Response to Comment 1:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using the FTA *Transit Noise and Vibration Impact Assessment*, and construction vibration levels were also evaluated using both FTA guidelines and standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 2:

COMMENTS	RESPONSES
	The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS. **Response to Comment 3:** The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community. Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility. For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**. **Response to Comment 4:** The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

RESPONSES

DEIS Comment 32:

Brittany Rolf

From: Kathryn Epple
Sent: Thursday, February 25, 2016 11:08 PM
To: BPTunnel Information
Cc: George Epple; Bill Lee; Kathryn Epple; 'Kylis Winborne'; Laura Amlie; Mark F. West; Remington Stone; Russ Moss; Soledad Salame; Stephen & Rebecca Arthur
Subject: DEIS COMMENT
Attachments: 20160224 DEIS Comments Epple.docx

B&P Tunnel project,

Here are my further comments on the DEIS.

Kathryn Epple
President, Residents Against the Tunnels

COMMENTS

Further Testimony regarding the B&P Tunnel Project Draft Environmental Impact Study
Kathy Epple,
President, Residents Against the Tunnels (RATT)
25 February 2016

- I am very concerned because I have not heard testimony from any of the 48 homeowners or business owners who may be displaced by the B&P Tunnel project. I assume that "displaced" means the buildings will be torn down. This makes me think that those owners have not received any notification, are unaware of the possibility, and had no opportunity to comment. The B&P Tunnel project should have notified those property owners by registered mail. 1
- The construction of four tunnels for double stack freight trains and the capacity to send 388 trains per day through the tunnels represents a potentially very heavy industrial use through a densely populated residential area.
- I cannot even image why consideration would ever be given to routing any trains at all under a historic district. These 100-150 year old brick homes are fragile. The B&P Tunnel vibration expert told us at the 2nd hearing meeting that these homes could never tolerate a level of vibration that new homes can tolerate ("2 inch movement"). Our houses shake now when a bus passes by. 2 3
- The terrorism risk of having trains travel under a residential area has not been addressed in the DEIS. Recommend that this study report be submitted to the Department of Homeland Security for review.
- The DEIS pretends that the B&P Tunnel project is only about passenger travel, and gives a mere nod to freight. If freight in 2040 were really to consist of only 2 freight trains per day as stated in the DEIS, it would be unnecessary to construct 4 tunnels for double stack freight. Given that Odessa Phillips has used the term "market-driven as determined by Norfolk Southern and CSX" with respect to freight, no one believes that freight will not increase radically. Given that transport of fracking oil has increased by 4000% in the past 6 years, we are very worried.
- The impact of freight trains traveling under a residential area has not been given serious consideration in the DEIS. 4
- CSX's use of the tunnels has not been discussed in the DEIS, though given Odessa Phillip's comments, they will likely be a user of the tunnels.
- Once double stack tunnels are constructed, I've been told by Amtrak experts at B&P meetings, that legally there is nothing that can be done to prevent freight trains from traveling through the tunnels. Please note that it would be a straight shot along the new route to the Norfolk Southern Bay View and CSX Bayview freight terminals.
- Highly volatile Bakken crude fracking oil (AKA bomb trains) and other hazardous freight should not be permitted in Baltimore at all. The risk to human life from bomb trains is unspeakable. As far as I can see, there's nothing in this plan to prevent this. The 5 bomb trains per week that currently transit Baltimore through the aging Howard Street tunnel line on the CSX tracks should also be banned.
- We are concerned that this CSX freight traveling though the Howard Street tunnel tracks would be also rerouted through the new B&P Tunnel double stack tunnels. We believe there is an unstated goal that the B&P Tunnel project would be a replacement for not only the B&P tunnel line (Norfolk Southern freight) but also the Howard Street line (CSX freight).
- Do the railroads and oil companies have such wealth and power that they can put Baltimore City residents at such potentially extreme risk? I certainly hope not. Does Baltimore City have any control over the safety of its residents?
- In the event of a derailment and resulting explosion of a fracking oil bomb train, it's unlikely that there would be any time to warn residents. In Lac-Megantic, Canada, a town of 6000 residents,

RESPONSES

Response to Comment 1:
Project design is not yet complete; once preliminary design is complete and the NEPA EIS process is finalized, the people who would be displaced by the alternative selected for implementation in the Record of Decision would be notified. The Project Team would provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. During the process, direct mailings were sent to residents in the Study Area, which included property owners within one-quarter mile of the Preferred Alternative, as well as additional property owners within the south portal area that could potentially be impacted by the Project.

The Preferred Alternative would displace 22 residential buildings in the Midtown-Edmondson neighborhood, Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings. 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 Project Team has engaged in extensive public outreach throughout the development of the Project including three Public Open Houses, as well as ten community meetings where the public was given the opportunity to learn about the project development and engage in discussion with the Project Team. In addition to these meetings, Mitigation Working Groups comprising community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI**, as well as **Chapter VIII.**

Response to Comment 2:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

Response to Comment 3:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which

COMMENTS

47 people were vaporized in the resulting explosions. The blast was a kilometer across. Reservoir Hill alone has a similar population of 5600 residents.

- A sensible, comprehensive transportation plan is needed to address maglev, long distance passenger, commuter, light rail, freight train, and bus transportation. Such a plan should be carefully staged. The B&P Tunnel project is not that type of plan. It's a stovepipe plan.

5

- If a maglev line is constructed, it should be routed into downtown Baltimore, possibly to Charles Center.
- If a maglev were constructed in the future, some passenger travel would be diverted from a new B&P Tunnel. This would permit an even greater increase in freight transportation. No discussion of this has been provided in the DEIS.
- Amtrak trains should be routed through improved track and tunnels along the existing B&P Tunnel right-of-way.

6

- Penn Station is inadequate to handle the projected increase in passenger trains. An alternate or secondary plan is needed.
- Recommend that MARC trains be joined to a light rail or streetcars that would be routed along North Avenue.
- No diesel trains should be permitted in Baltimore City. MARC should transition to a clean all-electric fleet, or else stay out of Baltimore. Baltimore already has a high pollution rate.

7

- If diesel trains were prohibited, there would be no need to construct such a gargantuan vent building in the heart of Reservoir Hill. The planned vent building would preclude business development of this area and kill the current Community Farm.

8

- Freight trains should be routed to port terminals under the Bay and Sparrows Point, which is already an industrial area. They should be kept out of downtown Baltimore.

9

- Today most people would acknowledge that it was wrong to build a road over the Jones Falls River. Similarly, it would be wrong to bore 4 double stack freight tunnels under a large swath of residential Baltimore, putting homeowners at risk.

RESPONSES

include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

COMMENTS

RESPONSES

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Coordination with local, state, and national officials will be ongoing throughout the final design and implementation of the Project. Safety and security of the tunnel will be carefully considered as the Project advances.

Response to Comment 4:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;

COMMENTS

RESPONSES

- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel. As Amtrak is responsible for operating a robust passenger rail service, the two inner tracks of the four-track tunnel system will be reserved (in all but emergency conditions) for high-speed passenger train operations, freight services will be restricted to share the two slower, outer tracks with MARC commuter rail trains. It is therefore not possible for the tunnel system to be converted to majority—or even significantly increased—freight operations.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

COMMENTS

RESPONSES

The Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan, to be implemented in the event of a tunnel emergency. Tunnel drainage concepts are being developed to meet MDE and BD standards for discharge into sanitary or stormwater utility systems. In addition, concepts are being designed to provide protection from diesel fuel and other hydrocarbon leaks into the tunnel drainage system.

Response to Comment 5:
The Maryland Department of Transportation oversees comprehensive transportation planning for the State. Prior studies have been performed that evaluate the full network of rail corridors, especially those in and around the City of Baltimore. The study of the B&P Tunnel partly resulted from the identification of this Project as a critical component to the greater rail access plan.

A Maglev train would not utilize existing or planned Amtrak infrastructure. The design of such a system requires significantly different rights-of-way and infrastructure. The design criteria for Maglev are extremely restrictive and would only be achievable on new alignments.

Response to Comment 6:
Regarding the comment that Amtrak trains should be routed through improved track and tunnels along the existing B&P Tunnel right-of-way, this option was explored with Alternative 2. As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

COMMENTS

RESPONSES

Amtrak is in the early planning stages of developing a master plan for the future needs at Baltimore Penn Station (Amtrak, 2015). The plan will outline a series of incremental and phased improvements to the station facility and select land assets to guide the station's future development. The master plan will build off three studies: The Operations and Facilities Study, which will assess long-term operational and facility requirements for Baltimore Penn Station to meet growing capacity demands; the State of Good Repair Study; and the Commercial Development Study. Early coordination between the Project Team and Baltimore Penn Station representatives indicated that neither project would impact the other. Planned high level platforms at Baltimore Penn Station would not have any material effect on the alternatives considered for the Project.

Response to Comment 7:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am and 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am, and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are in **Chapter VI**.

The type of locomotive traveling through the tunnel is determined by the train service operator. As per the 2040 projections, of the 388 daily vehicles running through the tunnel, 222 will be electric (Acela, NE Regional, and Metropolitan), and 166 will be diesel (2 freight and 164 MARC). Please refer to **Chapter VI**, Section H for additional information.

Response to Comment 8:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that

COMMENTS

RESPONSES

corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Ventilations plants are necessary for public safety and would still be needed regardless of the type of energy used by vehicles in the tunnel. As described in **Chapter III** of the FEIS, the build alternatives would require three ventilation plants in order to meet current safety industry standards (NFPA 130), for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation plant is to pull fresh air into the tunnel and ventilate the tunnel air to the outside.

The economic market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 9:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore

COMMENTS	RESPONSES
	Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

COMMENTS

RESPONSES

DEIS Comment 33:

From: Kathryn Epple
To: BPTunnel Information
Cc: George Epple; Bill Lee; Kathryn Epple; "Kylis Winborne"; Laura Amlie; Mark F. West; Remington Stone; Russ Moss; Soledad Salame; Stephen & Rebecca Arthur
Subject: DEIS COMMENT
Date: Monday, February 15, 2016 4:16:42 PM
Attachments: Residents Against the Tunnel Position Paper.pdf

B&P Tunnel Project,

As feedback on the B&P Tunnel Draft Environmental Impact Study, I respectfully submit the Residents Against the Tunnels (RATT) position paper (attached) opposing the B&P Tunnel project as currently conceived.

Thanks for the opportunity to comment.

Kathy Epple
President, RATT

COMMENTS | **RESPONSES**

Subject: B&P Tunnel Position Paper

To: **B&P Tunnel Project**
81 West Mosher Street
Baltimore, MD 21217
Attn: Ms. Odessa Phillip, PE
Environmental Project Manager
Baltimore City Department of Transportation

Cc:
Governor Larry Hogan
Senator Benjamin Cardin
Senator Barbara Mikulski
Congressman Elijah Cummings
Mayor Stephanie Rawlings-Blake
City Council President Bernard "Jack" Young
Councilman Nick Mosby
State Senator Catherine Pugh
State Senator Shirley Nathan-Pulliam
Delegate Antonio Hayes, 40th District
Delegate Barbara Robinson, 40th District
Delegate Frank M. Conaway, Jr., 40th District
Environmental Protection Agency, Region 3
DHS, Transportation Security Agency (TSA)
Baltimore City Department of Planning, Attn: Chad Hayes, Kyle Leggs
National Resources Defense Council
National Trust for Historic Preservation
Maryland Historical Trust
Preservation Maryland, Attn: Margaret De Arcangelis
Baltimore City Committee for Historic & Architectural Preservation (CHAP)
Baltimore Heritage, Attn. Johns Hopkins
Baltimore National Heritage Area, Attn: Jason Vaughan
Chesapeake Climate Action Network, Attn: Jon Kenney
Maryland Department of the Environment
MD Attorney General, Department of the Environment, Attn: Asst. Attorney General Ellen W. Cohill
NAACP, Attn: Jacqui Patterson
NAACP Legal Defense and Educational Fund, Inc. (LDF), Attn: Sherrilyn Ifill
NAACP MD
Baltimore NAACP
National Action Network, Baltimore Chapter, Attn: State Senator Larry Young
ACLU of Maryland, Attn: Susan Goering
Baltimore City Public Schools
John Eager Howard Elementary School
Historic Mount Royal Terrace, Attn: Greg Grenier
Reservoir Hill Improvement Council, Attn: Rick Gwynallen, Eli Lopatin
Greater Mondawmin Coordinating Council, Attn: Jacqueline Caldwell
Coppin Heights CDC, Attn: Gary Rodwell, Gretchen Spell
Edmondson Avenue Historic District
Greater Rosemont Historic District
Baltimoreans United In Leadership Development (BUILD)
Friends of Druid Hill Park
The Maryland Zoo in Baltimore
St. Francis Neighborhood Center, Attn: Christi Green
Healthy Neighborhoods, Inc., Attn: Mark Sissman, Barbara Aylesworth
Community Law Center, Attn: Shana Roth-Gormley

1

COMMENTS

The Baltimore Sun
AFRO-American Newspapers
WBAL, Attn: Jayne Miller
WEAA, The Marc Steiner Show
WYPR, Midday, Attn: Sheilah Kast

From: **Residents Against the Tunnels**
608 Lennox Street
Baltimore, MD 21217

Board of Directors: Kathryn Epple (President), Remington Stone (Vice President), Stephen Arthur (Secretary), Laura Amlie (Treasurer), Bill Lee, Russ Moss, Soledad Salame, Mark West, Kylis Winborne

Date: 10 December 2015

Position: As residents of Reservoir Hill and adjacent impacted areas, while we understand the importance of improving Northeast Corridor passenger rail transportation, we strongly oppose construction of the B & P Tunnel Project in our neighborhood as currently proposed (Great Circle Line, Option 3: A, B & C) for the following reasons.

Background

There is a proposal to construct four new train tunnels, which would pass under Reservoir Hill and nearby neighborhoods. Reservoir Hill is a densely populated area, primarily residential, with approximately 5600 residents[1]. Reservoir Hill has been experiencing highly positive growth over the past few years.

The neighborhood is one of the largest areas of historic homes on the East Coast, consisting primarily of 2-3 story brick row houses, generally 100-150 years old. In addition to historic homes, there are large historic apartment buildings, a school, historic churches and synagogues, a large community farm, and various small businesses. The neighborhood is adjacent to Druid Hill Park, which includes the Maryland Zoo.

There is great concern among the residents of this area that the proposed rail tunnels will have negative effects on the neighborhood. Issues identified to date are listed below.

Proposal

1 A proposal is being studied to construct 4 parallel train tunnels under our neighborhood. (The original B&P Project plan called for the construction of 2 tunnels.) Each would include a single track, which could accommodate double-stack freight trains. These 4 tracks could enable a significant increase in the number of trains through Baltimore, particularly for freight trains. The depth of the tunnels would vary (estimates have included 40 feet to 100+ feet), approaching the surface under Mount Royal Terrace. In addition, one or more buildings would be constructed (100 feet by 200 feet by 5 stories) to vent the tunnels.

Safety and Freight?

Neighborhood residents want to feel safe in their homes, in their schools, in their places of worship, and in their streets. There are concerns about acute and chronic impacts from the rail tunnels.

2 With these new tunnels, there would be a potential for freight trains to transport hazardous materials or chemicals under our homes that could catch fire, explode, poison us, or serve as a target for terrorism.[2]

2

RESPONSES

Response to Comment 1:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

The build alternatives will have an average tunnel depth of 115 feet.

COMMENTS

We have already been informed by the B&P Tunnel Project that this could include hazardous materials, such as petroleum (crude oil), chemical (propane, chlorine, etc.), and nuclear products. We have been told that the number of freight trains would be "market-driven" and no limitations have been stated to restrict the type and amount of cargo or the time of day trains could traverse the tunnels.

2

There is rising concern across the country about dangers associated with rail transportation near populated areas of increasingly larger shipments of highly volatile crude oil from fracking (a.k.a., "bomb trains"). Construction of the train tunnels in this location would introduce a very serious risk for an explosion under our homes that could result in significant injury or loss of life and property.

The 2013 Lake Megantic, Quebec, crude oil explosion had a 1 kilometer diameter blast area, incinerated half of down town including a lake, burned for 36 hours, and resulted in 47 deaths. Based on the increase of crude oil transport (10K carloads of fracking oil in 2008; 5M carloads in 2014), the Department of Transportation estimates a similar disaster every 2 years.[3]



2013 Lac-Megantic, Quebec, Train Explosion

There would also be a risk of discharging dangerous chemicals/poisons from a spill or smoke from a fire or explosion through the vent buildings.

The 2001 Baltimore train derailment resulted in a chemical fire that burned for 5 days, spillage of 2500 gallons of hydrochloric acid, a shutdown of parts of the city, restriction of traffic into town, a broken water main, collapsed storm drains, disruption of U.S. Internet service for several hours due to damage of a major fiber optic Internet cable.[4]

3

There are also serious environmental concerns about the potential for constant pollution from unfiltered diesel exhaust being discharged through the vent buildings into the neighborhood. Emissions from trains would significantly further pollute air which already approaches ambient air quality standards due to dense population. The proposed vent building locations are in the heart of Reservoir Hill, immediately adjacent to the existing community farm and possibly replacing the Whitelock Street Park. The vent tunnel is also in proximity to John Eager Howard Elementary School, St. Francis Neighborhood Center, and Druid Hill Park. Exposure to dangerous diesel fumes could have a deleterious long-term effect on residents, especially those who are elderly or infirm. The 5-story vent structures that would release these pollutants are of an industrial scale that does not belong in a historic, residential area.

4

There is serious concern about structural damage and even possible collapse of houses or other buildings during or after tunnel construction, due to earth settling, flooding (water main collapse or the known presence of springs in the neighborhood), or earthquake, resulting in injury or loss of life. While largely parallel, we understand some tunnels may "duck under" others, so there could be more than one tunnel under some homes.

We believe it would be unconscionable to introduce this level of risk to this densely populated area.

Quality of Life

Reservoir Hill is a relatively quiet Baltimore city neighborhood, with low levels of traffic, except for city buses, which already shake our houses. There is minimal truck traffic, since this is a residential area. Our

3

RESPONSES

As described in **Chapter III**, **Section III** of the FEIS, the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

Response to Comment 2:

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

COMMENTS

proximity to Druid Hill Park increases the peaceful aspect of life in Reservoir Hill. For many of us, this was a major factor in deciding to purchase homes in Reservoir Hill.

5 The existing train tunnel consists of 2 tracks, which service 150 passenger trains and 2 freight trains per day. Given the 4 proposed new tunnels, there is an opportunity for a radical increase in the number of trains. We have been told by the B&P tunnel project that trains only need to be 2 minutes apart, so there could be 2 trains in each tunnel (8 under our neighborhood) at any given time. Due to physical separation of the tunnels (180'-200' or 1-2 blocks wide), there could be severe impacts to the quality of life throughout the entire neighborhood. This would be like living over top of a train yard!

6 We are deeply concerned about noise and vibration resulting from continuous train traffic under our homes. We believe this would disturb our lives, affect the quality of our sleep, and result in extreme stress. We awaken now from noise (vibration, screeching brakes, train whistles) associated with the current freight trains, which are much further away.

7 Most of our houses are 2-3 stories with basements; the original proposals cited tunnel depth that were less than the height of our houses and did not appear to account for basements! We are very concerned about the impact of inadequate tunnel depth, especially where the tunnels would begin to surface under Mount Royal Terrace. (Some reports indicate houses with basements could be as little as 10' above the top of a 32' tunnel ceiling, given a 50' depth from tracks to ground level.) We do not believe that any of the depths proposed would isolate us from intensive noise and vibration. Furthermore, there are no plans that we are aware of to stop trains at night to allow residents to sleep.

We are also concerned about noise from exhaust ventilation fans in the vent buildings, especially for homes in close proximity. In addition, we would be concerned about construction noise associated with this project.

No one wants trains, especially double stack freight trains, running under their homes.

Damage to Homes and Historic Impact

"Reservoir Hill has some of the best examples of Victorian, Italianate and Empire style homes in Baltimore. The housing stock features a wide variety of nineteenth century architecture, including ornate Victorian mansions overlooking the Druid Hill Park, brownstones, and the smaller brick row houses that characterize much of Baltimore. Part of Reservoir Hill is a historic district listed on the National Register of Historic Places. Although restoration efforts have brought new life to portions of the area, many houses are in poor condition."[5]

8 *"A section of Reservoir Hill is known as Mount Royal. It is just across North Avenue from Bolton Hill and close to the Jones Falls. It is generally contains very well preserved homes. A portion of this has been declared the Mount Royal Terrace historic district by Baltimore City. The Upper Eutaw Madison neighborhood is also designated as a historic district. It is located on the western side of Reservoir Hill. This neighborhood includes many grand houses on Eutaw Place and Madison Avenue, as well three large federal landmark apartment buildings, the Esplanade, Emersonian, and Temple Gardens, that are located directly across from Druid Hill Park on Madison and Eutaw. Beth Am, considered to be one of the city's most historic synagogues, is also in this neighborhood. The Emerson (Bromo Seltzer) Mansion is located on Eutaw Place, and Chauncey Brooks' mansion Cloverdale was once located in this area. The recently restored Gertrude Stein house on Linden Avenue is also on the National Historic Register."*[5]

There is great concern that damage to historic homes could occur during tunnel construction and over time from constant frequent train traffic, especially long freight trains consisting of double stack cars. There is the risk of damage to foundations; cracking or falling plaster, brick, tile work, fireplaces, and historic details; damage to personal property; loss of mature trees; and even house collapse. There are already building damage issues resulting from vibration from city bus traffic.

4

RESPONSES

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than an above-ground track running through the neighborhood The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

Response to Comment 3:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am and 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am, and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are in **Chapter VI**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality; emissions would fall within all acceptable federal air quality standards. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, which have been set to safeguard public health. Because the concentrations of NO_2 were modeled to be within acceptable levels, all other criteria pollutant concentrations would be within NAAQS, as NOx is the most strictly regulated air pollutant generated from diesel

COMMENTS

We are concerned about the possible condemnation and destruction of historic buildings 1) to construct one or more large vent buildings (100' x 200' x 55', 5 stories) to exhaust the tunnels, and 2) to permit the tunnels to surface under Mount Royal Terrace. Furthermore, we believe that a large 5-story vent building would not visually harmonize with the residential appearance of this historic neighborhood.

The Whitelock Street business district, which had become a drug marketplace, was demolished in the 1990s with the promise from Baltimore City of future redevelopment. Placement of the vent tunnel in the heart of the community on Whitelock Street would seriously inhibit prospects for redevelopment of this critical area.

9

We build beltways to keep traffic out of our cities. While we understand the importance of improving Northeast Corridor passenger rail transportation, we question doing so to the detriment of our long established and historic residential area.

Infrastructure

10

Throughout Reservoir Hill, gas lines, water mains, storm drains, and power grid systems are very outdated. We believe that construction of 4 tunnels under the neighborhood could jeopardize the integrity of city roads and the aging infrastructure.

Political Considerations

11

Reservoir Hill is part of the larger community that was recently stressed by the Freddie Gray tragedy and resulting riots. Reservoir Hill is in immediate proximity to Penn North and Sandtown-Winchester, and our neighborhood feeds Douglass High School, where the riots started. The B&P Tunnel Project proposes to run the 4 tunnels under all of these neighborhoods. There is a sense in the community that the B&P Tunnel Project would take advantage of a less politically empowered area to benefit the railroads, oil, and chemical companies at the expense (and risk) of the residents of our area, and at a time when the area is recovering from recent events.

> *"Institutional racism in the United States has profound impacts on who lives where, near what, and with how much exposure to risk. This week my organization, ForestEthics, partnered with our ally, Communities for a Better Environment, to release a report in which we analyzed who was at the greatest risk from oil trains in California. The risk in this case is both explosions (there have been five major derailment explosions in 2015 alone,) as well as the longer-term health impacts of diesel fumes and off gassing from these oil trains (they lose 1-3% of volume during transit via toxic gaseous emission).*
>
> *The results are stunning -- dark skinned and poorer communities received not just disproportionate risk, in some cities 100% of the risk from oil trains was borne by lower income people of color…*
>
> *Transporting millions of gallons of oil on mile-long trains through our cities, towns, alongside our water supplies, and through our forests is a kind of insanity. Doing all of this while saddling dark skinned and poor communities with most, or in some cases, all of the risk, is morally repugnant. It is time to ban oil trains."*[6]

Financial Loss

12

Over the past few years Reservoir Hill has become an increasingly viable neighborhood. We have seen many creative young people and families, who have great enthusiasm for living in Baltimore, move into the neighborhood. Some of this due is to the proximity not only to Druid Hill Park, but also to universities (MICA, JHU, U of MD, U of Balto.), cultural institutions (BMA, concert halls, theatres), and restaurants and entertainment (Station North, Hamden, and Remington).

5

RESPONSES

locomotive operation. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

The Project has assessed the existing air quality conditions for the Project Study Area. Any changes to air quality would be in accordance with the Clean Air Act and other applicable air quality regulations. The Project Team has compared emissions from diesel train traffic through the Study Area with and without a new tunnel. With additional trains made possible by the new tunnel, the net change in the emissions of VOC, NO_x, and $PM_{2.5}$ will occur, but would be below *the de-minimis* levels that were set to safeguard public health. The proposed Project would not result in adverse impacts to air quality due to operational emissions.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

Response to Comment 5:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated

COMMENTS

We believe that construction of these tunnels could reverse the growth of Reservoir Hill and result in financial loss to both home owners and the city. Safety and quality of life issues could result in the permanent departure of home owners and residents from the neighborhood, threatening this hard-won stability and eroding the city's tax base.

12 In fairness, the tunnels did not exist when we purchased our homes. Construction of train tunnels under our houses is likely to result in a substantial loss in real estate value for a large number of homes. We have been told by B&P Tunnel Project representatives to anticipate a forced loss of mineral rights, with limited compensation. No compensation for the loss of real estate value has been mentioned. It has been suggested that the real estate values of our homes may have already been impacted as a result of the B&P Tunnel study itself.

Ownership, Control, and Responsible Party

13 It has been stated that, due to the expense, which is estimated at $1B - $3B, it is not currently known who would ultimately own, control, and be accountable for the tunnel, and consequently be responsible and liable for property damage or disaster recovery. It has also not been stated what level of federal, state, and local funding will be applied to the project. These are issues of transparency that should be made clear.

Goals, Cost, and Benefit

14 The stated primary goal of this project is to increase train speed and improve the schedule for passenger trains. Current estimates cite an improvement of less than 30 seconds per train. We question the relationship of this project to any future plans to construct a Washington to Baltimore to New York maglev passenger line. Also, there has been little discussion by the B&P Tunnel Project of plans to increase the number of freight trains moving through Baltimore. Given that since the start of the project, the plan for 2 tunnels has increased to 4 with the newer goal of accommodating double-stack trains, we believe the real purpose (or at least a major secondary goal) of this project is to increase rail freight capacity through Baltimore.[7] It is questionable whether this would be the optimal route for freight since freight trains do not need to go to Penn Station. The B&P Tunnel would be an expensive project, the justification of which strains common sense, especially given that the goals of the project seem murky and the funding source and ownership are unclear. To the extent that government funds are used, the benefits to citizens and Baltimore City (as opposed to private corporations) should outweigh the cost.

Hazards of Freight

15 In particular, we strongly object to having unknown and unlimited quantities of potentially dangerous freight travel under this densely populated area. It would be wrong to expose our community to nuclear material, potential explosions, hazardous chemical spills, diesel pollution, and to create potential opportunities for terrorists. Based on experience from the 2001 Baltimore train derailment, Megantic Lake, and other disasters, as well as expert predictions, we believe this represents a very serious and statistically significant long term risk. Since there is no need to route freight to Penn Station, we request that, particularly for freight, other alternatives be considered with less potential to endanger human life.

Conclusion
The Reservoir Hill community is strongly opposed to this project as currently proposed for the reasons stated above. We question whether the current plan represents the best technical solution to carry passenger and freight transport forward well into the current century. We appeal to our representatives to stop this proposed construction of train tunnels under Reservoir Hill.

Citations:

1. 2010 Census

6

RESPONSES

displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 6:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

COMMENTS

2. "Dangerous Cargo: Hazardous Materials That Travel Through D.C.," Channel 4 NBC Washington, http://www.nbcwashington.com/investigations/Dangerous-Cargo-Hazardous-Materials-That-Travel-Through-DC-287852791.html
3. Sierra Club, July 7 2015, http://www.sierraclub.org/michael-brune/2015/07/oil-trains-lac-megantic
4. Wikipedia, Howard Street Tunnel Fire, https://en.wikipedia.org/wiki/Howard_Street_Tunnel_fire
5. Wikipedia, Reservoir Hill, Baltimore, https://en.wikipedia.org/wiki/Reservoir_Hill,_Baltimore
6. "What Do the Ferguson Movement, the Charleston Killings and Oil Trains Have in Common?", Todd Paglia, Huff Post, 7 July 2015, http://www.huffingtonpost.com/todd-paglia/what-do-the-ferguson-move_b_7722300.html
7. "Washington's rails, part 5: Unbottlenecking Baltimore," Matt Johnson, 14 September 2009, http://greatergreaterwashington.org/post/3467/washingtons-rails-part-5-unbottlenecking-baltimore/

7

RESPONSES

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

Response to Comment 7:
The build alternatives will have an average tunnel depth of 115 feet.

The three ventilation plant facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use.

Noise levels in the immediate vicinity of the ventilation plant buildings would be caused by the continual operation of the ventilation fans within each facility. The horizontal fans would operate periodically and would generate sound that would propagate through the louvers at the top of the ventilation facilities. Fans would operate periodically when NO_2 levels in the tunnel exceed a set threshold or in emergencies when smoke is present in the tunnel. NO_2 levels are likely to be highest when the level of diesel locomotive operations is highest, or when congestion causes trains to operate slowly or to idle in the tunnel. However, there is not enough information currently available to determine how many hours per day, on average, the fans would run and whether or not they would run during the night.

The Project sponsor will develop and implement a construction noise mitigation plan. The plan will include to the extent practicable:

- Location of construction equipment and material staging areas away from sensitive receptors where possible
- Temporary noise barriers and advanced construction of permanent barriers to serve during construction where possible
- Routing of construction traffic and haul routes along roads in non-noise sensitive areas.

Response to Comment 8:

COMMENTS

RESPONSES

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

Response to Comment 9:
As noted in Comment 3 above, the preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 10:
Construction of the build alternatives would cause major utility relocations such as that would extend significant distances outside of the tunnel portal areas. Utility locations would be identified as the Project advances and relocations would take place to permit the reconstruction to advance as quickly as possible with minimal inconvenience to those living adjacent to the work areas.

Response to Comment 11:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

COMMENTS

RESPONSES

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A

COMMENTS

RESPONSES

would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 12:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

When the Project enters the right-of-way phase, an evaluation would be done on each property to determine if compensation for mineral rights is appropriate. Appropriateness of compensation would likely be based on location of the property in relation to the tunnel.

Response to Comment 13:
Amtrak will be the owner and operator of the new Tunnel. Amtrak will coordinate with local responders, who receive training for a variety of incidents related to specific facilities, including the B&P Tunnel. The tunnel would be constructed to meet current standards for fire protection. Additionally, the Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan to be implemented in the event of a tunnel emergency.

Local, state, and federal officials would be involved in any disaster recovery efforts. Responsibility for damages would be established at that time.

The Baltimore Metropolitan Council and MDOT amended the Fiscal Year 2011 State Transportation Improvement Program (TIP) list to add federal funds to the 2011-2014 Baltimore Regional Transportation Board's (BRTB) TIP for the existing B&P Tunnel Improvement Project (TIP # 92-1101-99). The current state of the Project is funded through a High-Speed Intercity Passenger Rail (HSIPR) grant for preliminary engineering and NEPA analysis. The BRTB approved funding for the study on May 24, 2011 (Resolution #11-26).

COMMENTS

RESPONSES

No funding for Project Construction has been identified to date; federal funding sources will be made public at the time of award.

Response to Comment 14:
While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason that the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Please refer to Comment 1 regarding the change from 2 tracks to 4 tracks and the double-stack trains.

Response to Comment 15:
Per **Chapter V** of the FEIS, it is projected that in 2040, 388 trains are expected to use the tunnel—386 passenger trains with no hazmat cargo, and two freight trains with limited hazmat cargo (based on current freight volumes projected into the future). Notwithstanding this likely very low volume of hazardous materials in the tunnel, the new tunnels would be designed to optimize safety and modern standards. Amtrak and Norfolk Southern (NS) are anticipated to use existing fleets and newly acquired equipment in the tunnel. This equipment must meet federal standards for safe operations. In addition, the tunnel will be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and

COMMENTS	RESPONSES
	freight trains within the tunnel. The Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan, to be implemented in the event of a tunnel emergency. Tunnel drainage concepts are being developed to meet MDE and BD standards for discharge into sanitary or stormwater utility systems. In addition, concepts are being designed to provide protection from diesel fuel and other hydrocarbon leaks into the tunnel drainage system. Finally, as Amtrak is responsible for operating a robust passenger rail service, the two inner tracks of the four-track tunnel system will be reserved (in all but emergency conditions) for high-speed passenger train operations, and freight services will be restricted to share the two slower, outer tracks with MARC commuter rail trains. It is therefore not possible for the tunnel system to accommodate significantly increased freight operations.

COMMENTS

RESPONSES

DEIS Comment 34:

Brittany Rolf

From:	Kathryn Epple <'
Sent:	Thursday, February 25, 2016 11:26 PM
To:	BPTunnel Inform
Cc:	George Epple; Bill Lee; Kathryn Epple; 'Kylis Winborne'; Laura Amlie; Mark F. West; Remington Stone; Russ Moss; Soledad Salame; Stephen & Rebecca Arthur
Subject:	DEIS COMMENT
Attachments:	Further RATT On-line Petition Comments.pdf

B&P Tunnel project,

Here are additional comments from the on-line petition opposing the B&P Tunnel project.

Kathryn Epple
President, Residents Against the Tunnels

COMMENTS

RESPONSES

On-line petition

RATT
INCORPORATED
Residents Against the Tunnels

Oppose construction of the B & P Tunnel Project (Great Circle Line)

As residents of Reservoir Hill, we oppose construction of the B & P Tunnel Project (Great Circle Line) in our neighborhoods.

https://www.change.org/p/odessa-phillip-oppose-construction-of-the-b-p-tunnel-project-great-circle-line/c

Further comments as of 2/25/2016
134 people have signed the petition

1 The only alternative in the current DEIS which is worthy of recommendation is the "do nothing" alternative. That would allow a responsible reevaluation, hopefully as part of a holistic analysis, with the potential to arrive at an alternative which could gain the support of local residents while providing for world class rail service on the Northeast Corridor. The MTA Advisory Committee Proposal notes that, with their plan, they "ensure economical, integrated future expansion rather than haphazard, costly, inefficient, and ineffective, project focused expansion." (p. 12) That is their objective, that is my objective, and I hope the B&P Tunnel Project will conclude that they have erred in this regard to date and make it their objective.
James Floyd, Baltimore, MD

Response to Comment 1:
A "do nothing" alternative, known in this FEIS as Alternative 1: No-Build, does not meet the stated Project Purpose and Need. The Project was initiated because the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

The MTA Citizen Advisory Committee report (**DEIS Comment #11**) recommends a comprehensive planning approach for local, state, and regional rail that is beyond the purview of the B&P Tunnel Project.

COMMENTS

2 The tunnel and the ventilation plant will have dire consequences on the health of our neighborhood. I have a 4-month-old baby whose every breath would be contaminated by this project. We invested in this neighborhood because we love the community and see the long-term potential for this area. We wish the project leaders could share that vision.
Carlos Payes, Baltimore, MD

3 I am greatly concerned about the current plans to construct a tunnel beneath Reservoir Hill, particularly the proposed ventilation building to be built at Whitelock and Brookfield. This massive building would destroy the new community park and Whitelock Community Farm and endanger the health of residents by spewing toxic fumes from hundreds of diesel trains per day. An industrial building of this scale should not be built in a residential neighborhood. The current proposals are not acceptable and another solution must be found.
Justin Kuk, Baltimore, MD

4 I'm appalled that this proposal is even being seriously considered. With all of the investment that is taking place in Reservoir Hill today, it's unfathomable that planners could consider a proposal that would devastate public health, quality of life, property values and plans for future development. Imagine if Robert Moses had had his way in the West Village! We are facing a similar catastrophe in Reservoir Hill. There must be another way to solve this problem that doesn't ruin our lives. Prepare for a messy fight if you don't look harder for it.
Elizabeth Ryan, Baltimore, MD

5 I live in Reservoir Hill and believe the proposed tunnel project will be disastrous for our homes and safety, and does not provide an informed and appropriate plan for improving rail service. In addition, the proposal endangers historical districts and undercuts already stressed Baltimore communities of diversity and working class and low-income residents.
stephanie Hull, Baltimore, MD

6 I'm signing because I strongly oppose the construction of a gigantic and hazardous tunnel in the middle of my residential neighborhood. I have heard that there are many other options that would avoid this tunnel being built in our neighborhood, that BP Tunnel is not considering because of how much it would cost for them. This is unacceptable. Our community will not allow this to be built.
Sarah Edelsburg, Baltimore, MD

RESPONSES

Response to Comment 2:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

During the study a total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 5:
Rail service improvements are detailed within the FEIS; furthermore, while improving rail service is a goal of the Project, it is not the sole reason the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically

COMMENTS

RESPONSES

disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 6:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

COMMENTS

RESPONSES

DEIS Comment 35:

From: Kathryn Epple
To: BPTunnel Information
Cc: George Epple; Bill Lee; Kathryn Epple; "Kylis Winborne"; Laura Arnie; Mark F. West; Remington Stone; Russ Moss; Soledad Salame; Stephen & Rebecca Arthur
Subject: DEIS COMMENT
Date: Monday, February 15, 2016 4:33:38 PM
Attachments:

B&P Tunnel Project,

Please find attached copies of petitions opposing the B&P Tunnel project, which are being submitted as feedback on the B&P Tunnel Draft Environmental Impact Statement.

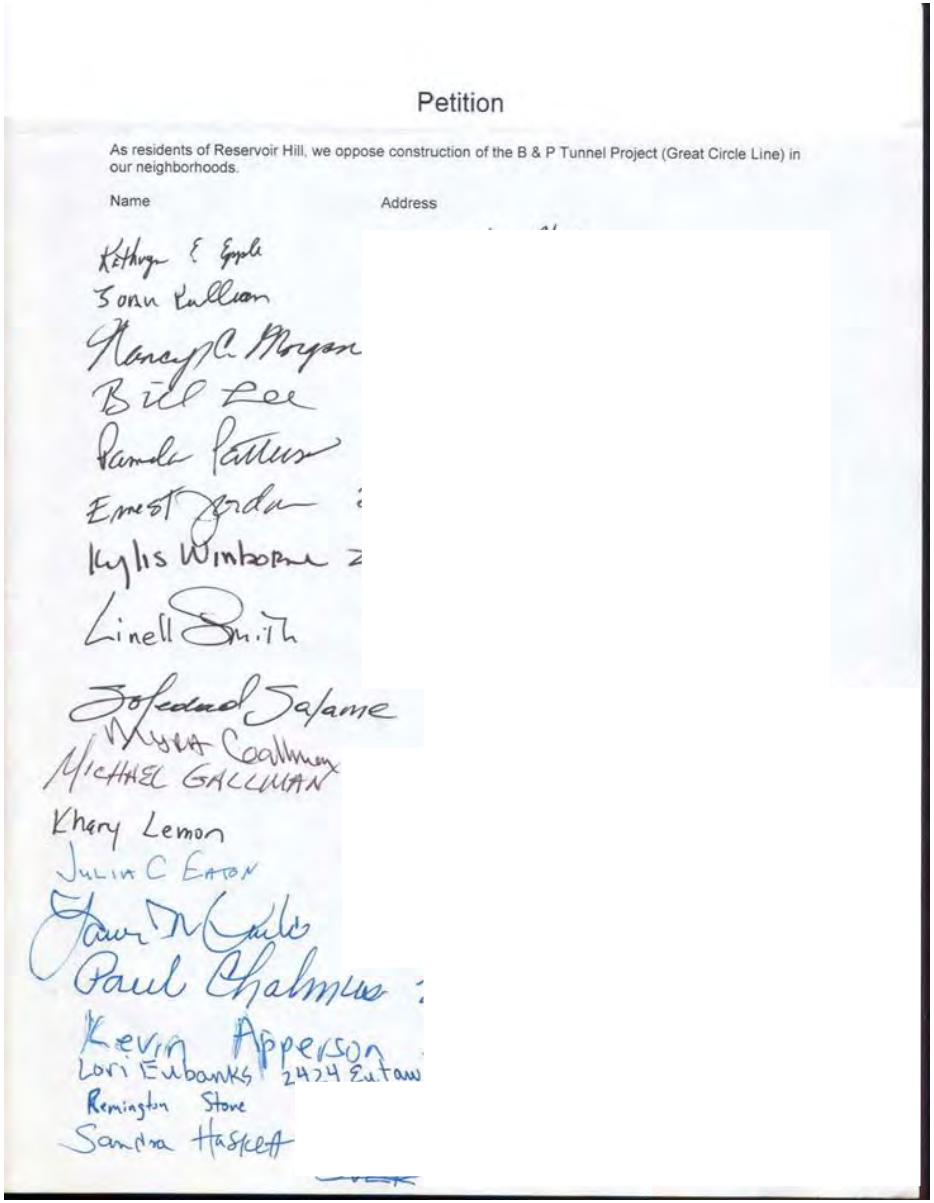
The first 6 attachments are softcopy versions of hardcopy petitions. The originals can be made available on request.

There is also an on-line version of the petition at https://www.change.org/p/odessa-phillip-oppose-construction-of-the-b-p-tunnel-project-great-circle-line. As of today, 123 people have signed it. Comments from people who have signed the on-line petition are included in the last attachment.

Kathy Epple,
President, Residents Against the Tunnels

Thank you for your comment. We have reviewed the petition and the signatories.

COMMENTS



Petition

As residents of Reservoir Hill, we oppose construction of the B & P Tunnel Project (Great Circle Line) in our neighborhoods.

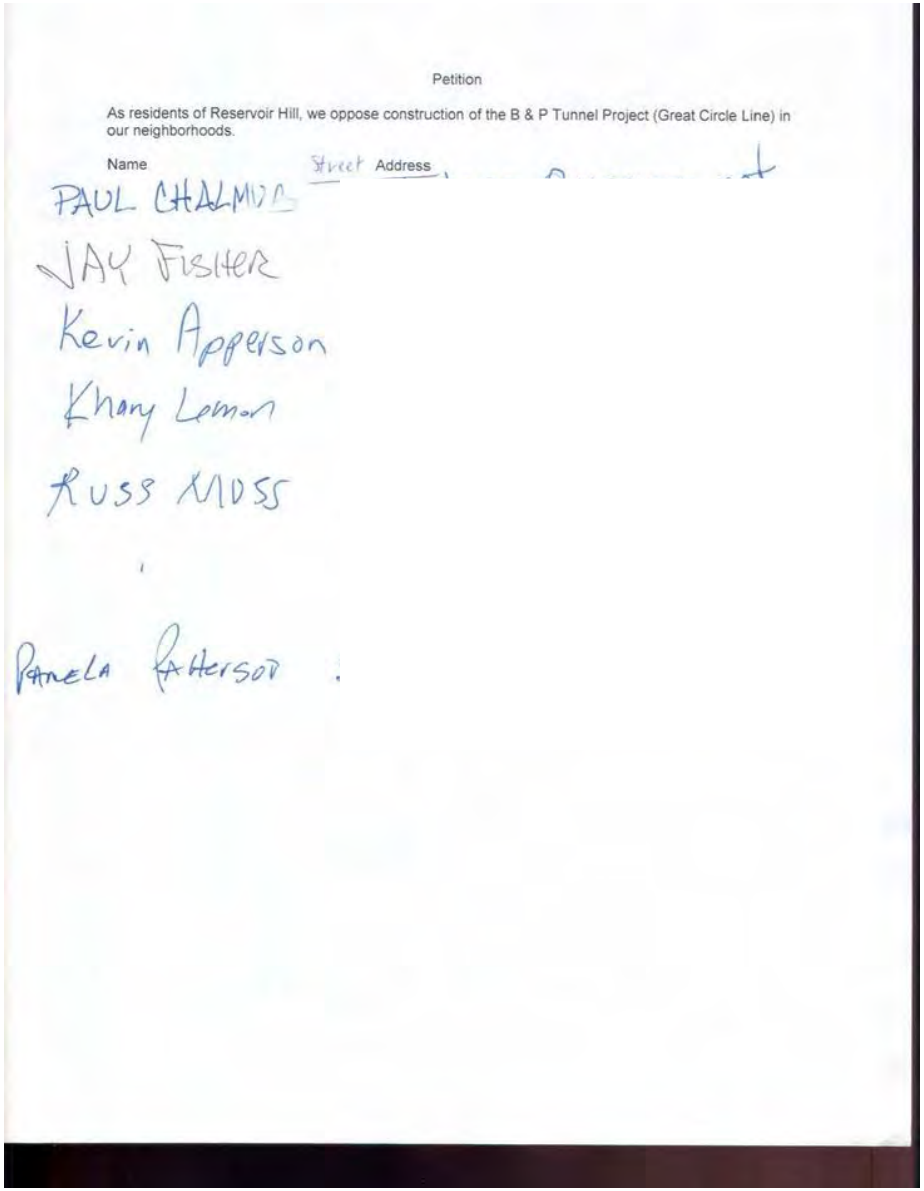
Name Address

Kathryn E Epple
Joann Sullivan
Nancy A. Morgan
Bill Lee
Pamela Patterson
Ernest Jordan
Kylis Winborne
Linell Smith
Soledad Salame
Myra Coalman
MICHAEL GALLMAN
Khary Lemon
JULIA C EATON
Paul Chalmers
Kevin Apperson
Lori Eubanks 2424 Eutaw
Remington Store
Sandra Haskell

RESPONSES

COMMENTS

RESPONSES



Petition

As residents of Reservoir Hill, we oppose construction of the B & P Tunnel Project (Great Circle Line) in our neighborhoods.

Name Street Address

PAUL CHALMUS

JAY FISHER

Kevin Apperson

Khary Lomon

RUSS MOSS

PAMELA PATTERSON

COMMENTS

TUNNEL PETITION

As many of you know, the city of Baltimore has proposed placing train tunnels under our houses to carry dangerous chemicals, therefore endangering our lives, including the lives of people from babies to adults. The city is also proposing placing a large ventilation plant in the center of our gorgeous neighborhood. We believe that it is not right. If you agree, please take a stand and sign this petition.

Thank You!!!
Eliyah (age 10) and Shamir (age 8)

NAME	SIGNATURE	ADDRESS	EMAIL	Child? Yes or No
Robert Walker	Robert Walker			no
Carol Scruggs	Carol Scruggs			No
Kimberly Williams	Kimberly Williams			
Bijan Glenn	Bijan Glenn			NO
G. Ragsdale	[illegible]			NO
Joshua Sorg	[illegible]			Yes
Geri Ford	[illegible]			No
Kristen Massey	[illegible]			No
Tracy Royster	[illegible]			Yes
Lorenzo Maxwell	[illegible]			No

RESPONSES

COMMENTS

NAME	SIGNATURE	ADDRESS	EMAIL	Child? Yes or No
GILDA BAIN-PEW	[illegible]			
ROXANNE REED	[illegible]			NO
Alex Viang	[illegible]			No
Margaret Stansbury	[illegible]			
CAROLYN WALTON	Carole Walt			YES ~~NO~~
Karen Brown	[illegible]			NO
Frances Hunt	Frances Hunt			
GRES DEAN	[illegible]			NO
David Brown	[illegible]			NO
Mel Dell	[illegible]			NO
Jas	[illegible]			
Conlene Smith	Conlene Smith			NO
Jeanette Snowden	Jeanette Snowden			YES
Abbi Weaver	Abbi Weaver			yes
Joel Weaver	Joel Weaver			yes
Sadie Baker	Sadie Baker			
COURTNEY CULLEY	[illegible]			NO
Cecilia Pessoa	[illegible]			NO
Whitney Birenbaum	[illegible]			Y

RESPONSES

COMMENTS

TUNNEL PETITION

As many of you know, the city of Baltimore has proposed placing train tunnels under our houses to carry dangerous chemicals, therefore endangering our lives, including the lives of people from babies to adults. The city is also proposing placing a large ventilation plant in the center of our gorgeous neighborhood. We believe that it is not right. If you agree, please take a stand and sign this petition.

Thank You!!!
Eliyah (age 10) and Shamir (age 8)

NAME	SIGNATURE	ADDRESS	EMAIL	Child? Yes or No
Bonnie Guralnick	Bonnie Guralnick			no
Shamir	Shamir Burg			yes
Eliyah	Eliyah			yes
Kathleen	[illegible]			no
Kim Gaeman	[illegible]			NO
Elaine Weiss	E Weiss			No
Lisa Akcha	[illegible]			NO
Margaret Scott	Margaret Scott			yes
Dave Burg	[illegible]			no
Alyson Bonavoglia	[illegible]			No

RESPONSES

COMMENTS

RESPONSES

NAME	SIGNATURE	ADDRESS	EMAIL	Child? Yes or No
David Wittenberg				Yes
Megan Ferguson				NO
Ray Kelly				NO
Barbara Blumberg				NO
Justin Kuk				No
Leah Doig				No
B. Cole				No
Aisha Pew				No
Edward				No
[illegible]				NO
Ashley Pressman				
Delegate				NO
Joyce Richardson				No
Alisa Engsberg				No
Sarah Tupper				No

COMMENTS

DEIS Comment 36:

2/15/2016

Residents Against the Tunnels (RATT)
On-Line Petition

https://www.change.org/p/odessa-phillip-oppose-construction-of-the-b-p-tunnel-project-great-circle-line

Odessa Phillip: Oppose construction of the B & P Tunnel Project (Great Circle Line)
by Residents Against the Tunnels · 123 supporters

Comments:

1 As a homeowner in Reservoir Hill, this will be the beginning of the end of these 100+ year old homes and the neighborhood as a whole.
Denise Doldron Oliver, Winter Park, FL

2 I'm signing this petition because this tunnel will ruin the future of Reservoir Hill and destroy the future of our children, who are the futuresult for this city and the country. Please don't do it.
Robyn Williams, Baltimore, MD

3 I'm against it
Robert Pruden, Baltimore, MD

4 I believe the tunnels will have a negative impact on the structure of the homes and streets and the city will not take responsibility for it
Atiya lemon, Baltimore, MD

5 I oppose construction of the B & P Tunnell Project in the community at large and the devastation in the longrun health wise it will have on its people and properties.
Pamela patterson, Baltimore, MD

6 There are numerous reasons why this is bad, but one which many people are not talking about is race and class. Here are the neighborhoods directly affected by the construction of the tunnels, and the corresponding percentage of the population who are black: Sandtown-Winchester/Harlem Park (97%), Upton/Druid Heights (94%), Reservoir Hill (91%), and Bolton Hill (32%, Note: the spatial layout of Bolton Hill has the train going through the northern portion of the neighborhood, near North Avenue where minority residence is higher). Minority neighborhoods in inner-city Baltimore have been victimized over and over again by "urban renewal" projects and transportation construction which disadvantage residents and pose significant health risks. These communities have comparatively small population numbers (due to histories of white flight, deindustrialization, etc.) which results in limited political influence. By routing new trains through these neighborhoods, the quality of life for residents will be further diminished and the pollution from these trains will contaminate the air. And who is the B&P Tunnel asking to bear the brunt of these changes? Largely, low-income black residents. We need to stop another Flint before it happens, and end the systemic degradation of minority populations for the benefit of wealthy, white populations and corporations. This is something that can be changed.

There is a public hearing Wednesday, February 17 from 5 to 8pm at Carver Vocational-Technical High School. Please go and speak out on this and encourage others to do so as well.

RESPONSES

Response to Comment 1:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

Response to Comment 2:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 3:
Thank you for your comment.

Response to Comment 4:
For information about potential Project impacts on the community, please see Response to Comment 2.

Response to Comment 5:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

COMMENTS

http://www.bptunnel.com/
SAMANTHA HAWKINS, Halethorpe, MD

7 I value Baltimore's historic neighborhoods and quality of life.
Dianne Wheaton, Baltimore, MD

8 I love and value this beautiful neighborhood of ours, and I don't want to see the foundations of our hundred-plus year old homes destroyed. I worry that this tunnel will alter the value of our home and the homes of our neighbors, create noise and air pollution, and negatively alter the quality of our lives. I do not support the tunnels.
Barbara Bourland, Baltimore, MD

9 I live in the historic neighborhood of Mount Royal Terrace and I strongly oppose the tunnel project for obvious reasons. I think it will impact the environment in our neighborhood, possibly damage historic properties,create noise pollution, and generally lower the quality of life in Reservoir Hill.
Lauren Ross, Baltimore, U.S. Outlying Islands

10 I am worried about my neighborhood, its residents and the quality of life we have to look forward to. We have worked so hard to bring this neighborhood back, and then something like this happens. It is beyond belief.
Jayj Fisher, Baltimore, MD

11 This will destroy the gas and water mains under the sidewalks.
Eve Golden, Lyndhurst, NJ

12 I was a resident of the Reservoir Hill ate a of Baltimore for years, and loved it. To damage these historic homes and build a vent tower next to an elementary school is a dreadful choice. This will irreparably damage the area and cause health problems. Please, come up with a better solution.
keith greene, Ithaca, NY

13 It's not routed under Roland Park or Ruxton
Joseph Bullen, Glen Burnie, MD

14 NO TUNNEL
Matthew Papich, Baltimore, MD

15 I believe it is wrong to expose people to the hazardous materials that these trains will be transporting under densely populated areas.
Sandra Marani, Baltimore, MD

16 I'm concerned about the safety and well being of the Baltimore residents located above the proposed tunnels
Rima Namek, Baltimore, MD

17 I care about the health and well-being of neighborhood residents.
Jennie Hirsh, Philadelphia, PA

RESPONSES

Response to Comment 6:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

COMMENTS

18 I'm concerned about the safety and well being of the Baltimore communities located above the proposed tunnels.
Dianne Rohrer, Baltimore, MD

19 I work in Reservoir Hill with 50+ children who would be affected by having a large vent spewing toxins in the air. This would greatly hurt the after school programming just across the street.
Torbin Green, Baltimore, MD

20 This tunnel could severely effect the health and well being of the residents. We already have train and Metro tunnels, How many holes does it take?
Joyce Scott, Baltimore, MD

21 This is just so wrong for everyone who lives in this area.
Pam Phillips, Glyndon, MD

22 I have concerns about the construction phase of these proposed tunnels and what potential damage could be caused both below and above ground. These projects often don't take into account the impact on old historical buildings - our homes - nor do they address noise, vibrations, and inconvenience. The proposed vent or vents also can only mean venting of questionable air into our front and backyards and into our gardens and our open windows. I wish an easier better solution existed because I am not opposed to better rail service but going under a 100 plus year old community that is only recently making a strong comeback doesn't seem to be the right answer.
Michael Felner, Baltimore, MD

23 The severity of potential damaging impacts are not fully known nor have been addressed. The level of analyses required will not occur until AFTER an alternative has been selected, and a Final Environmental Impact Statement (FEIS) is approved. There will be no opportunity for community redress of any impacts revealed...or not...resulting from the selected "locally preferred alternative", since it will only be fully engineered during the final design stage. The real concerns expressed by the Residents Against the Tunnels community opposition group and fellow petitioners are justified for the State of Maryland and the Federal Railroad Administration to reject any of the current alternatives for approval to move into the FEIS planning stage - unless all of the alternatives are fully analyzed for mitigation and/or avoidance of ALL environmental impacts at a 100% engineering level.
lorenzo bryant, baltimore, MD

24 We have lived on Reservoir Street for more than 30 years now and have never regretted it. However, we bought the house with a title that has a section disavowing any possible future damage from the tunnel that was drilled under it in great secrecy in the opening years of WWII. These things have long-term effects and the survey crew that came out recently was totally unaware of the old tunnel. What other mysteries will they hit? The vibration from drilling new tunnels will have unknown effects on the fabric of our fine old houses. What residential neighborhood would want a massive venting tower spewing unknown fumes into our air? Located right in the middle of the highly successful and transformative urban farm, no amount of lipstick is going to dress up that pig. When we lived in Charles Village before here, we washed our garden veggies in vinegar in hopes of removing the lead spouting from all the traffic racing down adjacent 33rd Street. Accepting that the existing tunnels cannot be expanded and that new tunnels must be built, why can't they go under the commercial district of North Avenue, affecting homeowners less, with the venting tower integrated into a renewed streetscape there? We need to borrow Barbara Mikulski to protest what is most likely going to be a disaster paralleling what

RESPONSES

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 7:
Thank you for your comment.

Response to Comment 8:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

COMMENTS

almost happened to Fells Point decades ago. Many people have invested their lives in this neighborhood and it is now on a healthy upswing. The future will surely condemn the planners and politicians who might force this folly through. It must be stopped, if not to save their reputations in history, in order to save our homes and beautiful neighborhood.
Larry Schaaf, Baltimore, MD

25 The proposed tunnels would run directly under my house. Residents of 21217 area live in a section of the City that is plagued by the worst deterrents of health and social disparities.Placing these tunnels here would increase health disparities tremendously. Additionally,
Sandra Haskett, Baltimore, MD

26 I'm against the tunnel project running through my neighborhood. Run it through "Bolton Hill". That was a proposed site. What ever reasons those residents didn't want it in their community are the same reasons that I don't want it in mine. Those 4 proposed tunnels run DIRECTLY.....DIRECTLY under my house. My well is well over 100 YEARS OLD!!!! I don't know what damages can occur to MY HOME during construction. I don't need the noise nor the vibration of the construction or the vibrations from the additional trains that are proposed to use those tunnels. .....and that monstrosity of an air-vent that is also proposed I'm also opposed! Who needs that eye-sore in their neighborhood; with that additional noise.....what about the pollution from that exhaust and/or the hazardous vapors from some of the hazardous materials that the additional freight trains WILL BE CARRYING. How come those projects aren't being constructed in GUILFORD, ROLAND PARK, MT. WASHINGTON, DULANEY VALLEY!! It's awfully funny that the area for these proposed tunnels are predominantly BLACK! What about that tunnel accident that occurred a few years back? Who wants the possibility of that in occurring in their neighborhood. Take your tunnel project out in the county somewhere!
Paul Chalmus, Baltimore, MD

27 I'm signing because I am a home owner in this neighborhood and I value the community.
Lynell Sanderson, Baltimore, MD

28 I am very concerned with the impact on this residential neighborhood.
Martin Cadogan, Baltimore, MD

29 I am against running tunnels under Reservoir Hill. There are better options that won't disrupt neighborhoods.
Helen Beckstrom, Baltimore, MD

30 I'm signing because, I don't want the tunnels running through my neighborhood as I believe it will be a health hazard a noise hazard among various other things
Richard Pazornik, Baltimore, MD

31 I am directly affected as I live in the neighborhood that will feel the most impact. This project along with the changes the Department of Water and Power are doing to the Reservoir negatively impact a neighborhood that is getting back on its feet. With the proposed treatment facility on Druid Hill Dr. between Brookfield and Lakeview and the Vent Plant across the street from Whitelock farms - it will cause additional residents and potential residents to rethink their choice to live in the neighborhood. The Vent plant will negatively impact Whitelock farms just when they have acquired access to that parcel to farm on it. This amenity serves more than just the immediate neighborhood. I hope that Big Bro. listens to the people this time.

RESPONSES

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

Response to Comment 9:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-

COMMENTS	RESPONSES
Ryan Jordan, Baltimore, MD	
32 I do not want a wasted opportunity for actual grow and recovery in my community to be taken by a MASSIVE building that will just continue to be an eye sore. This city can never seem to catch a break. ashe smith, baltimore, MD	
33 This is another offense against a community that had been continually overlooked by the city administration, which should be protecting its citizens, not getting a source of further struggle. Katherine Merrill, Brooklyn, NY	
34 I am against the tunnels under Reservoir Hill. Erin Scott, Joppa, MD	
35 This proposed tunnel runs RIGHT UNDER MY HOUSE! I do not want damage to the integrity and structure of my historic home. STOP THE TUNNEL. Lauren Haney Provost, Baltimore, MD	
36 I am against the tunnels under Reservoir Hill. Christina Green, Baltimore, MD	
37 I love my historic neighborhood. As a realtor when I was looking to buy a home this was the Best option. The construction and preservation of the community is unserpassed. I believe the tunnels would ruin our community. Vandessa Day, Baltimore, MD	
38 This will ruin our neighborhood and impacts a population that has been disadvantaged for decades. Katherine Ziombra, Baltimore, MD	
39 I own and reside at 2406 Madison Ave, 21217. I do not support this project as a result of structural concerns this may present to my home as well as the impact the project will likely have to this historic neighborhood. Graham Provost, Baltimore, MD	
40 The houses in this area were built when horse and carriage transportation was the norm. I am a contractor working in this area the footings were not engineered for this type of constant activity. I have seen many homes damaged or destroyed with less intrusion than tunneling. George Waldhauser, Fallston, MD	
41 My friends are being affected. Lina Vincent, India	
42 I'm signing this petition as a resident of this great neighborhood and as a structural engineer. The construction of the tunnels will have a negative effect on the property values in a neighborhood that is constantly struggling to improve the quality and value of the housing stock. As an engineer, I understand the potential damage that can come from commencing projects such as this one. Most, if not all of the homes in Reservoir Hill are over 100 years old and constructed of brick. The vibrations from construction could cause potential damage to the structural stability of the homes. Also the unknown nature of the	construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs. For information on environmental impact, please see Response to Comment 2. The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS. **Response to Comment 10:** Thank you for your comment. **Response to Comment 11:** Utility relocations requires effort to remove, handle, and dispose of materials. Since construction of the build alternatives would cause major utility relocations that would extend significant distances outside of the tunnel portal areas, utility locations would be identified as the Project advances and relocations would take place to permit the reconstruction to advance as quickly as possible with minimal inconvenience to those living adjacent to the work areas. **Response to Comment 12:** The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs. The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock

COMMENTS

chemical traveling through the tunnels causes me great concern. God forbid chemicals leach out into the subsoils. This could cause great harm to the groundwater supply and could have serious impacts to the ecosystems in the area.

43 I do not support the construction of the tunnel under my home.
Heather Macon, Baltimore, MD

44 I'm opposed to creating a tunnel that will carry toxic substances under residential areas.
Christine Neill, Baltimore, MD

45 I believe this project was conceived incorrectly , many safety questions have not been addressed and ultimately it is a complete irresponsibility to our community health and environment. I oppose alternative 3A,3B,3C
soledad
soledad salame, Baltimore, MD

46 The proposal to contaminate our community with debris and chemicals from underground tunnels is a slap in the face to residents of Baltimore!
William Lee, Baltimore, MD

47 I moved to Reservoir Hill with my young family in 2009 because we were attracted to its diverse community, historic homes, and the efforts the community was undertaking to improve the lives of all its residents. It disappoints and angers me that these improvements would be endangered so that Amtrak commuters could shave 3 minutes off their commute and giant corporations can transit their hazardous materials below our literal and figurative foundations. The fact that the most favored route just happens to correspond to our more socio-economically depressed neighborhood is not coincidental, as the project research itself acknowledges. I am certain that great engineering minds are capable of more creative and humane alternatives to transportation than the proposed routes.
Aimee Hickman, Baltimore, MD

48 We lived on Linden Avenue since 2007, in a previously blighted, abandoned house we lovingly restored over the course of two years. This will absolutely set back the progress we have made in reservoir hill, restoring the property values and community vitality over the course of the last ten years. The St. Francis Center is an invaluable resource to in the community - especially the children and families - that needs to grow, and Whitelock Farm is absolutely vital to bringing desperately needed fresh food to our neighbors and beyond. This project will be disastrous for the health and safety of our community, not to mention the impact it will have on surrounding property value. Please hear the voice of the community and consider alternatives.
Olga Brand, Baltimore, MD

49 This proposal threatens the health, life and property of many people.
susan taylor, greenbelt, MD

50 I am signing this because I understand how construction and operation of the tunnel(s) will negatively impact the residents. These fragile and historic homes will be damaged from the vibration during both construction and operation of the train tunnel(s). Because this neighborhood has residents that cannot afford the repair of significant damage to their homes that it will cause blight to the neighborhood

RESPONSES

Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 13:
Thank you for your comment.

Response to Comment 14:
Thank you for your comment.

Response to Comment 15:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for

COMMENTS

50 already at risk. The number of trains estimated to use the tunnel(s) will cause almost constant low frequency vibration which will be very destructive to the fragile homes.
Mark Reinhart, Charles Town, WV

51 This project endangers our safety, structural stability, air quality, and kills the heart of our neighborhood. It is also a dishonest presentation focusing on passenger service and minimizing or denying the freight aspect.
Laura Amlie, Baltimore, MD

52 FIRST, we see the proposed project as a clear example of an abuse of social justice.
- The routing of these trains clearly targets poor and minority neighborhoods and avoids more affluent neighborhoods.

SECONDLY, My neighbors and I rely on our homes as a major element of our financial security.
- We believe this project will seriously devalue our properties and take money from all Reservoir Hill residents who have worked long and hard to make our neighborhood a desirable place to live.

THIRDLY, Our homes are directly above the tunnel pathways the average home is 100 years old. They are built of soft, low-fire bricks, limestone, sandstone and marble are quite FRAGILE.
- Every resident will verify that our houses all shake every time a truck or buss pass by.
- We fear that we will experience irreversible damage , first from the construction vibration, then from the long term deterioration from the 338 trains that are estimated to pass under our homes every day?

FOURTH , We need a list of exactly what hazardous, toxic, flammable and explosive materials may be passing through the tunnels?
- And, given the history of disasters in Baltimore's existing tunnels, with only two frieght trains a day, how many emergencies are predicted when, by 2040, traffic is increased to 338 trains a day?

FIFTH, If the tunnels are 2 mile long and we multiply those 338 trains running through them daily by two, this equates to generating a toxic cloud from 776 miles worth of diesel exhaust every day.
- A major portion of this dangerous cloud will be discharged, through the Whitelock street vent.
- The footprint of the gigantic vent building, located in the very heart of our neighborhood will destroy most of our much- loved, neighborhood center, park and farm.
- The vent will be like a gigantic, noisy, exhaust pipe that will overshadow & overcloud all Reservoir Hill.
- The emissions will compromise air quality , especially for the nearby John Eager Howard Elementary School, St. Francis Neighborhood Center and the historic Gertrude Stein Retreat house

SIXTH, What steps are being taken to ensure that the vent meets all relevant air quality and human health and safety standards?
- What constant air quality monitoring signs, and emergency alarm systems will be put in place to inform and protect us?

We have submitted a more complete printed list of questions, NONE of these questions have been answered to our satisfaction.

IN SUMMATION, While we fear that the air quality of this vent may physically erode the structures of our existing homes, we fear even more what the construction of this project will do to our sense of security, to our physical health, and to the community we have worked so hard to create.

RESPONSES

specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 16:
Thank you for your comment.

Response to Comment 17:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 18:
Thank you for your comment.

Response to Comment 19:
Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

Response to Comment 20:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 21:
Thank you for your comment.

COMMENTS

- We do not want these tunnels running under our inner city homes?
Mark West, Baltimore, MD

53 I am signing this petition because will be a dangerous detrimental to our community in many ways, including safety, health, quality of life and property values. It is another bigoted way of expressing.... black community's, working class community's lives don't matter!
Russ Moss, baltimore, MD

RESPONSES

Response to Comment 22:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take

COMMENTS

RESPONSES

place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

Response to Comment 23:
For information regarding potential environmental impacts, please see response to Comment 2.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

Please see **DEIS Comment #34** for the Residents Against the Tunnel (RATT) official comment and response.

COMMENTS

RESPONSES

The Project has undergone a detailed Alternatives Analysis as part of the Environmental Impact Statement process. As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 24:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within

COMMENTS

RESPONSES

acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

A total of 16 preliminary alternatives were identified in the B&P Tunnel Project process. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

As described in **Chapter III** of the FEIS, the the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

Response to Comment 25:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

For information regarding disparate impact and environmental justice communities, please see Comment 6.

Response to Comment 26:
No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

COMMENTS

RESPONSES

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA '*frequent'* impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take

COMMENTS

RESPONSES

place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/sec., which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

For information regarding freight trains and hazardous material, please see Response to Comment 15.

For information regarding disparate impact and environmental justice communities, please see Comment 6.

Response to Comment 27:
Thank you for your comment.

Response to Comment 28:
Thank you for your comment.

COMMENTS

RESPONSES

Response to Comment 29:
Thank you for your comment.

Response to Comment 30:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

Response to Comment 31:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 32:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce

COMMENTS

RESPONSES

environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 33:
For information regarding disparate impact and environmental justice communities, please see Comment 6.

Response to Comment 34:
Thank you for your comment.

Response to Comment 35:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 36:
Thank you for your comment.

Response to Comment 37:
Thank you for your comment.

Response to Comment 38:
For information regarding disparate impact and environmental justice communities, please see Comment 6.

Response to Comment 39:
For information on the impact of vibration on foundations of both historic and modern homes, please see Response to Comment 35.

COMMENTS

RESPONSES

For information regarding impacts to the Historic District, please see Comment 1.

Response to Comment 40:
For information on the impact of vibration on foundations of both historic and modern homes, please see Response to Comment 35.

Response to Comment 41:
Thank you for your comment.

Response to Comment 42:
The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

For information on the impact of vibration on foundations of both historic and modern homes, please see Response to Comment 4.

For information regarding freight trains and hazardous material, please see Response to Comment 15.

No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

Response to Comment 43:
Thank you for your comment.

Response to Comment 44:
For information regarding freight trains and hazardous material, please see Response to Comment 15.

Response to Comment 45:
For information regarding freight trains, hazardous material, and safety, please see Response to Comment 15.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns. For information regarding potential Environmental Impacts, please see Comment 2.

COMMENTS

RESPONSES

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Response to Comment 46:
For information regarding freight trains and hazardous material, please see Response to Comment 15.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 47:
Rail service improvements are detailed within the FEIS; furthermore, while improving rail service is a goal of the Project, it is not the sole reason the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

For information regarding disparate impact and environmental justice communities, please see Comment 6.

A total of 16 preliminary alternatives were identified in the B&P Tunnel Project process. **Chapter III** of the FEIS details the basis of elimination or retention for each Alternative.

Response to Comment 48:
The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 49:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

For information regarding potential Environmental Impacts, please see Comment 2.

Response to Comment 50:
For information on the impact of vibration on foundations of both historic and modern homes (as well as planned mitigation for impacts), please see Response to Comment 35.

Response to Comment 51:
To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA).

Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project

COMMENTS

RESPONSES

Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

For information regarding potential Environmental Impacts, please see Comment 2.

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Response to Comment 52:
For information regarding disparate impact and environmental justice communities, please see Comment 6.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

For information on the impact of vibration on foundations of both historic and modern homes (as well as planned mitigation for impacts), please see Response to Comment 4.

To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that

COMMENTS

RESPONSES

corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Analysis of ventilation plant emissions included an air dispersion modeling analysis, which followed the latest US Environmental Protection Agency modeling guidelines for predicting air quality effects for regulated pollutants. The results of the analysis were compared to the stringent 1-hour NO_2 National Ambient Air Quality Standards (NAAQS) of 100 parts per billion (ppb) as opposed to the annual standard of 53 ppb. Emission studies have demonstrated that if NO_2 concentrations are maintained within acceptable levels, then other pollutant concentrations associated with diesel exhaust emissions will also be within acceptable limits. The maximum predicted 1-hour NO_2 concentration from the three ventilation facilities as well as north and south portals was 12.8 ppb. When added to the NO_2 background concentration of 51 ppb, the total predicted 1-hour concentration amounted to 63.8 ppb, which is below the NAAQS of 100 ppb. The maximum predicted 1-hour NO_2 concentration of the intermediate ventilation plant is 2.9 ppb and when combined with NO_2 background concentration of 51 ppb the total NO_2 concentration would be 53.9 ppb, below the NAAQS threshold limits of 100 ppb.

The three ventilation plant facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use.

Noise levels in the immediate vicinity of the ventilation plant buildings would be caused by the continual operation of the ventilation fans within each facility. The horizontal fans would operate periodically and would generate sound that would propagate through the louvers at the top of the ventilation facilities. Fans would operate periodically when NO2 levels in the tunnel exceed a set threshold or in emergencies when smoke is present in the tunnel. NO2 levels are likely to be highest when the level of diesel locomotive operations is highest, or when congestion causes trains to operate slowly or to idle in the tunnel. However, there is not enough information currently available to determine how many hours per day, on average, the fans would run and whether or not they would run during the night.

The design standard for the ventilation facilities would limit the outdoor noise level, when the fans are in operation, to Lmax 50 dBA at the facility property lines. 50 dBA is approximately the noise produced by an indoor air conditioner at a distance of three feet.

COMMENTS

RESPONSES

To achieve the required reduction in noise level, cylindrical or rectangular sound attenuators would be mounted directly to each fan or to the ductwork within the system. In addition, the building itself would partially shield noise from the interior of the ventilation plant, which would further reduce noise levels outside of the building. The Preliminary Engineering Team has stated that the ventilation plant facilities, with attenuators installed, will emit noise at 45 dBA. This would meet the design standard of L_{max} 50 dBA at the facility property lines (i.e., the noise level generated would be less than the design standard).

Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of $NO_{x,}$ VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality and is not anticipated to create conditions that would adversely impact the integrity of the structures in the Study Area. The maximum 1-hour NO2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

The Project meets air quality standards; therefore, public alerts regarding emissions will not be required.

Response to Comment 53:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

COMMENTS	RESPONSES
	For information regarding potential Environmental Impacts, please see Comment 2. The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community. For information regarding disparate impact and environmental justice communities, please see Comment 6.

COMMENTS

DEIS Comment 37:

From: Kathryn Epple
To: BPTunnel Information
Cc: Eric Hontz; George Epple; Councilman Nick Mosby; Chesapeake Climate Action Network, Jon Kenney; Healthy Neighborhoods, Inc., Barbara Aylesworth; Bill Lee; Kathryn Epple; "Kylis Winborne"; Laura Amlie; Mark F. West; Remington Stone; Russ Moss; Soledad Salame; Stephen & Rebecca Arthur
Subject: DEIS COMMENT
Date: Monday, February 15, 2016 5:32:31 PM

B&P Tunnel Project,

I am submitting this correspondence as part of the record relevant to community feedback regarding the B&P Tunnel DEIS. Some of the information in the correspondence below from Odessa Phillips raises serious concerns including:

- MARC's transition to an all diesel fleet
- The types of freight that could pass through the tunnel
- An increase in freight would be market-driven and determined by Norfolk Southern and CSX, as long as it would not impact passenger travel

Given the potential for 388 trains per day through these tunnels, we do not believe the B&P study or the DEIS addresses the potential for freight increases in a serious way. Also, the possible consequences to the public in the event of a disaster associated with the transport of hazardous freight, including Bakken crude, through densely populated residential area have not been raised in the report. This would constitute an hard core industrial use of a residential area, which should never be contemplated. 1

To understand our concerns, please see this video of the Lac-Megantic disaster:
https://www.youtube.com/watch?v=c8Q7d8c24T0

Furthermore, if MARC were to transition to a clean all-electric fleet instead of an all-diesel fleet, and if freight were prohibited, the need for such a colossal vent building would not exist. Fossil fuels are so last century. This does not seem like the right plan for the 21st century. 2

We commend Ms. Phillips for her forthright replies.

Again, we appreciate the opportunity to provide feedback.

Kathy Epple
President, Residents Against the Tunnels

From: Eric Hontz [
Sent: Thursday, September 24, 2015 10:03 AM
To: Kathryn Epple; Daniel Burg; Tom Hall
Cc:
Subject: Fwd: BP Tunnel Project Study Followup

Hi all,

RESPONSES

Response to Comment 1:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at https://www.fra.dot.gov/Page/P0444. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-

COMMENTS

Please see answers from Odessa (the Baltimore City transportation rep) to my questions following the JEH community meeting. Some of her answers have helped to clarify things while others simply bring up more questions.

Please share with the group and others.

Kind regards,

Eric

---------- Forwarded message ----------
From: **Phillip, Odessa**
Date: Thu, Sep 24, 2015 at 9:41 AM
Subject: RE: BP Tunnel Project Study Followup
To: Eric Hontz
Cc: "Greene, Candance" "Mosby, Nick J." "Mack, Nikia"

Good morning Mr. Hontz:

Thank you so much for your patience as our engineering team consulted to develop the most accurate information to answer the questions you posed to us in your correspondence. If any of the responses require further clarification, please don't hesitate to call me and I will walk you through any questions you may have. Before answering your questions, *I want to make you aware of a new series of community meetings to be held on October 6, 14, and 20 to share with the community the current status of the project. I have attached a copy of the postcard that is being sent to the communities that includes all of the relevant meeting information.* There will be new project information shared at these meetings (although each meeting will include the same information) and I would like to encourage you to attend.

- **How many diesel locomotives use the BP tunnel every day?**

  Current freight train operations through the B&P Tunnel include two local, diesel-powered Norfolk-Southern Corp freight trains (one in each direction). By 2040, it is anticipated that there would be a similar level of freight rail service. For passenger trains, Amtrak's preference is to use electric locomotives on the NEC; however, it is sometimes necessary to operate diesel locomotives through Baltimore, but this occurs irregularly.

- **What is the projected use of diesel in the 2020-2040 time period?**

  A portion of the MARC train fleet uses diesel locomotives. Overall, the percentage of diesel locomotives is driven by MARC operations. Currently, 56 MARC trains operate through the tunnel on a regular weekday; between 58% and 68% of these are diesel-powered. On weekends, between 12 and 18 trains operate, all of which are diesel-powered. Overall, of the approximate 145 Amtrak, MARC and NS trains that use the existing tunnel most days, 26% - or 38 trains – are likely to be hauled by a diesel locomotive.

  MARC is moving toward an all-diesel fleet. The NEC Future study that is

RESPONSES

passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the tunnel would be projected up and away from the community. -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 reduce the ability of particles to travel through the fans and louvers.

The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than a fire or other emergency event on an above-ground track running through the neighborhood The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

Response to Comment 2:
Ventilations plants are necessary for public safety and would still be needed regardless of the type of energy used by vehicles in the tunnel. As described in **Chapter III** of the FEIS, the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

Please see attached replies from Odessa Phillip for answers to remaining comments found in this email chain.

COMMENTS | **RESPONSES**

defining NEC travel demand and capacity requirements through 2040 assumes 2040 rail traffic to be upwards of 388 trains per day, with 164 being MARC commuter trains. Assuming that MARC is all diesel by then, approximately 42% would be diesel in 2040 build conditions.

- **What type of freight cargo passes through the tunnel?**

  The two local Norfolk-Southern Corp freight trains that operate through the B&P Tunnel serve customers south of the tunnel. The trains originate at Bayview Yard in Eastern Baltimore, deliver and/or pick-up cars at various sidings, then return to Bayview Yard. 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.

- **Is there any oil or hazardous/flammable materials included on these freight trains?**

  Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at https://www.fra.dot.gov/Page/P0444. From that text:

  > *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

  The balance of the information provided gives specific rules regarding labeling and placarding, time-of-day restrictions, specifications for tank cars, general requirements, and packaging specifications, among others. We refer you to this and other FRA and USDOT rules for clarification of specific questions regarding shipment of regulated materials.

- **Will there be (are there currently) restrictions on the type of cargo that is allowed to be transported through the tunnel?**

  Please refer to the previous response provided above.

- **Do future forecasts anticipate an increase in freight trains through the tunnel?**

  There are no plans to alter the current rights of freight trains on the NEC. The B&P Tunnel study assumes that Amtrak would not be required to provide any additional track rights to Norfolk Southern than what is currently provided.

COMMENTS | **RESPONSES**

Freight train usage of the tunnel will be determined by Norfolk Southern and CSX, and will be market-driven to the extent that it does not interfere with passenger train operation, as the priority for the NEC will remain passenger service. Freight train operation along the NEC is permitted by regulations in effect at the time of shipment.

- **What is the approximate decibel level of the exhaust fans for the new NYC vents installed?**

  As stated at the community meeting, noise from exhaust fans would vary substantially by location and distance from the vent plant. Based on your comments, the environmental team has conducted follow up conversations with ventilation engineers from the Amtrak preliminary engineering team. The engineers noted that the vent plants in NYC are required to comply with local (NYC) noise ordinances, which dictate an interior noise level of 45 decibels at the nearest receptor (e.g. the closest exterior window of a building). A noise level of 45 dB(A) is comparable to a quiet nighttime urban setting and is significantly less than the sound of typical household appliances. Although the fans are quite loud at their source, sound attenuating equipment and baffling in the ventilation facility reduce the fan noise that would be heard outside the building to this level.

- **Would it be accurate to assume a similar decibel level for the current system envisioned?**

  The project team has not yet identified the predicted noise level of the vent plants since the vent plant design has not yet been developed. The project team would consider applicable Baltimore City noise criteria during vent plant design. It is reasonable to assume that the noise attenuators in the vent plant would be able to reduce the noise to these criteria levels (or below), as was done in NYC. Here are some typical noise levels for comparison purposes:

  - Dial tone = 80 dB
  - Talking at 3 feet = 65 dB
  - Quiet urban daytime = 50 dB
  - Quiet urban nighttime = 40 dB
  - Quiet rural nighttime = 25 dB

- **Are any alternatives to a central vent stack available or may any "workarounds" be engineered, thereby avoiding locating a central vent stack in Reservoir Hill?**

- **A two mile tunnel is not extremely long, and as I mentioned in my question last evening, there are several examples of lengthy tunnels without a central vent stack, including the Channel Tunnel, several in the EU (which have similar safety standards to the US), many examples in the Western portion of the United States and even in the Appalachians.**

COMMENTS | **RESPONSES**

Many of the tunnels you referred to were constructed before current ventilation requirements were enacted and so the standards for those tunnels are "grandfathered". This means that these existing projects are not required to be retrofitted to meet current standards. Some tunnels, such as the "Chunnel" incorporate a parallel horizontal ventilation shaft for the length of the tube with larger ventilation fans at the ends; this avoids the need for a mid-tunnel vent plant. The parallel shaft is approximately the same size as the track tunnels in which the trains operate. This method was feasible and reasonable for a two-track tunnel where a mid-tunnel vent shaft would have had to be constructed in open seas.

In the case of the B&P Tunnel, there are 3-dimensional constraints that preclude the construction of a parallel tunnel, and such a solution is therefore not viable for this project. Additional parallel bore(s) cannot be placed above the tunnels due to the depth of cover and interference with existing city infrastructure (e.g. the subway, I-83, and/or the light rail tracks). Placing ventilation bore(s) next to the track tunnels would drastically increase the width needed to accommodate rock pillar walls between all the tunnels, making the track geometry untenable in the space available. Finally, as part of our design, a "duck under" track and tunnel is required for local and express train movements across tracks. This feature prevents all four tunnels from being truly "parallel"; therefore, three vent bores would be required to serve the four running tunnels, further exacerbating already tightly constricted track geometry. Placing the vent bores below the running tunnels requires the vent bores to snake around the running tunnels which would require splaying the running tunnels to fit the vent bores, resulting in the same track geometry problems noted above.

The other tunnels offered for comparison (Western US and Appalachia) are freight railroad owned tunnels that are not governed by the NFPA 130 fire/life/safety codes. More appropriate examples for comparison lie with modern subways, urban light rail, and urban commuter railroad tunnels which frequently have vent shaft spacing ranging from one-quarter to one-half mile apart.

- **As a part of your assumptions you noted that you must engineer the tunnels so that one of the four tunnels can accommodate two trains simultaneously. Does this assume that the other three tunnels are closed or otherwise inoperable?**

No, there is no relationship between the need to accommodate - and properly ventilate – two trains in each tunnel at the same time, and whether any one of the four tunnels would be closed or out of service. Under normal operation, all four tunnels must be able to carry two trains simultaneously within the ventilated area. Thus, it is possible to have – and the ventilation system must address – a condition where eight trains are in the four tunnels at the same time. Although these ventilation requirements apply independently to each tunnel, the three ventilation plants (north portal, mid-tunnel, and south portal) will be designed to manage the vent requirements of all four tunnel bores as a system. Thus, in keeping with the NFPA 130 codes, the ventilation will be of sufficient power to protect two trains at the same time in any one (but not

COMMENTS | **RESPONSES**

more than one) of the tunnels, with the capability to address only a single event at any one time.

The signal system will be designed to permit trains to follow two minutes apart (a two minute "headway;" that is, the time separation between the leading end of two trains traveling on the same track in the same direction). Since it will take 2.5 – 3 minutes for trains to clear the tunnel, this will result in two trains following on a 2-minute headway to occupy the tunnel simultaneously.

Since each train must occupy a separate vent zone and be independently ventilated, two vent zones are required. Where two zones meet, a vent plant is required to enable the isolation of a fire in one zone entirely within that zone, such that, through the action of the ventilation system, the passengers and crew in a train occupying the second zone can be protected from smoke or heat and the passengers and crew of the incident train can be safely evacuated. A vent plant must be located at the interface between the two zones, so that smoke and heat can be drawn away from crews, response personnel, and passengers as they evacuate the train and tunnel and the second train be protected. Building the tunnels with only one vent zone – and limiting them to one train at a time -- would unacceptably limit train capacity in relation to future passenger forecasts, resulting in congestion, delays, reduced service, and high- and lower-speed train conflicts in the increasingly congested Baltimore rail network.

- **Would a middle vent stack be necessary if only one train were in the tunnel at a time? How would this affect train time tables?**

  A middle vent stack would not be required if only one train were in the tunnel at a time. With only one vent zone, however, trains could only follow 2.5-3 minutes apart, and it would not be possible to meet future train traffic forecasts for this section of the Northeast Corridor. The increase in headway from 2 to 3 minutes that results from making the tunnel a single vent zone (no middle vent plant) causes a 33% reduction in capacity. Conversely, the capacity demand projected to be required by 2040 is 50% greater than the capacity that can be delivered by a single vent zone tunnel.

- **What is the probability of more than two of the four planned tunnels being inoperable at any one time?**

  We couldn't predict the frequency of this event but, based on typical experiences of other tunnel operations, it is likely to be rare. Because all four tubes will become increasingly important to the delivery of reliable and higher-speed operations, Amtrak intentionally plans its tunnel track and system maintenance to require the removal of only one track at any time, with the work typically done at night when train volumes are lowest, and when the loss of one of four tracks has the least effect on operations and passenger experience.

- **In the event of an emergency would the ventilation shaft have fire suppression equipment to prevent burning embers and other hazardous material from escaping into the surrounding historic**

COMMENTS

RESPONSES

neighborhood?

The vent shaft does not have fire suppression equipment. The path from a tunnel fire to the exhaust louvers is long and circuitous, however, with many bends that retard the ability of particles to travel through the fans and the louvers. The system also contains dampers, sound attenuators, fans and a series of physical screens which collectively tend to screen out burning material, such that only highly diluted exhaust air is emitted.

- **Would the ventilation system contain any environmental remediation equipment (i.e. scrubbers) that would reduce airborne particulates?**

  The ventilation system does not contain pollution control equipment. Under normal operation, the ventilation system will dilute all emissions such that pollutant concentrations are well below regulatory thresholds. Please see the attached discussion which helps to answer this question.

- **Will the neighborhood impact statement include an analysis of the effect of the placement of the ventilation shaft on nearby property values?**

  A qualitative assessment of community and economic impacts / benefits of the project will be included in the Environmental Impact Statement. It is not possible to make a quantitatively meaningful assessment of the impacts of a vent plant on surrounding property values, since too many other factors – e.g. market trends, municipal investments in related public spaces, the presence or absence of mass transit and its perceived quality, the presence or absence of crime, socio-economic factors, and municipal services – are in play.

- **Will the neighborhood impact statement include an estimate on the cost to residents of the use and enjoyment of the Whitelock corridor as a park and garden (or future commercial development)?**

  Similar to the above response, a qualitative assessment of community and economic impacts / benefits of the project will be included in the Environmental Impact Statement.

- **As this is currently a study, are you considering the cost of "uncertainty" that this study is creating for potential investors and homeowners in the neighborhood?**

  This is a consideration for all project alternatives as well as all similar infrastructure projects, however, the cost of uncertainty cannot be reasonably quantified given the unknown variables described in the above responses. The intent of the study is to identify the preferred alternative so that the uncertainty may be relieved. Until the project is fully funded, however, some uncertainty would remain.

- **There are over 5,000 people (2010 census) living in the two census tracts that constitute Reservoir Hill and the proposed location of the ventilation shaft would displace a park and garden and limit/curtail potential commercial and residential redevelopment along the Whitelock corridor. The presence of such a ventilation unit in Reservoir Hill is potentially burdensome, disruptive and damaging the**

COMMENTS | **RESPONSES**

improving quality of life for its residents and may curtail individuals and investors from investing in this capital starved community. I look forward to the answers to the above questions and further conversations and public meetings.

Thank you for your comments. We agree with the importance of the vent plant relative to the Reservoir Hill community and welcome the opportunity to work with the community and the project team partners to develop the best solution possible.

Regards
Odessa

Odessa L. Phillip, PE
Environmental Project Manager
for the Baltimore and Potomac (B&P) Tunnel Project
Baltimore City Department of Transportation
417 East Fayette Street, 7th Floor, **Room 747**
Baltimore, Maryland 21202
Phone: 410-396-6856

DOT Meeting Cancellation Policy: *If Baltimore City Schools have a delayed start or are closed due to inclement weather, the meeting will be rescheduled.*

From: Eric Hontz
Sent: Wednesday, September 02, 2015 11:50 AM
To: Phillip, Odessa
Cc: Greene, Candance; Mosby, Nick J.; RHIC News
Subject: BP Tunnel Project Study Followup

Odessa,

Thank you very much for your time at the meeting last night in Reservoir Hill (September 1). You and the team from the architectural firm, MDOT and Amtrak gave a very informative presentation that seems to have crystallized several uncertainties surrounding the study. This is a very exciting project that has the potential to benefit the citizens of Baltimore and all those that use Amtrak along the northeast corridor.

That being said, I was wondering if you could find answers to a few questions that remained unanswered (or were answered a bit vaguely) during the presentation and question and answer session:

- How many diesel locomotives use the BP tunnel every day?
  - What is the projected use of diesel in the 2020-2040 time period?
- What type of freight cargo passes through the tunnel?

COMMENTS

RESPONSES

- Is there any oil or hazardous/flammable materials included on these freight trains?
- Will there be (are there currently) restrictions on the type of cargo that is allowed to be transported through the tunnel?
- Do future forecasts anticipate an increase in fright trains through the tunnel?

- What is the approximate decibel level of the exhaust fans for the new NYC vents installed?
  - Would it be accurate to assume a similar decibel level for the current system envisioned?
- Are any alternatives to a central vent stack available or may any "workarounds" be engineered, thereby avoiding locating a central vent stack in Reservoir Hill?
  - A two mile tunnel is not extremely long, and as I mentioned in my question last evening, there are several examples of lengthy tunnels without a central vent stack, including the Channel Tunnel, several in the EU (which have similar safety standards to the US), many examples in the Western portion of the United States and even in the Appalachians.
- As a part of your assumptions you noted that you must engineer the tunnels so that one of the four tunnels can accommodate two trains simultaneously. Does this assume that the other three tunnels are closed or otherwise inoperable?
  - Would a middle vent stack be necessary if only one train were in the tunnel at a time? How would this affect train time tables?
  - What is the probability of more than two of the four planned tunnels being inoperable at any one time?
- In the event of an emergency would the ventilation shaft have fire suppression equipment to prevent burning embers and other hazardous material from escaping into the surrounding historic neighborhood?
- Would the ventilation system contain any environmental remediation equipment (i.e. scrubbers) that would reduce airborne particulates?
- Will the neighborhood impact statement include an analysis of the effect of the placement of the ventilation shaft on nearby property values?
  - Will the neighborhood impact statement include an estimate on the cost to residents of the use and enjoyment of the Whitelock corridor as a park and garden (or future commercial development)?
  - As this is currently a study, are you considering the cost of "uncertainty" that this study is creating for potential investors and homeowners in the neighborhood?

There are over 5,000 people (2010 census) living in the two census tracts that constitute Reservoir Hill and the proposed location of the ventilation shaft would displace a park and garden and limit/curtail potential commercial and residential redevelopment along the Whitelock corridor. The presence of such a ventilation unit in Reservoir Hill is potentially burdensome, disruptive and damaging the the improving quality of life for its residents and may curtail individuals and investors from investing in this capital starved community. I look forward to the answers to the above questions and further conversations and public meetings.

COMMENTS

RESPONSES

Thank you in advance for your time and attention to these questions.

Eric

--
Eric K. Hontz
JD/MBA
University of Maryland Francis King Carey School of Law
University of Maryland Robert H. Smith School of Business

--
Eric K. Hontz
JD/MBA
University of Maryland Francis King Carey School of Law
University of Maryland Robert H. Smith School of Business

COMMENTS

DEIS Comment 38:

From: Mike Felner
To: BPTunnel Information
Subject: DEIS comment
Date: Saturday, February 06, 2016 3:09:59 PM

Good afternoon!

I am a resident of Reservoir Hill and am opposed to any tunnels being constructed under the Reservoir Hill community.

1 My house is over 100 years old and would possibly suffer cracking and other damage if tunnels were to be bored underneath it. I don't know what assurance anyone would have that any of this type damage would be properly addressed. I am also about to paint the interior from top to bottom and the thought of having to return to address cracking or allowing an outside contractor in to address cracking is not a pleasant one.

2 The idea of a vent or vent(s) being constructed in the middle of the neighborhood is also a terrible idea from an enjoyment of life and what little clean air we have. What would be vented thru these exhaust stacks? Not clean air is the only answer I can arrive at. It would be toxic air that would be bad for the birds that visit my garden, bad for the Whitelock Farm crops, bad for the air I breathe in and bad for the brick walls of my house.

For the above reasons this alternative for the tunnel should be stopped immediately.

Sincerely,
Michael Felner
Reservoir Hill Resident
as well as owner or part owner of three (3) other buildings in the community

RESPONSES

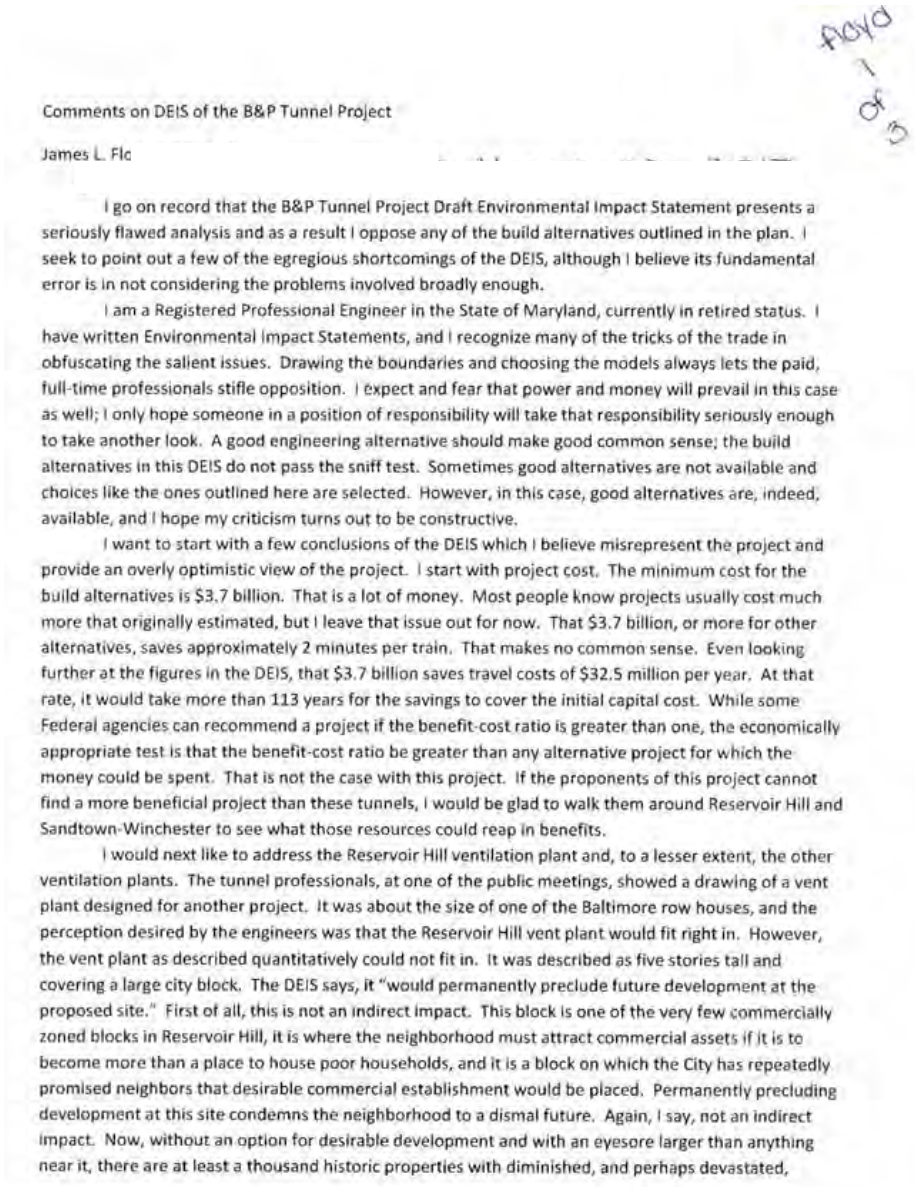
Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

COMMENTS

DEIS Comment 39:



Floyd 1 of 3

Comments on DEIS of the B&P Tunnel Project

James L. Flo

I go on record that the B&P Tunnel Project Draft Environmental Impact Statement presents a seriously flawed analysis and as a result I oppose any of the build alternatives outlined in the plan. I seek to point out a few of the egregious shortcomings of the DEIS, although I believe its fundamental error is in not considering the problems involved broadly enough.

I am a Registered Professional Engineer in the State of Maryland, currently in retired status. I have written Environmental Impact Statements, and I recognize many of the tricks of the trade in obfuscating the salient issues. Drawing the boundaries and choosing the models always lets the paid, full-time professionals stifle opposition. I expect and fear that power and money will prevail in this case as well; I only hope someone in a position of responsibility will take that responsibility seriously enough to take another look. A good engineering alternative should make good common sense; the build alternatives in this DEIS do not pass the sniff test. Sometimes good alternatives are not available and choices like the ones outlined here are selected. However, in this case, good alternatives are, indeed, available, and I hope my criticism turns out to be constructive.

1

I want to start with a few conclusions of the DEIS which I believe misrepresent the project and provide an overly optimistic view of the project. I start with project cost. The minimum cost for the build alternatives is $3.7 billion. That is a lot of money. Most people know projects usually cost much more that originally estimated, but I leave that issue out for now. That $3.7 billion, or more for other alternatives, saves approximately 2 minutes per train. That makes no common sense. Even looking further at the figures in the DEIS, that $3.7 billion saves travel costs of $32.5 million per year. At that rate, it would take more than 113 years for the savings to cover the initial capital cost. While some Federal agencies can recommend a project if the benefit-cost ratio is greater than one, the economically appropriate test is that the benefit-cost ratio be greater than any alternative project for which the money could be spent. That is not the case with this project. If the proponents of this project cannot find a more beneficial project than these tunnels, I would be glad to walk them around Reservoir Hill and Sandtown-Winchester to see what those resources could reap in benefits.

2

I would next like to address the Reservoir Hill ventilation plant and, to a lesser extent, the other ventilation plants. The tunnel professionals, at one of the public meetings, showed a drawing of a vent plant designed for another project. It was about the size of one of the Baltimore row houses, and the perception desired by the engineers was that the Reservoir Hill vent plant would fit right in. However, the vent plant as described quantitatively could not fit in. It was described as five stories tall and covering a large city block. The DEIS says, it "would permanently preclude future development at the proposed site." First of all, this is not an indirect impact. This block is one of the very few commercially zoned blocks in Reservoir Hill, it is where the neighborhood must attract commercial assets if it is to become more than a place to house poor households, and it is a block on which the City has repeatedly promised neighbors that desirable commercial establishment would be placed. Permanently precluding development at this site condemns the neighborhood to a dismal future. Again, I say, not an indirect impact. Now, without an option for desirable development and with an eyesore larger than anything near it, there are at least a thousand historic properties with diminished, and perhaps devastated,

3

RESPONSES

Response to Comment 1:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 2:
While reducing travel time through B&P Tunnel and along the NEC is a goal of the Project, it is not the sole reason the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS. Project goals include reducing travel time through the B&P Tunnel and along the NEC, accommodating existing and projected travel demand for intercity and commuter passenger services, eliminating impediments to existing and projected operations along the NEC, and providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that

COMMENTS

minimal impacts. If there were only minimal impacts, common sense should tell us that we wouldn't need a five story ventilation plant. The vent plants have the capability to move large quantities of noxious pollutants into the ambient air surrounding thousands of men, women, and children who live nearby. If the capability is there, it is impossible to conclude other than that the pollutants will be there, too. Perhaps this is the first place on earth that will be different, but an investment in that much ventilation equipment makes it hard to believe that it won't be regularly used.

4

And the subject of air leads to what may be the ultimate misrepresentation of the DEIS and the B&P Tunnel Project. Freight trains. The presenters at the public meeting I attended clearly stated that this was an Amtrak tunnel and that all their work was to improve passenger rail service. At least the DEIS was a little more forthcoming and mentioned freight trains, although not until near the end of the Executive Summary. If there were a commitment to using the tunnels for only passenger service, there would probably be much less concern. In my experience, passenger trains in this area are propelled by electricity. There is not much need for extensive ventilation for electric trains. The vent design is clearly driven by freight traffic. The pollution, noise, and vibration from freight trains are larger concerns to affected residents than the passenger trains. Passenger trains have local benefits, freight trains have essentially none. I am appalled that my neighborhood is expected to bear all the costs, of pollution, of decreased property values, of risk of catastrophic accidents, of other serious impacts, while the benefits go to other regions. I am further appalled that the B&P Tunnel Project has systematically misrepresented the degree to which these tunnels have been planned as freight routes. One does not need to look much further than this misrepresentation about freight traffic as a source of local rancor about the proposed project. I am clearly not the only one appalled by this project and the demeanor of the proponents. That dismissive demeanor hardly ever shows up in a process where there is a real search for mutually beneficial outcomes. It is often evident where the proponents are going through the motions, knowing that power is on their side and they will get their way. I expect that, but I hope we could find a better way. It is always the hope in speaking truth to power.

5

6

7

There are several other issues which concern me, but I want to save enough time to return to the fundamental error I referred to above. It is here that I hope my comments provide constructive criticism. It appears that the initial scope of the project location was far too limited. There was the existing tunnel, and all the initial alternatives were close to that. Why? That is not clear. I believe the project planners erred in not looking more widely for alternative routes. As a first look, a route that follows the East Side or the West Side of the Baltimore Beltway would seem to have marked benefits. We have known since the 1950's that major transportation routes do not belong in the center city; that is why we built the Beltway in the first place. The same thinking should apply to new rail service. A route for the Northeast Corridor around the City of Baltimore, perhaps associated with the Beltway but not ruling out other locations, even distant locations, would seem to make common sense. The existing tunnels could continue to carry passenger trains to stations in Baltimore, and there are now in the order of 100 trains per day carrying passengers. That seems to be enough passenger capacity for the

8

RESPONSES

corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

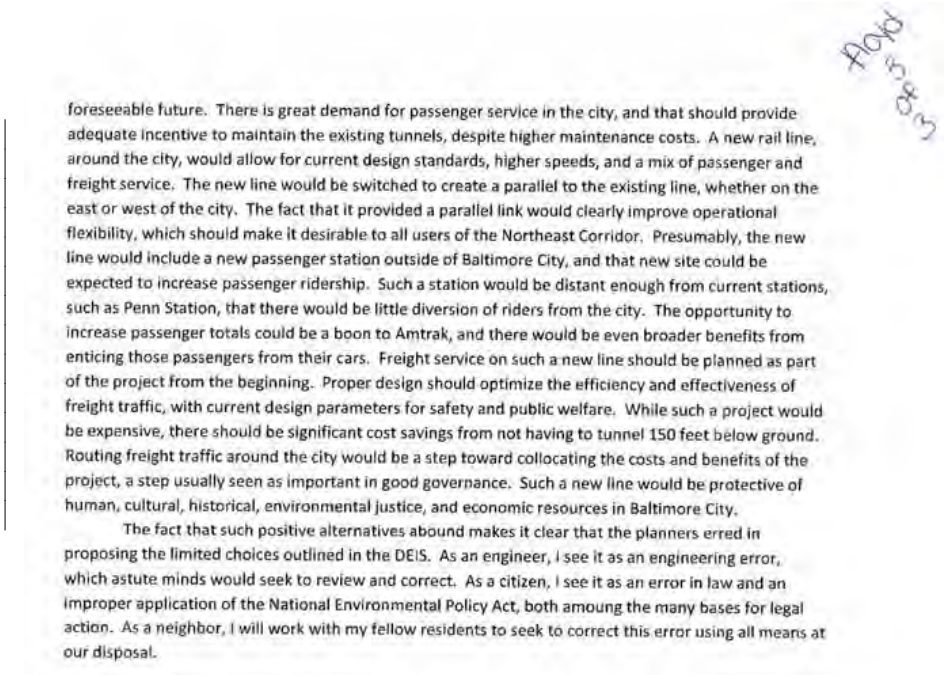
Response to Comment 4:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

Response to Comment 5:
Ventilation plants would be necessary regardless of whether the Tunnel served passengers or freight. As described in **Chapter III** of the FEIS, the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

Response to Comment 6:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am and 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am, and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit

COMMENTS



foreseeable future. There is great demand for passenger service in the city, and that should provide adequate incentive to maintain the existing tunnels, despite higher maintenance costs. A new rail line, around the city, would allow for current design standards, higher speeds, and a mix of passenger and freight service. The new line would be switched to create a parallel to the existing line, whether on the east or west of the city. The fact that it provided a parallel link would clearly improve operational flexibility, which should make it desirable to all users of the Northeast Corridor. Presumably, the new line would include a new passenger station outside of Baltimore City, and that new site could be expected to increase passenger ridership. Such a station would be distant enough from current stations, such as Penn Station, that there would be little diversion of riders from the city. The opportunity to increase passenger totals could be a boon to Amtrak, and there would be even broader benefits from enticing those passengers from their cars. Freight service on such a new line should be planned as part of the project from the beginning. Proper design should optimize the efficiency and effectiveness of freight traffic, with current design parameters for safety and public welfare. While such a project would be expensive, there should be significant cost savings from not having to tunnel 150 feet below ground. Routing freight traffic around the city would be a step toward collocating the costs and benefits of the project, a step usually seen as important in good governance. Such a new line would be protective of human, cultural, historical, environmental justice, and economic resources in Baltimore City.

The fact that such positive alternatives abound makes it clear that the planners erred in proposing the limited choices outlined in the DEIS. As an engineer, I see it as an engineering error, which astute minds would seek to review and correct. As a citizen, I see it as an error in law and an improper application of the National Environmental Policy Act, both amoung the many bases for legal action. As a neighbor, I will work with my fellow residents to seek to correct this error using all means at our disposal.

9

RESPONSES

through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are in **Chapter VI**.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 7:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Response to Comment 8:
Please refer to Comment 1 for information regarding the alternatives analysis. An alternative was considered to have a fatal flaw if it did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge. The viable alternatives are close to the existing Tunnel in order to utilize existing infrastructure.

Response to Comment 9:
The Maryland Department of Transportation oversees comprehensive transportation planning for the State. Prior studies have been performed that evaluate the full network of rail corridors, especially those in and around the City of Baltimore. The study of the B&P Tunnel partly resulted from the identification of this Project as a critical component to the greater rail access plan.

COMMENTS

DEIS Comment 40:

From: James Floyd
To: BPTunnel Information
Subject: DEIS Comment
Date: Monday, February 22, 2016 10:24:54 AM
Attachments: Further Comments on DEIS of the B&P1.docx
Comments on DEIS of the B&P1.docx
UnravelBAltsTangledRailLines_FinalDraft10Sep15a.pdf

I am providing further testimony regarding the B&P Tunnel Project DEIS. I have attached the file, and I also include it in the email text below. I have also attached two files, which you have received prior to this, but which are provided here to give you easy access to the context documents referenced in my further comments.

Please respond to my email to confirm that you have received my further comments and that they will be considered as part of the NEPA process. I look forward to your prompt confirmation.

Thank you,

James L. Floyd, P.E., Ret.

****

Further Comments on DEIS of the B&P Tunnel Project
James L. Floyd—21 Feb 16

I provided comments on the Draft Environmental Impact Statement of the B&P Tunnel Project at the hearing on 6 Feb 16. I stated my opposition to any of the build alternatives of the DEIS, based on my analysis that the B&P Tunnel Project had erred in scoping the project too narrowly, amoung other reasons. I stand by my opposition, only now I believe my analysis requires even more attention from the B&P Tunnel Project because my testimony aligns closely with other testimony presented that day. I refer to the report from the MTA Citizens Advisory Committee, and related groups, entitled "A Proposal to Unravel Baltimore's Tangled Rail Lines," dated 10 September 2015.

I have reviewed the Advisory Committee Proposal, and I believe it provides a well thought out and cogent analysis. It approaches the level of an engineering design study, and its attention to the complete picture of rail service in the Maryland region makes it superior to the DEIS concocted by the B&P Tunnel Project. The Advisory Committee Proposal should be seriously considered by the B&P Tunnel Project, AMTRAK, MARC, the State of Maryland, and anyone connected with rail service on the Northeast Corridor. The fact that the information in the Committee's Proposal did not appear as at least an alternative for consideration seems to be further evidence of engineering and design error by the B&P Tunnel Project. While the date of the Final Draft of the Committee's Proposal is 10 September 2015, the ideas in earlier drafts would have been available to anyone who was working on railroad issues in plenty of time to be considered by the B&P Tunnel Project for the DEIS. The fact that these ideas did not appear must be considered an error which

RESPONSES

The report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding The Purpose and Need for the Project, please see **Chapter II** of this FEIS.

To review the September 2015 report in its entirety, please refer to **DEIS Comment #11.**

For the responses to comments provided via the attached email dated February 6, 2016, please see **DEIS Comment #39**.

COMMENTS

Comments on DEIS of the B&P Tunnel Project

James L. Floyd—6 Feb 16

I go on record that the B&P Tunnel Project Draft Environmental Impact Statement presents a seriously flawed analysis and as a result I oppose any of the build alternatives outlined in the plan. I seek to point out a few of the egregious shortcomings of the DEIS, although I believe its fundamental error is in not considering the problems involved broadly enough.

I am a Registered Professional Engineer in the State of Maryland, currently in retired status. I have written Environmental Impact Statements, and I recognize many of the tricks of the trade in obfuscating the salient issues. Drawing the boundaries and choosing the models always lets the paid, full-time professionals stifle opposition. I expect and fear that power and money will prevail in this case as well; I only hope someone in a position of responsibility will take that responsibility seriously enough to take another look. A good engineering alternative should make good common sense; the build alternatives in this DEIS do not pass the sniff test. Sometimes good alternatives are not available and choices like the ones outlined here are selected. However, in this case, good alternatives are, indeed, available, and I hope my criticism turns out to be constructive.

I want to start with a few conclusions of the DEIS which I believe misrepresent the project and provide an overly optimistic view of the project. I start with project cost. The minimum cost for the build alternatives is $3.7 billion. That is a lot of money. Most people know projects usually cost much more that originally estimated, but I leave that issue out for now. That $3.7 billion, or more for other alternatives, saves approximately 2 minutes per train. That makes no common sense. Even looking further at the figures in the DEIS, that $3.7 billion saves travel costs of $32.5 million per year. At that rate, it would take more than 113 years for the savings to cover the initial capital cost. While some Federal agencies can recommend a project if the benefit-cost ratio is greater than one, the economically appropriate test is that the benefit-cost ratio be greater than any alternative project for which the money could be spent. That is not the case with this project. If the proponents of this project cannot find a more beneficial project than these tunnels, I would be glad to walk them around Reservoir Hill and Sandtown-Winchester to see what those resources could reap in benefits.

I would next like to address the Reservoir Hill ventilation plant and, to a lesser extent, the other ventilation plants. The tunnel professionals, at one of the public meetings, showed a drawing of a vent plant designed for another project. It was about the size of one of the Baltimore row houses, and the perception desired by the engineers was that the Reservoir Hill vent plant would fit right in. However, the vent plant as described quantitatively could not fit in. It was described as five stories tall and covering a large city block. The DEIS says, it "would permanently preclude future development at the proposed site." First of all, this is not an indirect impact. This block is one of the very few commercially zoned blocks in Reservoir Hill, it is where the neighborhood must attract commercial assets if it is to become more than a place to house poor households, and it is a block on which the City has repeatedly promised neighbors that desirable commercial establishment would be placed. Permanently precluding development at this site condemns the neighborhood to a dismal future. Again, I say, not an indirect impact. Now, without an option for desirable development and with an eyesore larger than anything near it, there are at least a thousand historic properties with diminished, and perhaps devastated,

RESPONSES

This text refers to the commenter's original submission. Please see **DEIS Comment #39** for the original submission and responses.

COMMENTS | **RESPONSES**

prospects. The entire Cultural Resources section of the DEIS becomes a laughable figment of the imagination of people who don't live nearby, who don't seem to know what is going on in the local area, and don't seem to care.

Before I leave the subject of the vent plants, I feel compelled to mention the air. Our air in Baltimore is not great. The DEIS notes the problems. However, the DEIS only alludes to sporadic and minimal impacts. If there were only minimal impacts, common sense should tell us that we wouldn't need a five story ventilation plant. The vent plants have the capability to move large quantities of noxious pollutants into the ambient air surrounding thousands of men, women, and children who live nearby. If the capability is there, it is impossible to conclude other than that the pollutants will be there, too. Perhaps this is the first place on earth that will be different, but an investment in that much ventilation equipment makes it hard to believe that it won't be regularly used.

And the subject of air leads to what may be the ultimate misrepresentation of the DEIS and the B&P Tunnel Project. Freight trains. The presenters at the public meeting I attended clearly stated that this was an Amtrak tunnel and that all their work was to improve passenger rail service. At least the DEIS was a little more forthcoming and mentioned freight trains, although not until near the end of the Executive Summary. If there were a commitment to using the tunnels for only passenger service, there would probably be much less concern. In my experience, passenger trains in this area are propelled by electricity. There is not much need for extensive ventilation for electric trains. The vent design is clearly driven by freight traffic. The pollution, noise, and vibration from freight trains are larger concerns to affected residents than the passenger trains. Passenger trains have local benefits, freight trains have essentially none. I am appalled that my neighborhood is expected to bear all the costs, of pollution, of decreased property values, of risk of catastrophic accidents, of other serious impacts, while the benefits go to other regions. I am further appalled that the B&P Tunnel Project has systematically misrepresented the degree to which these tunnels have been planned as freight routes. One does not need to look much further than this misrepresentation about freight traffic as a source of local rancor about the proposed project. I am clearly not the only one appalled by this project and the demeanor of the proponents. That dismissive demeanor hardly ever shows up in a process where there is a real search for mutually beneficial outcomes. It is often evident where the proponents are going through the motions, knowing that power is on their side and they will get their way. I expect that, but I hope we could find a better way. It is always the hope in speaking truth to power.

There are several other issues which concern me, but I want to save enough time to return to the fundamental error I referred to above. It is here that I hope my comments provide constructive criticism. It appears that the initial scope of the project location was far too limited. There was the existing tunnel, and all the initial alternatives were close to that. Why? That is not clear. I believe the project planners erred in not looking more widely for alternative routes. As a first look, a route that follows the East Side or the West Side of the Baltimore Beltway would seem to have marked benefits. We have known since the 1950's that major transportation routes do not belong in the center city; that is why we built the Beltway in the first place. The same thinking should apply to new rail service. A route for the Northeast Corridor around the City of Baltimore, perhaps associated with the Beltway but not ruling out other locations, even distant locations, would seem to make common sense. The existing tunnels could continue to carry passenger trains to stations in Baltimore, and there are now in the order of 100 trains per day carrying passengers. That seems to be enough passenger capacity for the

COMMENTS

RESPONSES

foreseeable future. There is great demand for passenger service in the city, and that should provide adequate incentive to maintain the existing tunnels, despite higher maintenance costs. A new rail line, around the city, would allow for current design standards, higher speeds, and a mix of passenger and freight service. The new line would be switched to create a parallel to the existing line, whether on the east or west of the city. The fact that it provided a parallel link would clearly improve operational flexibility, which should make it desirable to all users of the Northeast Corridor. Presumably, the new line would include a new passenger station outside of Baltimore City, and that new site could be expected to increase passenger ridership. Such a station would be distant enough from current stations, such as Penn Station, that there would be little diversion of riders from the city. The opportunity to increase passenger totals could be a boon to Amtrak, and there would be even broader benefits from enticing those passengers from their cars. Freight service on such a new line should be planned as part of the project from the beginning. Proper design should optimize the efficiency and effectiveness of freight traffic, with current design parameters for safety and public welfare. While such a project would be expensive, there should be significant cost savings from not having to tunnel 150 feet below ground. Routing freight traffic around the city would be a step toward collocating the costs and benefits of the project, a step usually seen as important in good governance. Such a new line would be protective of human, cultural, historical, environmental justice, and economic resources in Baltimore City.

The fact that such positive alternatives abound makes it clear that the planners erred in proposing the limited choices outlined in the DEIS. As an engineer, I see it as an engineering error, which astute minds would seek to review and correct. As a citizen, I see it as an error in law and an improper application of the National Environmental Policy Act, both amoung the many bases for legal action. As a neighbor, I will work with my fellow residents to seek to correct this error using all means at our disposal.

COMMENTS

Further Comments on DEIS of the B&P Tunnel Project

James L. Floyd—21 Feb 16

I provided comments on the Draft Environmental Impact Statement of the B&P Tunnel Project at the hearing on 6 Feb 16. I stated my opposition to any of the build alternatives of the DEIS, based on my analysis that the B&P Tunnel Project had erred in scoping the project too narrowly, amoung other reasons. I stand by my opposition, only now I believe my analysis requires even more attention from the B&P Tunnel Project because my testimony aligns closely with other testimony presented that day. I refer to the report from the MTA Citizens Advisory Committee, and related groups, entitled "A Proposal to Unravel Baltimore's Tangled Rail Lines," dated 10 September 2015.

I have reviewed the Advisory Committee Proposal, and I believe it provides a well thought out and cogent analysis. It approaches the level of an engineering design study, and its attention to the complete picture of rail service in the Maryland region makes it superior to the DEIS concocted by the B&P Tunnel Project. The Advisory Committee Proposal should be seriously considered by the B&P Tunnel Project, AMTRAK, MARC, the State of Maryland, and anyone connected with rail service on the Northeast Corridor. The fact that the information in the Committee's Proposal did not appear as at least an alternative for consideration seems to be further evidence of engineering and design error by the B&P Tunnel Project. While the date of the Final Draft of the Committee's Proposal is 10 September 2015, the ideas in earlier drafts would have been available to anyone who was working on railroad issues in plenty of time to be considered by the B&P Tunnel Project for the DEIS. The fact that these ideas did not appear must be considered an error which must be corrected, with a thorough engineering evaluation, as part of the NEPA process. 1

The MTA Citizens Advisory Committee Proposal delves into rail issues at a level of detail beyond my expertise. As a result, I cannot endorse all of the specifics and implications of the Proposal. However, the fundamental elements of the Proposal are consistent with my earlier comments regarding the DEIS. I continue by highlighting some points from the Proposal which warrant review and inclusion in the DEIS, and without which the DEIS presents a flawed analysis.

First, the Advisory Committee Proposal is right in calling for a full, system-wide review of and design for rail service. They note that, "It is necessary to take a full system approach to this problem and 'unpack' the conflicts. By doing things in the correct order, the total construction costs will be reduced by several billion dollars and the final system performance significantly enhanced...." (p. 2) The current build alternatives in the DEIS represent a continuation of the project-by-project approach which has resulted in the rail tangle described in the Advisory Committee Proposal. The Proposal points out something that is evident to any careful observer of our rail system, that "projects that get done first are the ones with the greatest political muscle, and not necessarily the projects that make the most engineering, operational, fiscal, or financial sense." (p. 2) The build alternatives in the DEIS seem to represent the worst of the project approach. These alternatives call for building four deep tunnels under historic and culturally significant neighborhoods, but there are still only two tracks north and

RESPONSES

Response to Comment 1:
The report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding The Purpose and Need for the Project, please see **Chapter II** of this FEIS.

To review the September 2015 report in its entirety, please refer to **DEIS Comment #11.**

COMMENTS | **RESPONSES**

south of the project proposed by the B&P Tunnel Project. It does not take a great deal of foresight to see that tunnel proponents, if successful in building these tunnels, will use that fact that the tunnels have been built to justify, and probably force, the addition of tracks. Other neighborhoods will have to work to oppose this short-sighted rail design. If they lose, they will face the degradation the B&P Tunnel Project wants impose on Reservoir Hill and Sandtown-Winchester. If they succeed, the tunnels proposed in the DEIS will become a repeat of the "Road to Nowhere," where Route 70 has one disconnected segment in the city which destroyed a wide swath of neighborhoods for no social benefit. The failure to adopt a system-wide approach to the need for rail improvements appears to be the fundamental error of the B&P Tunnel Project DEIS. The fact that the Advisory Committee Proposal includes such a holistic analysis proves that it can and should be done. It is likely that the Advisory Committee has done most of the work on that holistic approach and has provided it to the B&P Tunnel Project for their use.

Second, the Advisory Committee Proposal appears to have gotten it right, unlike the B&P Tunnel Project DEIS, in calling for a separate rail line, with tunnels as needed, to serve the needs for high volume and high speed freight traffic (p. 4). The Advisory Committee Proposal calls for a rail line passing through Marley Neck and Sparrows Point; further details are not included in their Proposal. Certainly the exact alignment would be subject to further engineering scrutiny, but freight rail service clearly needs to be associated with Baltimore's harbor. I want to make it clear that I believe that the Port of Baltimore and the freight rail service which connects the Port to the regional, state, and national economies are of the highest importance. However, I also believe that it seems imprudent to route all that freight back through Baltimore city, saving two minutes in new tunnels but otherwise clacking along over outdated infrastructure which cannot handle the freight flow necessary to keep the Port operating at optimum efficiency. The idea of a separate route for rail service, not passing through the residential neighborhoods of Baltimore, was central to my earlier comments on the DEIS; I deemed the idea a constructive criticism. Now the Advisory Committee Proposal has made that idea an even more constructive criticism by providing detail regarding route, order of construction, and coordination with other rail infrastructure needs.

Third, the Advisory Committee Proposal addresses intercity passenger rail service by calling for a "Tunnel for high speed, intercity rail under Fayette Street with a station at Charles Center Plaza." The Proposal provides further details passenger service later in their text. While this goes beyond what I suggested in my earlier comments, this idea has a great deal of merit, especially as part of the holistic analysis in the Proposal. While I think it may be possible to make infrastructure exceptions to allow some AMTRAK trains to access Penn Station, improved service to a Charles Center Plaza station could well be a better alternative for Baltimore. The city would maintain its place of importance in regional intercity rail service. Taking an intracity train from Penn Station to the new Charles Center Plaza station to catch an intercity train would be very feasible. It is exactly analogous to my travels in Florence, Italy last summer, when I had to take a local train to meet the train to Verona. Wouldn't it be nice to be able to say Baltimore had a train system that worked like a European city? The important point here is that the infrastructure required to support efficient and effective intercity rail service needs to be explicit

COMMENTS | **RESPONSES**

before four billion dollar rail tunnels are designed and built. That is not the case with the B&P Tunnel Project DEIS, and that is further evidence of error in the DEIS.

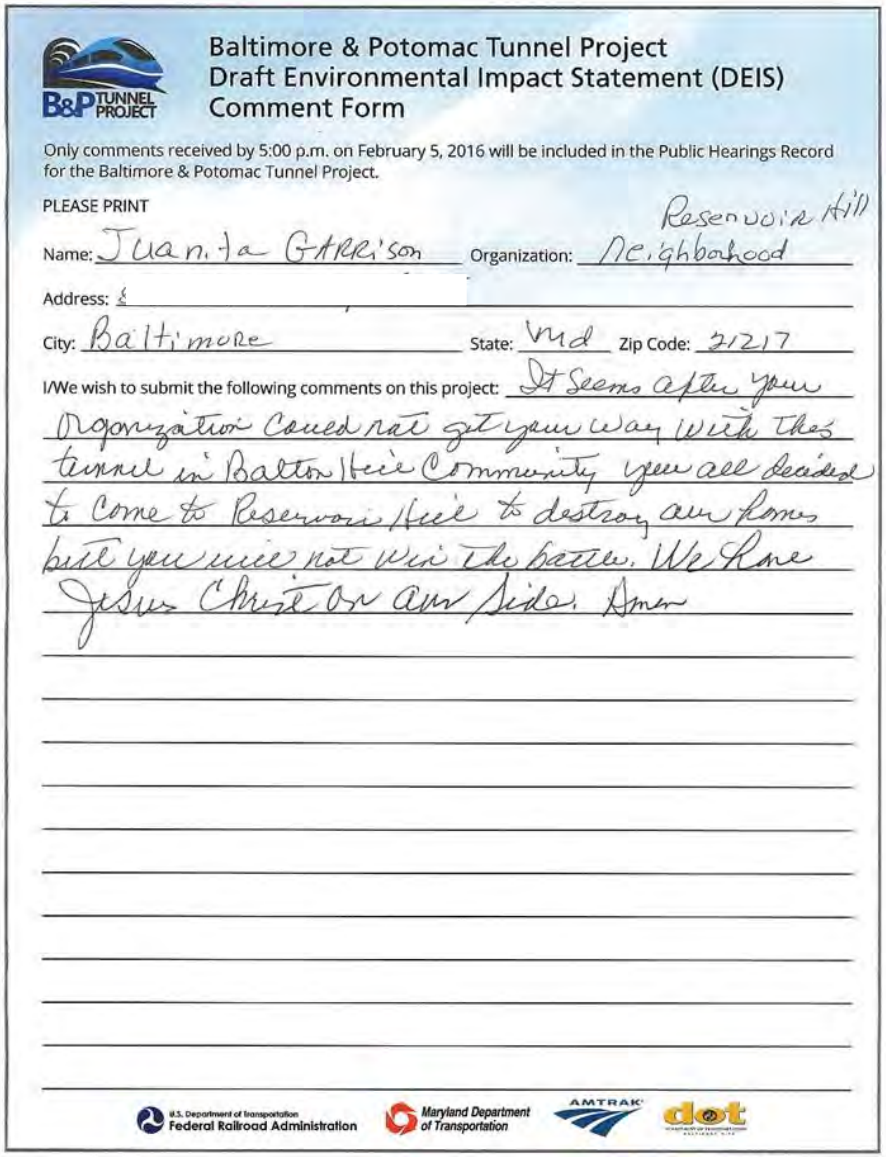
Fourth, the Advisory Committee Proposal, as a result of its holistic approach and its unpacking of conflicts, looks at the rail lines considered in the B&P Tunnel Project DEIS and calls to "rebuild the B&P and Union Tunnels for MARC access to Penn Station with several new stations along the line." (p. 4) The Advisory Committee Proposal continues, "This proposal eliminates the need for ... the Great Circle Tunnel into Penn Station. Cost saving to the state would be in the billions of dollars." (p. 12) While the social, cultural, and environmental justice impacts of the build alternatives in the DEIS probably have greater impact than the economic ones, it still would not be bad to save a few billion dollars from being spent erroneously. Again, the fact that beneficial alternatives, not using the Great Circle Route for the train tunnels, are available provides clear evidence that the B&P Tunnel Project DEIS is fundamentally and seriously flawed. These other alternatives, in the context of a system-wide analysis, need to be considered, and if considered objectively, it seems clear that they would be found superior to the build alternatives in the DEIS. These other alternatives, once studied and evaluated, could be recommended for further analysis and engineering design.

It is hard to fathom why and how the B&P Tunnel Project did not pursue a system-wide analysis that would have addressed many of the issues in the Advisory Committee Proposal, in my earlier comments on the DEIS, and in much of the evidence provided in the Public Hearing process for the DEIS. Almost all of the evidence provided was in opposition to the DEIS, and it appears that the dissenting public has been, in part, responding negatively to the myopic process and short-sighted conclusions of the B&P Tunnel Project, its staff, and presumably, its management. The only alternative in the current DEIS which is worthy of recommendation is the "do nothing" alternative. That would allow a responsible reevaluation, hopefully as part of a holistic analysis, with the potential to arrive at an alternative which could gain the support of local residents while providing for world class rail service on the Northeast Corridor. The Advisory Committee Proposal notes that, with their plan, they "ensure economical, integrated future expansion rather than haphazard, costly, inefficient, and ineffective, project focused expansion." (p. 12) That is their objective, that is my objective, and I hope the B&P Tunnel Project will conclude that they have erred in this regard to date and make it their objective.

James L. Floyd
P.E., Ret. Baltimore, MD 21217

COMMENTS

DEIS Comment 41:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Juanita GARRison Organization: Reservoir Hill Neighborhood

Address: &

City: Baltimore State: Md Zip Code: 21217

I/We wish to submit the following comments on this project: It seems after your

1 Organization Coued not get your way with the

tunnel in Bolton Hill Community you all decided

2 to come to Reservoir Hill to destroy our homes

but you will not win the battle. We have

Jesus Christ On our Side. Amen

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

Response to Comment 1:
The existing B&P Tunnel tracks are in Bolton Hill. Options as to where the new B&P Tunnel should reside are limited. Due to the geography and the shallowness of the area beneath Bolton Hill, this area was not a feasible option for the proposed Tunnel, whereas the area underneath Reservoir Hill is deeper and more practicable.

As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering

COMMENTS

RESPONSES

issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 2:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS

DEIS Comment 42:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Thursday, February 11, 2016 1:53:20 PM

Mrs Stephanie Gates

DEIS COMMENT
We are voicing opposition to the B&P tunnel under our neighborhood of Reservoir Hills for these reasons:

1 1. We do not trust that those who wish to build this tunnel under our neighborhood are considering what is in the best interest of us who live there. It is always about the money; the bottom line; the economic gain and interest of the few with the money. They choose a path of least resistance and we become "collateral damage" for the greater agenda. It is not fair!

2 2. We have read that it will be a source of jobs. Jobs for whom? If the applicant do not possess the skills to do the job, then who gets the job? Chances are, the job will go to the best qualified person who does not reside in the area.

3 3. The quality of life as we know it will change. We can assume living with the fact that you have a tunnel with trains running under your home can cause great stress and fear of the ground collapsing like it did on 26th Street. I can only imagine that the property values will decrease because no one would want to live on top of a tunnel.

4 4. Highways are built to bypass business districts in cities then, why can't a tunnel be built to bypass vital residential areas?

5. Reservoir Hills is growing and plays a vital part in people returning to the city. The neighborhood is stable, diverse and there is room for growth. The heart of Baltimore is within a 5 minute ride down the Jones Falls expressway. The B&P tunnel would be a devastating blow to those of us who work so hard in building a great quality of life here.

James and Stephanie Gates

RESPONSES

Response to Comment 1:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

Response to Comment 2:
As part of the mitigation efforts, the Project sponsor would provide coordination with local job training organizations to 1) facilitate targeted job training by providing estimates of the type, number, and timing of jobs expected to be created by project contractors, 2) include in construction contracts goals for nationally targeted workers of social and economic disadvantage, and 3) require project contractors to report on a regular basis their progress in meeting contract goals. The Project sponsor will provide public reporting on job creation. These efforts are ongoing and are documented in this FEIS as described in **Chapter VI**.

Response to Comment 3:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety. The build alternatives will have an average tunnel depth of 115 feet.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 4:
The Project has been planned mostly underground in order to avoid greater impacts to the community.

Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated

COMMENTS	RESPONSES
	displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS

DEIS Comment 43:

Brittany Rolf

From: Gentner, Paul
Sent: Sunday, January 31, 2016 9:33 PM
To: BPTunnel Information
Subject: BP Tunnel Project - Alternates
Attachments: RR Baltimore indd.pdf

Hello,

I am curious to know if the railways have been studied that would preclude building new tunnels in the City vs. utilizing existing railways and State owned rail right-of-ways that could be designated primarily for freight on routes south of the City and through a new rail tunnel system under the outer harbor. Looking at rail lines in Curtis Bay area connecting across the water to rail right-of-ways on the north shore. 1

Maintain and improve existing tunnels primarily for passenger service via the Amtrak / MARC and CSX lines thus eliminating new tunnels below City neighborhoods.

See attached maps, Figures 1 and 2.

Paul L. Gentner
Reservoir Hill, Baltimore City 21217

RESPONSES

Response to Comment 1:
The Maryland Department of Transportation oversees comprehensive transportation planning for the State. Prior studies have been performed that evaluate the full network of rail corridors, especially those in and around the City of Baltimore. The study of the B&P Tunnel partly resulted from the identification of this Project as a critical component to the greater rail access plan.

A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

COMMENTS



Figure 1
Baltimore area railways

RESPONSES

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

COMMENTS

RESPONSES

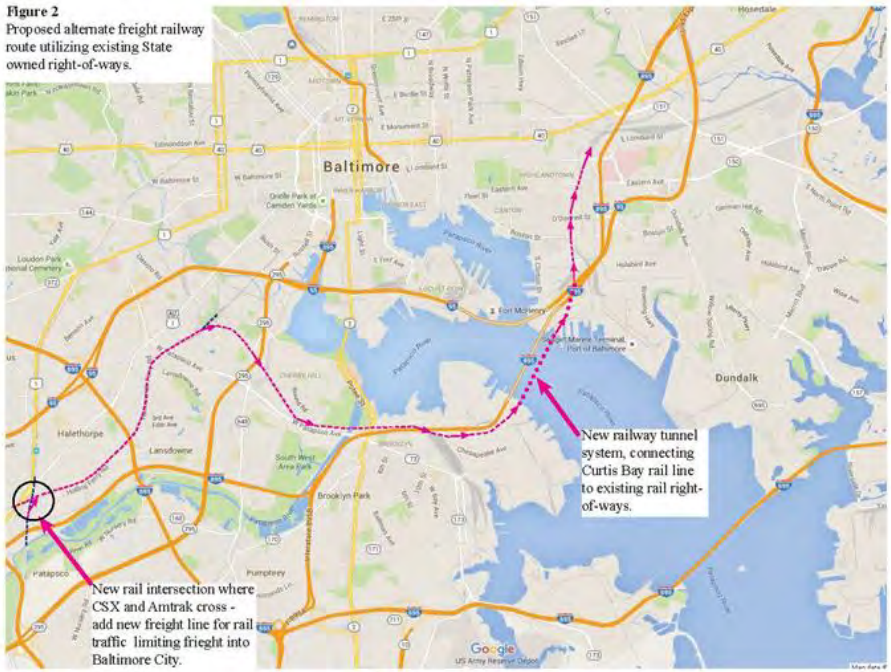
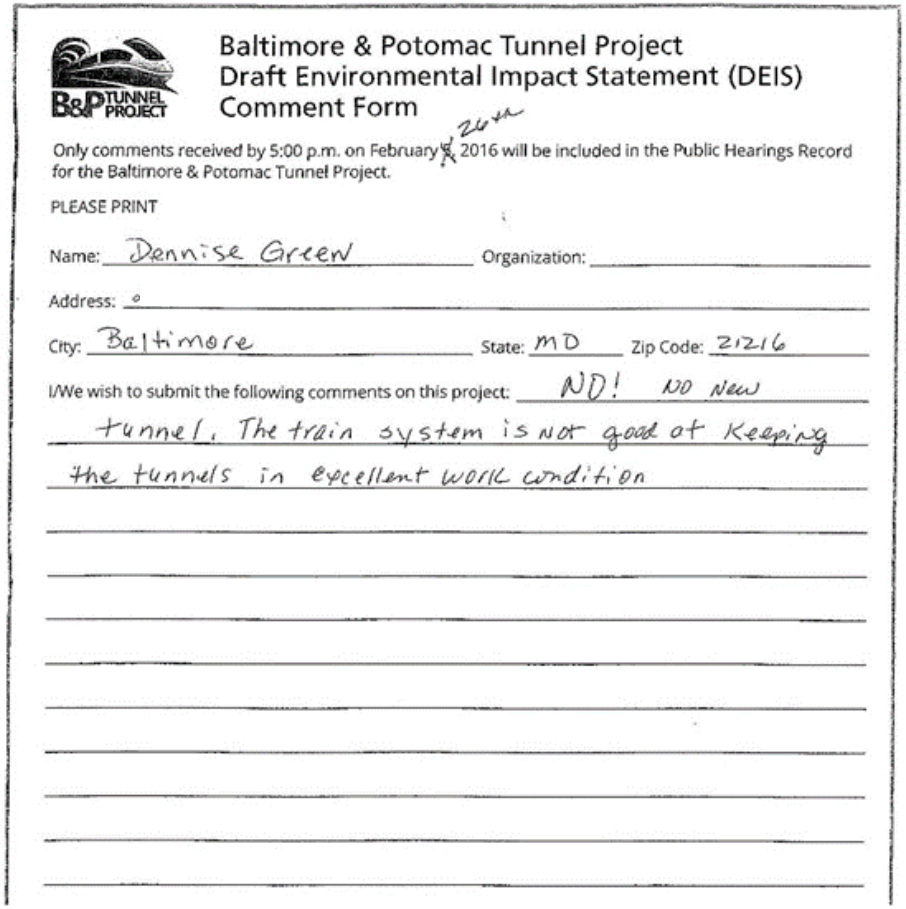


Figure 2
Proposed alternate freight railway route utilizing existing State owned right-of-ways.

COMMENTS

DEIS Comment 44:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 26th 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Dennise Green Organization:

Address:

City: Baltimore State: MD Zip Code: 21216

I/We wish to submit the following comments on this project: ND! NO New tunnel. The train system is not good at Keeping the tunnels in excellent work condition

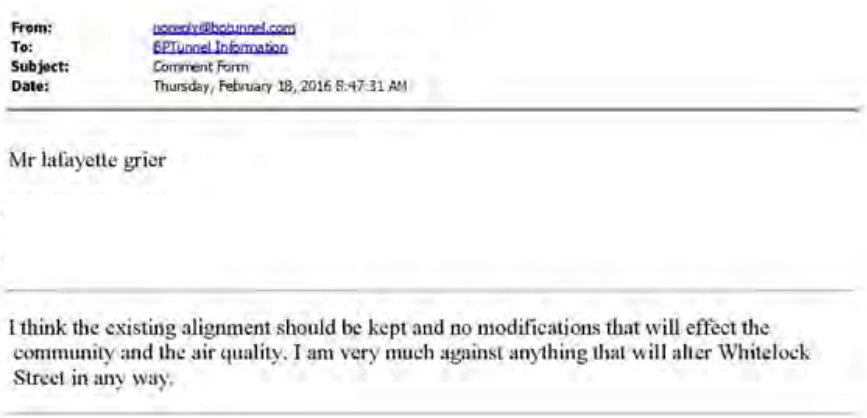
1

RESPONSES

Response to Comment 1:
The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

COMMENTS

DEIS Comment 45:



From: noreply@bpitunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Thursday, February 18, 2016 8:47:31 AM

Mr lafayette grier

1 I think the existing alignment should be kept and no modifications that will effect the community and the air quality. I am very much against anything that will alter Whitelock Street in any way.

RESPONSES

Response to Comment 1:
As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 46:

From: PETER HALSTAD
To: BPTunnel Information
Subject: Re: DEIS COMMENT
Date: Thursday, February 18, 2016 1:58:23 PM

My name is Peter Halstad. I have lived in Baltimore City for over 30 years – including on beautiful Mount Royal Terrace.

1 I'm looking at this proposal, and at this process, and at the smattering of media coverage and I'll be frank: what I see is terrifying. I can't be the only person who thinks that high-speed double-stacked freight trains do NOT belong racing under residential areas in the center of a city! Does ANYONE

2 hearing or reading this testimony want crude oil, fracking waste, or nuclear material racing under their home? Monstrous industrial vent shafts exhausting diesel fumes do NOT belong smack in the middle of housing and next to an elementary school.

I thank you for holding these hearings. But despite all this testimony, I have a bad feeling about how this will go.

I foresee the citizens who live here and are rebuilding these neighborhoods, some second and third generation - many pouring blood, sweat, tears and every cent they have into these homes, many who spend hours doing good for the community, who pay taxes, who have made sacrifices to live in the city make this city work, literally being railroaded by the big-moneyed corporate interests of the Port, CSX, Norfolk Freight and the Governor – all of them piggy backing on federal & state money

3 assigned to improve the NEC passenger service. You can find the CSX Vice President's quotes in the May 22, 2015 Baltimore Sun, attesting to his determination to "get into the B&P." I hope I'm wrong, but I foresee the residents being treated as an inconvenient speed bump.

1 This project is being touted as for Amtrak and MARC trains. Then why are the parameters of it designed for double-stack FREIGHT trains? It expands the demands and therefore limits the options for tunnel size and placement. It does NOT serve us as passengers – we don't want to share the tunnels with speeding freight trains with hazardous cargo any more than we want them under our houses.

4 As to the Environmental impact study: I can accept that the engineers sincerely believe in their assurances that there will be minimal vibration, no damage to the stacked stone foundations, the soft brick walls and the brittle ornate plaster of our homes. But I do NOT see their sincere belief doing us a squat load of good when the foundation shifts, the bricks crack and the plaster falls. Their own study even says there will be damage. I don't see those long-gone engineers coming fix anybody's foundation. I don't see any plan backers & study funders volunteering to pay for the plaster repairs – a very specialized, expensive and hard to find skill, that some of us have spent thousands of dollars and hours restoring.

5 I have heard talk of mitigation, of reparation for damages. I don't see it, I see a nightmare. I see the burden of proof being dumped on the owners of the damaged homes. "Prove that the damage to your house was caused by our process, not its age" regardless of the fact that it was standing just fine for 120 years – until someone drilled a 30' hole under it and shook the heck out of it. I see our homes and investments literally crumbling, while we try to decide whether to go broke trying to fix them, go broke trying to sue for damages against million dollar lawyers, or go broke giving up and moving out.

Beyond that, how do you mitigate the loss of community that happens when you plop a massive

RESPONSES

Response to Comment 1:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable

COMMENTS

6 industrial zombie building right in the heart of it? Dead to the living, but constantly humming, blocking any sense of view or neighborhood. How do you mitigate the loss of a community that cannot survive a years long construction assault, and a devaluation of its future?
Mt. Royal Terrace is closest to the South Portal. I dread hearing 300 speeding trains a DAY passing in and out of tunnels about two blocks away. One plan has the North portal about that far Carver Vo-Tech school. Think that will be conducive to study?
I just want to beg you: Don't railroad right over us – or under us, I should say. And don't vent-shaft us, either.

RESPONSES

materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2

COMMENTS

RESPONSES

concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

Response to Comment 3:
The Project Team has engaged in extensive public outreach throughout the development of the Project including three Public Open Houses, as well as ten community meetings where the public was given the opportunity to learn about the project development and engage in discussion with the Project Team. In addition to these meetings, Mitigation Working Groups comprising community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI**, as well as **Chapter VIII.**

Response to Comment 4:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using analysis procedures from the *FTA Transit Noise and Vibration Impact Assessment.* Construction vibration levels were also evaluated using both FTA guidelines and standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

COMMENTS

RESPONSES

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI**.

Response to Comment 5:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

Response to Comment 6:
The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations

COMMENTS

RESPONSES

and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

The three ventilation plant facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use.

Noise levels in the immediate vicinity of the ventilation plant buildings would be caused by the continual operation of the ventilation fans within each facility. The horizontal fans would operate periodically and would generate sound that would propagate through the louvers at the top of the ventilation facilities. Fans would operate periodically when NO_2 levels in the tunnel exceed a set threshold or in emergencies when smoke is present in the tunnel. NO_2 levels are likely to be highest when the level of diesel locomotive operations is highest, or when congestion causes trains to operate slowly or to idle in the tunnel. However, there is not enough information currently available to determine how many hours per day, on average, the fans would run and whether or not they would run during the night.

The design standard for the ventilation facilities would limit the outdoor noise level, when the fans are in operation, to L_{max} 50 dBA at the facility property lines. 50 dBA is approximately the noise produced by an indoor air conditioner at a distance of three feet.

To achieve the required reduction in noise level, cylindrical or rectangular sound attenuators would be mounted directly to each fan or to the ductwork within the system. In addition, the building itself would partially shield noise from the interior of the ventilation plant, which would further reduce noise levels outside of the building. The Preliminary Engineering Team has stated that the ventilation plant facilities, with attenuators installed, will emit noise at 45 dBA. This would meet the design standard of L_{max} 50 dBA at the facility property lines (i.e., the noise level generated would be less than the design standard).

COMMENTS

DEIS Comment 47:

From: Harrington, Jen J
To: BPTunnel Information
Subject: B & P Tunnel - Upcoming Hearings
Date: Tuesday, January 19, 2016 10:28:22 AM
Attachments: image001.png

Good Morning, Odessa.

I hope this message finds you after a great, long weekend.

Per my voice message, I am reaching out about your upcoming hearings for the B & P Tunnel project. Are you still looking for venues to get the word out to the public? If yes, I am confident that WBAL radio is a great venue to connect with an active, educated, civic minded Baltimorean. Can we connect for a few minutes by phone to talk about options? Thanks in advance.

Here's to a great week!

Jenifer

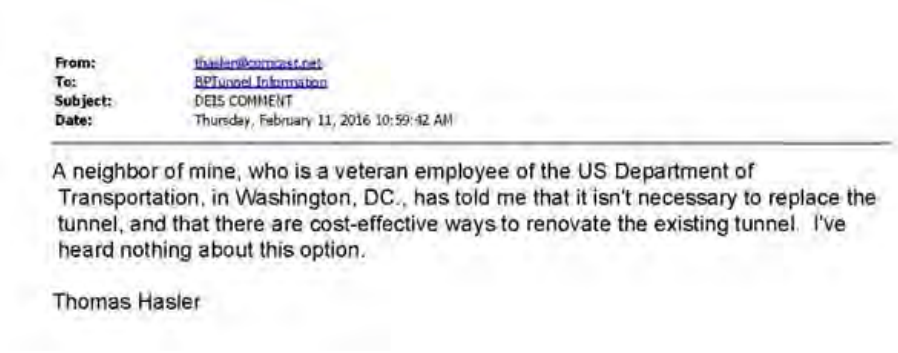
Jenifer Harrington

RESPONSES

Thank you for your comment.

COMMENTS

DEIS Comment 48:



From: thasler@comcast.net
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Thursday, February 11, 2016 10:59:42 AM

A neighbor of mine, who is a veteran employee of the US Department of Transportation, in Washington, DC., has told me that it isn't necessary to replace the tunnel, and that there are cost-effective ways to renovate the existing tunnel. I've heard nothing about this option.

Thomas Hasler

1

RESPONSES

Response to Comment 1:
As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

COMMENTS

DEIS Comment 49:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Friday, February 19, 2016 1:41:36 PM

Ms Aimee Hickman

When I moved my young family to Reservoir Hill in 2009, it was because we could see the incredible potential and unique opportunity to live in such a diverse and historic neighborhood. It has been a joy to watch our community come together in shared projects like the growth of the Whitelock farm and see as new development revitalize areas that have too long stood vacant. Situated in midtown Baltimore by historic Druid Hill Park, Reservoir Hill has the potential to be an urban gem in the heart of our great city.

1 But I have real concerns that the wonderful growth our neighborhood has experienced in the last decade will be jeopardized by plans to build 4 train tunnels and its accompanying ventilation building beneath and within the heart of our historic community. All of the
2 proposed routes bore directly beneath 100+ year old homes (including my own) and it is impossible to assume that the vibrations produced during the boring process will not impact these structures in ways big and small. Moreover, the fact that these tunnels will be used to
3 transport literally *any* material, poses a risk to residents in the long-term which have not been seriously addressed in the report.

4 I am disappointed that this project is being considered in order to save 3 minutes for commuters on Eastern corridor rail lines and freight lines without greater concern for the residents who will be displaced or permanently impacted by this route. It also seems foolhardy to proceed with these plans when proposals for the oft-discussed high-speed commuter line have yet to roll out.

5 I hope that the long-term impacts of this historic neighborhood and its residents will be given equal (or greater) consideration than the fleeting few minutes lost to commuters or the financing of multinational corporations eager to transport their dangerous materials through highly populated areas.

RESPONSES

Response to Comment 1:
Consistent with Northeast Corridor (NEC) long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 3:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel

COMMENTS

RESPONSES

subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 4:
While reducing travel time through B&P Tunnel and along the NEC is a goal of the Project, it is not the sole reason the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS. Project goals include reducing travel time through the B&P Tunnel and along the NEC, accommodating existing and projected travel demand for intercity and commuter passenger services, eliminating impediments to existing and projected operations along the NEC, and providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure

Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the

COMMENTS

RESPONSES

Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 5:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 50:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form [2]
Date: Friday, December 16, 2015 4:41:52 PM

Dr David Highfield

The need is for a tunnel that allows a straighter route and higher speed without environmental or long term disruption to neighborhoods. A thoughtful and creative change is needed for the bptunnel, not simple maintenance and cosmetics. Think of radical, revolutionary solutions! Action is needed.

1

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 51:

Brittany Rolf

From: Benjamin Hovey
Sent: Wednesday, February 03, 2016 10:00 AM
To: BPTunnel Information
Subject: Document download

Follow Up Flag: Follow up
Flag Status: Flagged

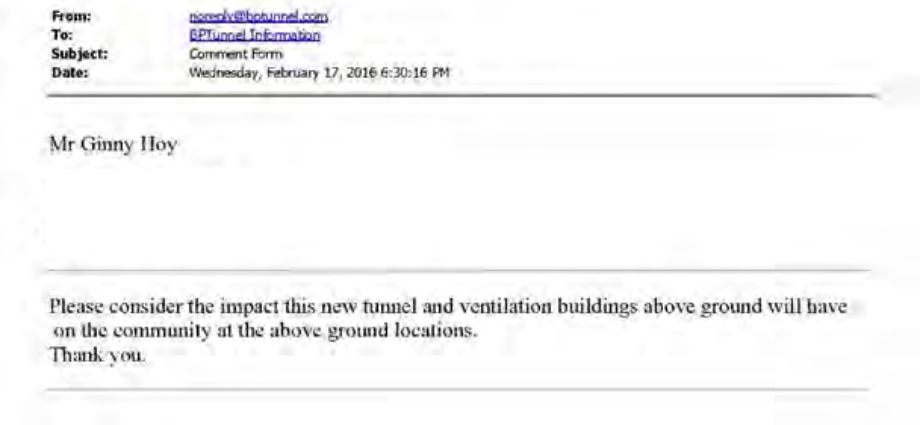
I'm having difficulty downloading meeting and deis documents that are linked to media.elk.com. Others work.

RESPONSES

Thank you for your comment.

COMMENTS

DEIS Comment 52:



From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Wednesday, February 17, 2016 6:30:16 PM

Mr Ginny Hoy

Please consider the impact this new tunnel and ventilation buildings above ground will have on the community at the above ground locations.
Thank you.

1

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 53:

From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Thursday, January 28, 2016 12:03:50 PM

Ms Karen ILiff

What a snow!
I was looking forward to the meeting tonight as I won't be able to attend on future dates. Saturday or Monday the 1st.

I'm an owner/resident in Bolton Hill and would like to leave my comment -

1 I would like an answer to the question of whether or not within the proposed DEIS, the possible future impact of a MAG/LEV train is taken into consideration on these tracks? The possibility is real and there has already been funds allocated to the study of the high speed train and approval by the Federal Railroad Administration. The huge amount of funds needed to build a new tunnel needs to include the possibility of these tracks.
Is this happening?

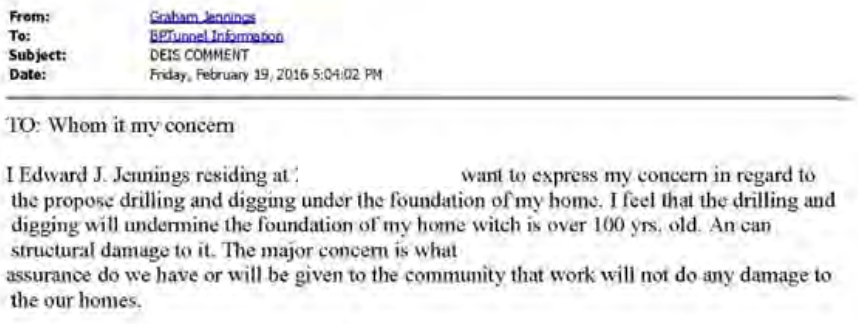
thank you for your time and attention,
Karen ILiff

RESPONSES

Response to Comment 1:
A Maglev train would not utilize existing or planned Amtrak infrastructure. The design of such a system requires significantly different rights-of-way and infrastructure. The design criteria for Maglev are extremely restrictive and would only be achievable on new alignments.

COMMENTS

DEIS Comment 54:



From: Graham Jennings
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Friday, February 19, 2016 5:04:02 PM

TO: Whom it my concern

I Edward J. Jennings residing at want to express my concern in regard to the propose drilling and digging under the foundation of my home. I feel that the drilling and digging will undermine the foundation of my home witch is over 100 yrs. old. An can structural damage to it. The major concern is what assurance do we have or will be given to the community that work will not do any damage to the our homes.

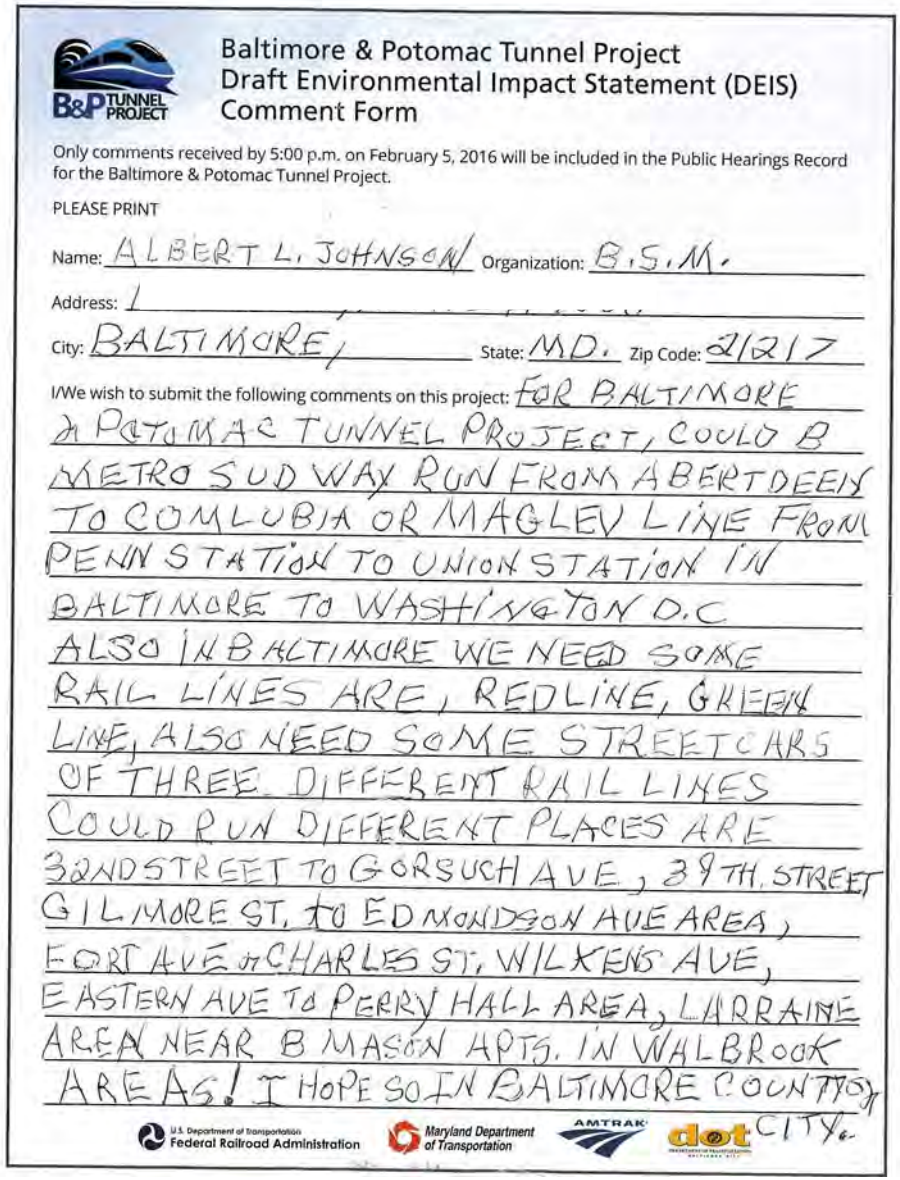
1

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

COMMENTS

DEIS Comment 55:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: ALBERT L. JOHNSON Organization: B.S.M.

Address: [illegible]

City: BALTIMORE, State: MD. Zip Code: 21217

I/We wish to submit the following comments on this project: FOR BALTIMORE A POTOMAC TUNNEL PROJECT, COULD B METRO SUD WAY RUN FROM ABERTDEEN TO COMLUBIA OR MAGLEV LINE FROM PENN STATION TO UNION STATION IN BALTIMORE TO WASHINGTON D.C ALSO IN BALTIMORE WE NEED SOME RAIL LINES ARE, REDLINE, GREEN LINE, ALSO NEED SOME STREETCARS OF THREE DIFFERENT RAIL LINES COULD RUN DIFFERENT PLACES ARE 32ND STREET TO GORSUCH AVE, 39TH. STREET GILMORE ST. TO EDMONDSON AVE AREA, FORT AVE & CHARLES ST, WILKENS AVE, EASTERN AVE TO PERRY HALL AREA, LARRAINE AREA NEAR B MASON APTS. IN WALBROOK AREAS! I HOPE SO IN BALTIMORE COUNTY & CITY.

U.S. Department of Transportation Federal Railroad Administration · Maryland Department of Transportation · AMTRAK · dot

1

RESPONSES

Response to Comment 1:
This comment refers to regional rail planning and is beyond the purview of the B&P Tunnel Project. 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:

- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and
- Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

COMMENTS

DEIS Comment 56:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Friday, February 05, 2016 3:49:29 PM

Mr Ryan Jordan

1 I currently live in the area that this realignment will likely impact the most. I read your report and you have already discounted a couple of options that still within my mind show validity. Option 11B pushes the entry from the West back out of the residential neighborhood. This is a good option, and while the Mark Station would need to be reconstructed, it doesn't seem to impact the other neighborhoods as much as any of the Option 3's do. Option 3 places a Vent structure in the heart of a neighborhood just beginning to reconstruct itself. This location is an

2 urban farm that while feeds the residents of the area beyond also holds events for the residents of the neighborhood. In addition, I am not certain that others know that the Department of Water and Power is considering constructing a water treatment facility on the edge of Druid Hill Park Road which will also sit within the Reservoir Hill neighborhood. These two large Government structures will in essence create brooding bookends of industry in a strictly residential area. 11B does fail on this account as well as it proposes to place the Vent structure at the corner of North Av and Eutaw - a major parkway up to Druid Hill Park. If the Government was trying to damage the connection to one of the cities best assets - the park; it is accomplishing that goal.
Separately, has their been an option that looks to connect a portion of the existing tunnel with a new tunnel similar to 11B? This might help with some costs and could keep residents happy as it doesn't impact the neighborhoods that much (minimal impact to the Midtown Edmondson neighborhood. This could also remove one of the bends in the existing track - which seems to be the goal of this study. The other idea is to head north to Route 1 and take the tunnel under the entire street most of the way until the turn. This way the street would only feel the impact.

Please reconsider the routes and keep the tunnel route in the same location.

RESPONSES

Response to Comment 1:
Alternative 11B would meet the Project's Purpose and Need; however, overall, the impacts associated with this alternative would not result in commensurate benefits when compared to the other alternatives. Specific reasons for the elimination of this alternative can be found in the *Alternatives Report*.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 57:

From:
To: BPTunnel Information
Cc: Orla Kastberg
Subject: DEIS COMMENT
Date: Friday, February 05, 2016 12:17:11 PM

1 As residents of Bolton Hill, thank you for the opportunity to comment on the b&p tunnel project. First, we strongly recommend that NO expansion or major rehabilitation work occur on the existing tunnel. Historic homes will be put under
2 major stress, as well as the residents. We currently hear and feel train traffic vibrations under our house throughout the day and night. We can't even imagine what it would feel and sound like with even more traffic and what damage it will bring to these historic homes. Not to mention the impact on property values. So if the decision is to go with "No Build" any rehabilitation should be minimal with only required maintenance. Out of all the alternatives, we support the option (3a) that would take the tunnel through an industrial park/less populated area and is ultimately much deeper and has less impact on people and existing properties and businesses. Tearing down vacant and dilapidated houses in the process would also be a benefit for the community. Minimizing impact on residents should be a
3 top priority. And preserving our historic neighborhoods should also be a top priority. Picking a less expensive option will cost more in the long run on many levels. Should the decision be to proceed with any of the alternatives, we
4 recommend shutting down the existing tunnel. It should have no other use as the alternative would meet the needs and purpose. Please do the right thing for the people, community, and planet.

Sent from my iPhone

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM

COMMENTS

RESPONSES

would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 3:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include

COMMENTS	RESPONSES
	historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**. **Response to Comment 4:** Amtrak desires to reserve the existing tunnel for a future rail transportation use.

COMMENTS

DEIS Comment 58:

From: FKhosravi
To: BPTunnel Information
Subject: DEIS Comment
Date: Saturday, February 13, 2016 10:06:17 AM

Please stop this project!
It is a risk to our lives because:

- 1 Exposure to hazardous material as it happened not too long ago and we had to evacuate down town Baltimore.
- 2 Disturbs the ground and makes it vulnerabl to other environmental elements like rain which can cause the collapse of neighborhous as it happened in Charles Village.
- 3 Vibrations and noise can cause neurological health issues that can lead to physical health issues.

Would you go forward with this project if it was your neighborhood?

Farndoon Khosravi

RESPONSES

Response to Comment 1:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

Response to Comment 2:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

Response to Comment 3:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

COMMENTS

RESPONSES

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

COMMENTS

DEIS Comment 59:

From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Saturday, February 13, 2016 9:59:28 AM

Mr Faridoon Khosravi

N/A

This project is a risk to the entire city for the following reason:
Exposure to hazardous material. it wasn't too long ago when we had to evacuate down town Baltimore. The same company and people were involved. 1
Damage to ground that can cause collapse of the neighborhoods. It wasn't too long ago that the Charles village collapsed. Disturbing the ground that has been settled and solidified for thousands of years, makes the area vulnerable to such risks. 2
Sound and vibrations are exposing people to neurological health issues. 3

RESPONSES

Response to Comment 1:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

Response to Comment 2:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

Response to Comment 3:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

COMMENTS

RESPONSES

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

COMMENTS

DEIS Comment 60:

Brittany Rolf

From: Kirby, Chris
Sent: Thursday, February 25, 2016 4:59 PM
To: BPTunnel Information
Subject: DEIS COMMENT
Attachments: DEIS COMMENT - B&P Tunnel.pdf

Attached, please fine our correspondence pertaining to the above subject. Thank you.

Chris Kirby for Pierce Flanigan IV
Administrative Assistant

RESPONSES

There would be minimal impacts to P. Flanigan and Sons by the Preferred Alternative. These minimal impacts would include potential utility relocation impacts. Alternative 3B would include a south portal located southeast of the P. Flanigan and Sons Asphalt plant. Build alternatives 3A and 3C, though, would have substantial impacts. For more information, please see **Chapter III**.

COMMENTS

RESPONSES

★ ★ ★ FLANIGAN ★ ★ ★

SINCE ★ 1885

February 25, 2016

Ms. Jacqueline Thorne
Project Manager
Maryland Department of Transportation
81 Mosher Street
Baltimore, MD 21217

RE: B&P Tunnel Project – DEIS COMMENT

Dear Ms. Thorne,

I am writing to share additional comments regarding the conceptual plan for Alternative 3 Options A, B, and C. These options and any other future options that could impact the ability of P. Flanigan and Sons to operate would be devastating for the business and the people it employs.

We annually employ three hundred people. The majority of our employees live in Baltimore City. We are the largest employer of blue collar workers in the Sandtown/Winchester neighborhood.

P. Flanigan and Sons exists to build and maintain transportation infrastructure in the Baltimore Region. The facility in question is critical to our business and mission. We have contracts with numerous state and municipal agencies as well as private land owners. We produce over 300,000 tons of hot mix asphalt and 75,000 tons of recycled aggregates at this location. All of our construction projects are time sensitive. For this reason, the facility is in use day and night during the construction season and daily throughout the winter.

Since 2006, we have been purchasing adjacent property so that we can expand this facility. We fully utilize our property and are actively pursuing more land in this area. In the past 10 years alone, we have invested more than three million dollars into this facility through land acquisition and improvements.

The unique location of this facility and its special attributes make it truly one of a kind. The production of asphalt materials has been going on here for over one hundred years. This location is minutes away from three major highways and the center of the city. It has an active rail spur which is used continuously to deliver aggregates from Vulcan Materials. The site also has an upgraded electric sub-station and natural gas service which are critical for the efficient operation of this type of facility. The combination of these three attributes, along with the permitting necessary to operate this type of facility makes it impossible to recreate. This is why we continue to expand and improve this facility.

P. FLANIGAN & SONS, INC. | www.pflanigan.com
2444 LOCH RAVEN ROAD | BALTIMORE, MD 21218
Telephone 410-467-5900 | Facsimile 410-467-3127

COMMENTS

RESPONSES

The purpose of this letter is to reiterate three main points. Firstly, this facility is essential to a business that supports hundreds of Baltimore City residents. Any disruption to its operations would be damaging to my business, my company and my employees. The location is unique because of its location to highways, the on-site rail service, the utilities, and the history of its use. We have been expanding and investing in this facility because it is fully utilized and essential to our operations.

Sincerely,

P. FLANIGAN & SONS, INC.

Pierce J. Flanigan, IV
President/CEO

cc: Mr. William H. Cole, CEO
Baltimore Development Corp.

Page 2 | 2

COMMENTS

DEIS Comment 61:

Brittany Rolf

From: noreply@bptunnel.com
Sent: Friday, February 26, 2016 2:08 PM
To: BPTunnel Information
Subject: Comment Form

Ms Barbara Kozminski

N/A

I strongly support Alternative 3C, as it provides greater travel time savings than Alternative 3A and results in fewer residential and community facility displacements than Alternative 3B.

1 It is time to rebuild this critical link in the Northeast Corridor's rail infrastructure; doing nothing should not be an option.

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

RESPONSES

DEIS Comment 62:



Whitelock Community Farm
922 Whitelock Street #4
Baltimore, MD 21217
farmer@whitelockfarm.org

KUK
1
of
3

February 1, 2016

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

To B&P Tunnel Project Management:

1 I am writing on behalf of the board of directors of Whitelock Community Farm to express our deep concern and displeasure regarding the current proposals of the B&P Tunnel project. While we have issues with many aspects of the three alternatives still under consideration, our strongest objection is to the proposed location of the ventilation building at the corner of Brookfield Avenue and Whitelock Street.

First, allow me to provide some background information on Whitelock Community Farm and the proposed ventilation site. For much of Reservoir Hill's history, the Whitelock Street corridor was the commercial heart of the community. As the neighborhood declined in the 70's and 80's, the commercial district fell into disrepair and became a violent and notorious open-air drug market. In 1994, the city razed the buildings on Whitelock Street, promising to bring commercial development back to these blocks as part of the revitalization of Reservoir Hill. These promises were not fulfilled for over fifteen years and the lots became neglected, trash ridden eye-sores in the community.

In 2010, a group of ten neighbors met through the Green Team of the Reservoir Hill Improvement Council. This group shared not only a passion for the greening of our neighborhood, but also a love for wholesome food and concern for the health outcomes of our community. According to a 2011 Baltimore City Health Report, the neighborhoods of Penn North and Reservoir Hill suffer from the third highest rate of diabetes and the sixth highest rate of heart disease compared to the other fifty-five neighborhoods in Baltimore. Much of Reservoir Hill is classified as a food desert due to a lack of access to healthy food options.

The group decided to start an urban farm on one of the vacant lots on Whitelock Street with the mission of increasing access to healthy, affordable food for all Baltimore City residents; promoting positive community activity; and creating local, green jobs. Through the hard work of Whitelock Community Farm's farm managers, board of directors and hundreds of volunteers, Whitelock Community Farm has not only thrived on the original lot on the north side of Whitelock Street, but has expanded to the south side of Whitelock Street where the proposed ventilation building would be located.

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

RESPONSES

RUP 2 of 3

Whitelock Community Farm has been successful in pursuing its mission. In the past year alone, Whitelock Community Farm accomplished the following:

- Grew 3,700 pounds of produce to sell to neighbors at our weekly farm stand.
- Increased membership in our Community Supported Agriculture (CSA) program from 15 members to 25 members.
- Increased sales to residents using food assistance by 57%.
- Diverted over 3,000 gallons of food from the dump through our neighborhood composting program.
- Managed 20 apprentices and college interns.
- Employed four high school students from the neighborhood for the second summer.
- Hosted a Farm Club and healthy cooking classes with students at John Eager Howard Elementary School.
- Partnered with Midtown Academy to install an irrigation system on one of our expansion lots and revamp our neighborhood composting system.
- Hosted a fermentation workshop and a canning workshop with 80 and 15 attendees, respectively.
- Hosted five community potlucks featuring healthy farm fresh dishes.

Additionally, Whitelock Community Farm serves as a place where neighbors of diverse racial and socio-economic backgrounds can gather and build bridges across those barriers. At a recent community meeting regarding the extension of the lease of the lots on Whitelock Street, many neighbors from a variety of backgrounds testified to the positive effect Whitelock Community Farm has had on the community and their own lives.

If the ventilation building were built on the Whitelock Street lots, it would destroy the work of Whitelock Community Farm. Not only would a large portion of our farming land be plowed under, but the remaining land would not receive suitable sunlight and would be poisoned by the emissions from the ventilation building.

Furthermore, building a ventilation building on this land would serve as an act of social and racial injustice. Reservoir Hill is a community with unequal health outcomes, in part due to a lack of access to affordable, healthy food. Whitelock Community Farm is addressing this issue by not only growing fresh produce, but making it available to all neighbors and providing incentives for neighbors using food assistance to purchase produce. Whitelock Community Farm is instilling healthy eating habits in the next generation through our partnerships with John Eager Howard Elementary School, Midtown Academy, and Youth Works. A ventilation building at Whitelock Street would not only eradicate the progress that is occurring, but would also degrade health in the neighborhood through the release of toxic emissions.

Finally, should the B&P Tunnel Project continue with plans to seize the lots at Whitelock Street and Brookfield Avenue, it would serve as a slap in the face to residents who have risen above broken promises to take the future of their neighborhood into their own hands. The Baltimore City Government made promises to redevelop Whitelock Street, but these promises were not honored.

COMMENTS

KUK 3 of 3

Instead, neighbors decided to build their own future and transformed these neglected parcels into a green oasis that improves health outcomes, promotes positive community activity, and creates learning and employment opportunities. It would be ironic, tragic and unjust if the federal government now came in and destroyed the progress that has been achieved.

2 Whitelock Community Farm's board of directors is also very concerned about emissions from a ventilation building, regardless of its location, and the potential transport of hazardous materials beneath our neighborhood. However, we felt that it was essential to spend the majority of this letter explaining our strong objections to the proposed location of the ventilation building.

If you have any clarifying questions regarding the statements and information presented in this letter please do not hesitate to contact me by phone (443-799-7338) or email. While I know there are many factors involved in the decisions being made in this process, I trust moral decisions will be made that place the health of communities above corporate interests.

Sincerely,

Justin Kuk
President, Whitelock Community Farm

RESPONSES

Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

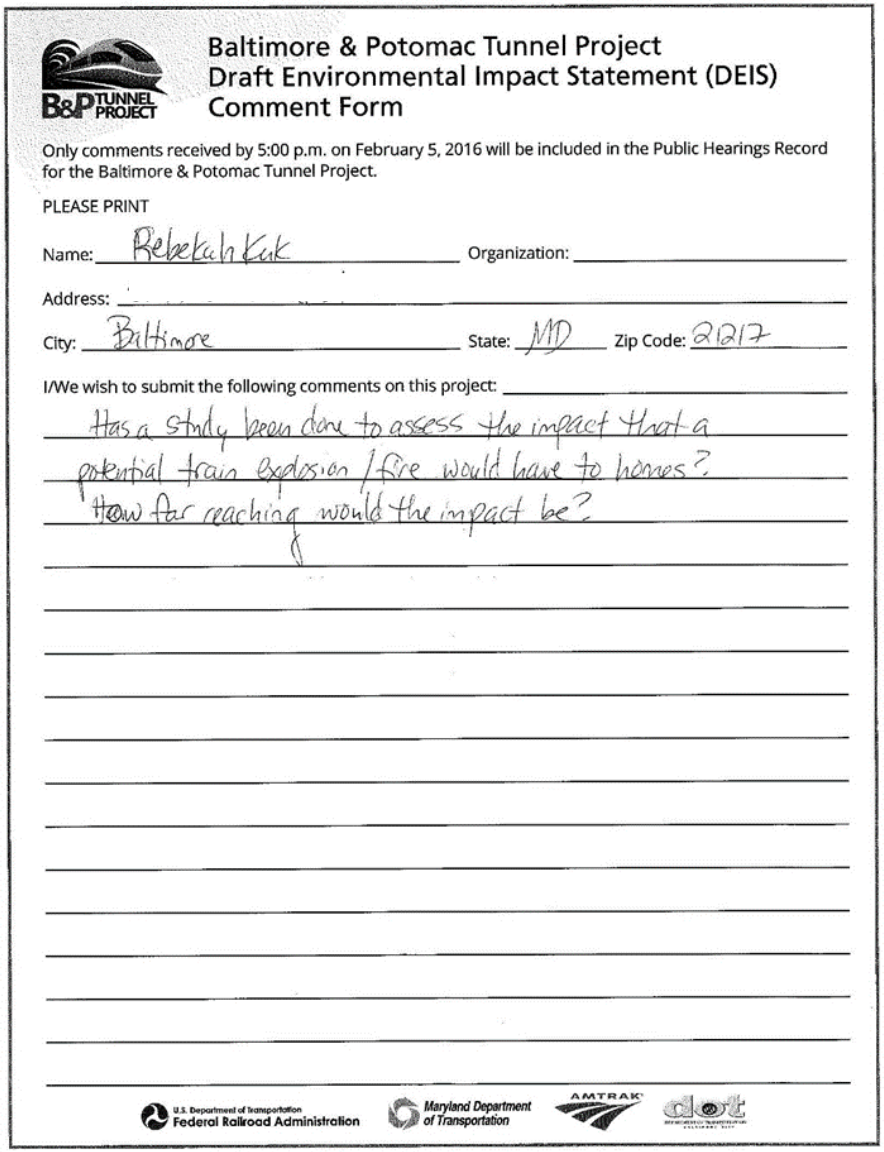
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

COMMENTS

DEIS Comment 63:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Rebekah Kuk Organization:

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project:

1 Has a study been done to assess the impact that a potential train explosion / fire would have to homes? How far reaching would the impact be?

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

Response to Comment 1:
To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA).

The Project has been planned mostly underground in order to avoid greater impacts to the community. In the unlikely event of an emergency, the event in a tunnel is much less damaging to a community than a similar event on an above-ground track running through the neighborhood. Additionally, as stated above, the new B&P Tunnel would be designed to be better equipped and prepared than the current B&P Tunnel.

COMMENTS

DEIS Comment 64:

B&P Tunnel Hearings on the Draft Environmental Impact Statement

Testimony of Bill Lee, Baltimore MD, 21217

Board Member: Baltimore Heritage, Inc. and Residents Against the Tunnels

February 6, 2016

I am here to represent my neighbors, neighborhood, friends, family, and, primarily, my house, in opposing the planned construction of tunnels underneath my neighborhood. My house is similar in construction to the one described by my neighbor, Kathryn Epple, at the February 1 hearing. My house is several decades older than me since she was built in the 1890's. I know my house pretty well because I have lived in her for more than thirty years. She listens to the pulse of her neighborhood. When the buses and trucks replaced the trolley tracks and rumbled down Eutaw Place, she knew the vibrations were not good for her bones. She has well placed friends such as the plumbers, electricians, carpenters, and Woodwrights who regularly visit her to make necessary repairs and renovations. They have expressed their concerns about her future because of the dangers presented by tunnels carrying as many as 388 trains a day. "That's a lot of train power." She said to me the other day. She explained the concerns of her professional friends. They worry about the continual vibrations which will give her the shakes. "That can't be good for me," she said. I agreed with her. 1

"Why are they planning this construction?" she asked. I supposed it was based on the need for economic development. She was not impressed. "Will anyone want to live in me if there are tons of travelling trains underneath my basement floor?" she wondered. "This neighborhood won't be worth a nickel ice cream." she said, showing her age. "And besides all the shaking, what about that five story vent they want to build a block away? It's going to be shooting out all the dust, diesel excess, nuclear waste and who knows what else into the air. Are people going to want to breathe in that filth? I don't think so. I think business people don't care about all of us old houses or the people who live here. They wouldn't mind if these grand historic houses just dry up and blow away, along with all the people who live in them." I tried to explain that the businesses really wanted to keep the city and the port as viable job providers. But she was not happy. She closed down and wouldn't talk to me. I thought I heard her sniffle but that might just have been one of her radiators. 2 3 4 5

There are some things I don't bring up around her. For instance, I remember that in 2001 a train de-railed and sparked a chemical fire that raged for five days in the Howard Street Tunnel. Later, the chemical build-up blew off several man-hole covers in downtown Baltimore. Then there was the recent train accident in Lac-Megantic, Canada in 2013. Crude oil from a rolling train exploded, killing 47 people and destroying more than 30 buildings in the town. I will not talk to my house about these events because I do not want to think about them myself. If I did say something, I would have to admit that present planning does not even begin to address the obvious safety issues. At least the city council is now alarmed enough to study problems faced by transporting crude oil though city neighborhoods. 6

If the tunnel project is pursued, I think my house should have answers to the many questions raised at these hearings.

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 2:
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:

- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and
- Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

In addition, the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 3:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 4:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality; emissions would fall within all acceptable federal air quality standards. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold,

COMMENTS

RESPONSES

which have been set to safeguard public health. Because the concentrations of NO_2 were modeled to be within acceptable levels, all other criteria pollutant concentrations would be within NAAQS, as NOx is the most strictly regulated air pollutant generated from diesel locomotive operation. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

Response to Comment 5:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

Response to Comment 6:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

COMMENTS	RESPONSES
	FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection. The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

COMMENTS

RESPONSES

DEIS Comment 65:

From: Bill Lee - DHR - SSC
To: BPTunnel Information
Subject: Testimony presented at Hearing on February 17, 2016
Date: Thursday, February 18, 2016 12:39:57 PM
Attachments: Tunnel Testimony 2.docx
Tunnel Testimony Nancy.docx

Attached please find written testimony presented at the hearing on February 17, 2016.

ATTENTION: This e-mail (including any attachment) may contain proprietary, legally privileged and/or confidential information. This e-mail is intended solely for the use of the person(s) to which it is addressed. If you are not an intended recipient, or the employee or agent responsible for delivery of this e-mail to the intended recipient(s), you are hereby notified that any dissemination, distribution or copying of this e-mail is strictly prohibited. If you have received this message in error, please immediately notify the sender and permanently delete this e-mail and any copies.

COMMENTS

B&P Tunnel Hearings on the Draft Environmental Impact Statement

Testimony of Bill Lee, Baltimore MD, 21217

Board Member: Baltimore Heritage, Inc. and Residents Against The Tunnels

February 17, 2016

Good evening. I am here to oppose the building of train tunnels beneath my house. My house is a fine older lady with a great history and solid bones. I've been talking to her, lately, about the fact that some people—mostly train people—want to build tunnels so they can run trains – big diesel freight trains—underneath her. At the last hearing, I testified that she does not like this idea. In fact, she is adamantly opposed.

"What are they trying to do to me?" she asked the other day "An hour ago I was shaken up by a large truck followed by two city buses roaring down Eutaw Place. The horses and buggies and even the trolleys were lightweights compared to these big dumb machines tearing us up every few minutes."

My house was built in the 1880's, so she is well over a hundred years old. She is constantly undergoing repair and renovation. It is the only way old houses survive. The whole idea of 388
1 diesel trains rumbling beneath her every day makes her very nervous.

"They don't really care about me or my friends." She told me. " They are planning to build that five story building-vent a block away. It will spew out debris, oil, diesel fuel, and lots of other things into the air around us. We'll all get sick on that stuff."

"I know," I said. " But some people seem concerned. The City Council is considering a bill that will study the effects of freight trains running through Baltimore neighborhoods."

"Study, schmuddy" she countered. " We don't need another study. We all know that old houses like us already have big problems. Look around you. We are having a hard time. Some of my closest friends on this block are so neglected they can barely stand. What do these train people want to do? Jumble my guts and dust up my windows, that's what. They are destroying this fine old neighborhood. I don't know what to do. If I could, I'd go to that hearing and give them all a piece of my historic mind."

"OK. OK. I'll go to the hearing and tell them what you think" I told her.

And so, I have.

Thank you.

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 66:

B&P Tunnel Hearings on the Draft Environmental Impact Statement

Testimony of Nancy Cooper Morgan, [illegible] Baltimore MD, 21217

February 17, 2016

It isn't because I have something new to say that I am here today. I am lending my voice and support to my neighbors in opposing the B&P tunnel proposition.

We are a community which cares and supports each other. That's why there are so many people who have eloquently and creatively expressed strong opposition to this proposed tunnel project. I agree with them! I, too, abhor the potential pollution, danger, and destruction this project would bring to our lives. It is not beneficial for us! It will hurt us! 1

That is why we are fervently working, organizing, and respectfully reaching out to individuals and organizations to maintain and preserve our historic homes and buildings—our lives and our endurance! As I examine the plans, I see capitalistic greed that leaves no room for the needs of our humanity. 2

And so, we implore you. If you must proceed, look for a more suitable area and alternative plan—a far less egregious plan! 3

It can be done!

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

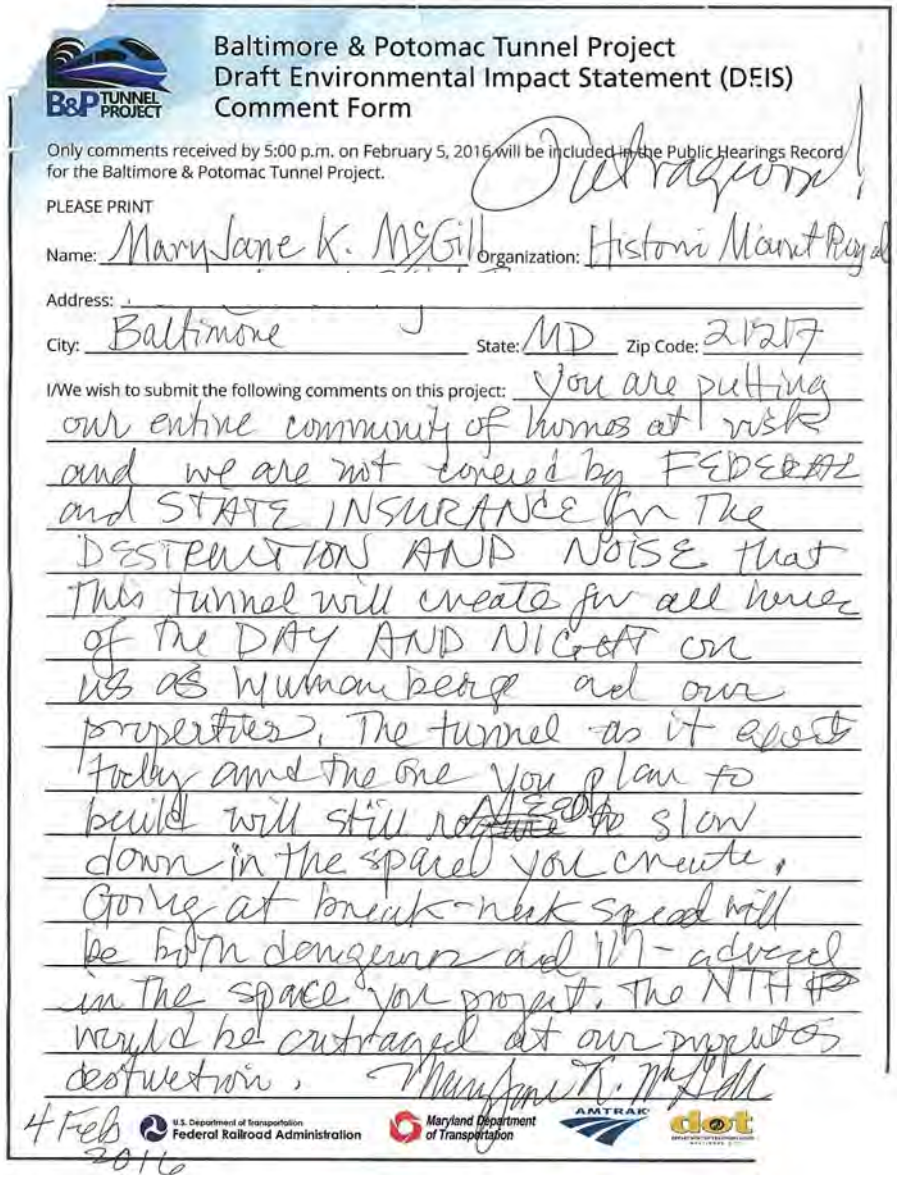
The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 3:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies

COMMENTS	RESPONSES
	(Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)). Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative. Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 67:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: MaryJane K. McGill Organization: Historic Mount Ro

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project: You are putting our entire community of homes at risk and we are not covered by FEDERAL and STATE INSURANCE for the DESTRUCTION AND NOISE that this tunnel will create for all hours of the DAY AND NIGHT on us as humanbeings and our properties. The tunnel as it exists today and the one you plan to build will still require to slow down in the spaces you create. Going at break-neck speed will be both dangerous and ill-advised in the space you project. The NTHP would be outraged at our properties destruction. MaryJane K. McGill

4 Feb 2016

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

COMMENTS

RESPONSES

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

Response to Comment 3:
New tunnels would be designed to optimize safety and modern standards. Amtrak and Norfolk Southern (NS) are anticipated to use existing fleets and newly acquired equipment in the B&P Tunnel. This equipment must meet federal standards for safe operations. In addition, the tunnel would be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and freight trains within the tunnel.

COMMENTS

DEIS Comment 68:

Brittany Rolf

From: noreply@bptunnel.com
Sent: Thursday, February 25, 2016 2:15 PM
To: BPTunnel Information
Subject: Comment Form

Ms Amy Miller

N/A

1 I vote against the tunnel. The ventilation towers will create an unsafe environment for the community, especially the St. Francis Community Center. St. Francis provides an afterschool and summer program for school-aged children, yoga classes, church meetings and many more community services and meetings.

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

COMMENTS

DEIS Comment 69:

Brittany Rolf

From: Russ Moss
Sent: Friday, February 26, 2016 4:57 PM
To: BPTunnel Information; Kathryn Epple
Subject: Emailing: DEIS COMMENT signatures Residents Against The Tunnels 001
Attachments: DEIS COMMENT signatures Residents Against The Tunnels 001.jpg

Attached
Final signatures for Residents Against The Tunnels Thanks!

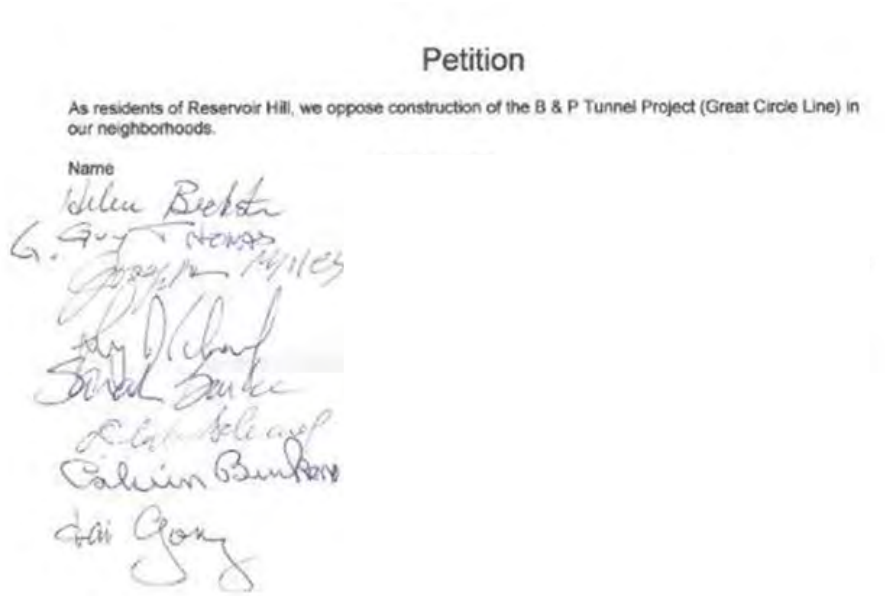
Russ Moss

RESPONSES

Thank you for your comment. We have reviewed the signatories attached.

COMMENTS

RESPONSES



Petition

As residents of Reservoir Hill, we oppose construction of the B & P Tunnel Project (Great Circle Line) in our neighborhoods.

Name

COMMENTS | **RESPONSES**

DEIS Comment 70:

MOSS 1 of 4

February 1, 2016

To: B & P Tunnel Project

From: Roosevelt "Russ" Moss,

Baltimore, MD

I am deeply saddened to be standing here this evening, February 1st, 2016, the first day of African American history month (how ironic) to be making a plea with public servants not to construct four-lanes of train tunnels underneath our community. Four train tunnels that will bring numerous adverse effects to a majority African American community.

POLLUTION

DIMINISHED COMMUNITY HEALTH

NOISE

DESTRUCTION OF ASTHETIC VALUE

DISRUPTION OF COMMUNITY COHESION

DESTRUCTION OF COMMUNITY ECONOMIC VITALITY

DEVAULING OF PROPERTY VALUES

COMMENTS

MOSS 2 of 7

ALL of the adverse cumulative effects that Non-discrimination clauses of Title VI and Environmental Justice were put in place years ago to prevent.

"This seems like Déjà vu all over again."

For many in West Baltimore, where working class communities of color are targeted for many projects for the "public good" like landfills, highways, incinerators and other unpleasant, noisy, ugly, stinky, gaseous infrastructure. West Baltimore has been dumped on enough; just take a drive down the highway to nowhere or the interstate width North Avenue to see the wonderful progress these past "public investments" in our infrastructure have made in our communities.

WE'VE HAD ENOUGH !!!!!!!

1

These laws requires that each Federal agency shall, to the greatest extent allowed by law, administer and implement its programs, policies and activities that affect human health or the environment so as to identify and avoid "disproportionately high and adverse" effect on minority and low-income populations.

A study lead by MIT Professor, Steven Barrett, Baltimore City has more deaths from air pollution than any large city in the United States. The study found 130 were likely to die prematurely each year of causes related to air pollution each

RESPONSES

Response to Comment 1:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations.

COMMENTS

year. Small particulate matter in the air contribute to development of heart disease, asthma and other lung diseases.

BALTIMORE'S ASTHMA RATE IS 20%, more than TWICE the national average.

2

Life expectancy for African Americans along the proposed tunnel route is 63 years, 20 years less than in 83 years Roland Park.

3

In addition to these four busy train tunnels and the vibrations and noise that will result, a 100 ft. by 200 ft. by 50 ft. (5 story) high ventilation tower is being proposed for the center of Reservoir Hill along Whitelock Street, an area that after decades of blight now serve as a community garden and

4

gathering spot and may potentially serve as a center for retail stores (and jobs) in the community. To add insult to injury, the proposed vent shaft is one block from where the city is investing millions in a new John Eager Howard Elementary School. Even closer, directly across the street, is St. Francis Neighborhood Center that provides after school programs and other services to our children and adults. St. Francis Center is planning a major expansion that would be compromised by this unfiltered ventilation tower.

RESPONSES

For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 2:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 3:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA's *Transit Noise and Vibration Impact Assessment*, and construction vibration levels were also evaluated using both FTA guidelines and standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train

COMMENTS

moss 4 of 4

1 Finally, I am asking you to stop this environment injustice from undermining a place we love, our community and homes. Black lives matter! Communities of color lives matter! Working class communities' lives matters! For once give priority to the folks that live in our community over investors and those passing through it.

RESPONSES

passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI**.

The three ventilation plant facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use.

Noise levels in the immediate vicinity of the ventilation plant buildings would be caused by the continual operation of the ventilation fans within each facility. The horizontal fans would operate periodically and would generate sound that would propagate through the louvers at the top of the ventilation facilities. Fans would operate periodically when NO_2 levels in the tunnel exceed a set threshold or in emergencies when smoke is present in the tunnel. NO_2 levels are likely to be highest when the level of diesel locomotive operations is

COMMENTS

RESPONSES

highest, or when congestion causes trains to operate slowly or to idle in the tunnel. However, there is not enough information currently available to determine how many hours per day, on average, the fans would run and whether or not they would run during the night.

The design standard for the ventilation facilities would limit the outdoor noise level, when the fans are in operation, to L_{max} 50 dBA at the facility property lines. 50 dBA is approximately the noise produced by an indoor air conditioner at a distance of three feet.

To achieve the required reduction in noise level, cylindrical or rectangular sound attenuators would be mounted directly to each fan or to the ductwork within the system. In addition, the building itself would partially shield noise from the interior of the ventilation plant, which would further reduce noise levels outside of the building. The Preliminary Engineering Team has stated that the ventilation plant facilities, with attenuators installed, will emit noise at 45 dBA. This would meet the design standard of L_{max} 50 dBA at the facility property lines (i.e., the noise level generated would be less than the design standard).

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise, and vibration impacts, as described in **Chapter VI**. These efforts are ongoing and are documented in this FEIS.

Response to Comment 4:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

RESPONSES

DEIS Comment 71:

Brittany Rolf

From: Russ Moss
Sent: Friday, February 26, 2016 4:57 PM
To: BPTunnel Information; Kathryn Epple
Subject: Emailing: DEIS COMMENT signatures Residents Against The Tunnels 001
Attachments: DEIS COMMENT signatures Residents Against The Tunnels 001.jpg

Attached
Final signatures for Residents Against The Tunnels Thanks!

Russ Moss

COMMENTS

February 26, 2016

Baltimore, MD 21217

"DEIS COMMENT"

I am making one more Plea for the RECORD to all involved in this decision making process. Please decide NO to a proposal to construct 4 lanes of B & P Tunnels under several densely populated West Baltimore Neighborhoods, including Reservoir Hill. I want to sound the ALARM one more time! Just as our testimonies at recent public hearings did....PLEASE DO NOT IMPOSE THIS ENVIRONMENTAL INJUSTICE ON SEVERAL PREDOMINATELY AFRICAN AMERICAN LOW INCOME COMMUNITIES. IT WILL COMPROMISE THE LIVES AND WELL BEING OF THOUSANDS OF BALTIMORE'S CITIZENS.....WHO ARE ALREADY WRESTLING WITH EVERY IMAGINABLE URBAN ISSUE! 1

Considering the projected number of trains that will be hauling hazardous cargo under our homes....it isn't a matter of IF.... SADLY, it is a matter of WHEN a catastrophe will happen. 2

RESPONSES

Response to Comment 1:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of **Transportation's** environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held **with** local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations.

COMMENTS

When someday Baltimore becomes the Poster Child of URBAN TRAIN TRAGEDY…as Flint, Michigan is now the Poster Child for LEAD IN DRINKING WATER TRAGEDY….This PLEA will be among the many that tried desperately to SOUND an ALARM to ears of seemingly indifference.

We hope those of you who will make this decision remember….that AFRICAN AMERICAN LIVES MATTER, LOW INCOME FOLKS LIVES MATTER…..ALL OF OUR LIVES MATTER! We hope this Plea MATTERS to YOU!

Sincerely,

Russ Moss

Board Member

Residents Against The Tunnels (RATT)

RESPONSES

For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 2:
Per **Chapter V** of the FEIS, it is projected that in 2040, 388 trains are expected to use the tunnel—386 passenger trains with no hazmat cargo, and two freight trains with limited hazmat cargo (based on current freight volumes projected into the future). Notwithstanding this likely very low volume of hazardous materials in the tunnel, the new tunnels would be designed to optimize safety and modern standards. Amtrak and Norfolk Southern (NS) are anticipated to use existing fleets and newly acquired equipment in the tunnel. This equipment must meet federal standards for safe operations. In addition, the tunnel will be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and freight trains within the tunnel. The Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan, to be implemented in the event of a tunnel emergency. Tunnel drainage concepts are being developed to meet MDE and BD standards for discharge into sanitary or stormwater utility systems. In addition, concepts are being designed to provide protection from diesel fuel and other hydrocarbon leaks into the tunnel drainage system.

COMMENTS



As a courtesy we are forwarding for your perusal the attached unofficial independent document not approved or endorsed by MTA. The Proposal to Unravel Baltimore's Tangled Rail Lines document was a collaboration between MTA's Citizens Advisory Committee for Accessible Transportation (CACAT) and Citizens Advisory Committee (CAC).

If you have any questions, please feel free to contact CACAT Chair, Edward Cohen. He can be reached at 410-837-6582.

3

Response to Comment # 3:

Report 20 Oct 2015	**Report 10 Sept 2015**
"Project requires only one new underground station and about 1.15 miles of new tunnel. It costs less than half of what the Red Line would cost. The east side portal would be north of Madison and Curley Streets and any current structures." "Item 2, a two track freight tunnel…"	"This project requires about 1.15 miles of new tunnel and cost less than half of what the Red Line would cost." "Item 2, the freight tunnel…"
List of Maps added. (page 14)	
New maps (page 21).	

The report entitled, *A Proposal to Unravel Baltimore's Tangled Rail Lines,* from October 2015 provides the updates mentioned above; however, aside from these changes, it is not substantively different from the original report of the same name, dated September 2015. To review the September 2015 report in its entirety, please refer to **DEIS Comment #11**.

RESPONSES

Finally, as Amtrak is responsible for operating a robust passenger rail service, the two inner tracks of the four-track tunnel system will be reserved (in all but emergency conditions) for high-speed passenger train operations, freight services will be restricted to share the two slower, outer tracks with MARC commuter rail trains. It is therefore not possible for the tunnel system to accommodate significantly increased freight operations.

Response to Comment 3

The report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding The Purpose and Need for the Project, please see **Chapter II** of this FEIS.

CACAT CAC 8&P

A Proposal to Unravel Baltimore's Tangled Rail Lines
Joint Open Infrastructure Subcommittee of the
MTA Citizens Advisory Committee;
MTA Citizens Advisory Committee for Accessible Transportation;
MARC Riders Advisory Committee
Final version adopted by CACAT on 16 October 2015
Final version adopted by CAC on 20 October 2015

In April of 2002 the I-95 Corridor Coalition released its "Mid-Atlantic Rail Operations Study" which identified many choke points and decaying infrastructure throughout New Jersey, Pennsylvania, Delaware, Maryland, and Virginia that prevent expansion of rail capacity that the rest of the system could otherwise accommodate. These include the Howard Street Tunnel, the B&P Tunnels, and the Union Tunnels in Baltimore as well as several bridges in Maryland.

The study divided the projects into near, medium, and long-term time frames.
The near term projects (5 years or done by 2007) included:
Design for reconstruction of the Howard Street Tunnel and approaches
Design for reconstruction of Amtrak's Union Tunnels and the B&P Tunnels.

The Medium Term projects (5 to 10 years or 2007 to 2012) included:
Reconstruct the Howard Street Tunnel and approaches
Reconstruct Amtrak's Union Tunnels and the B&P Tunnels.

The long term projects listed in the I-95 Corridor Coalition study are not part of this report and so are not listed herein.

In November 2005, the U. S. Department of Transportation Federal Railroad Administration issued "Report to Congress: Baltimore's Railroad Network: Challenges and Alternatives" (The FRA 2005 report) that says

> In the end, each of the competing carriers built its own, inferior right-of-way, compromising even the then-prevailing standards for gradient, curvature, and operating efficiency. Despite subsequent improvements, today's network — still reliant on the Baltimore & Potomac (B&P), Union, and Howard Street Tunnels for connectivity — is essentially the same as the geometrically compromised and operationally handicapped system cobbled together during the post-Civil War decades.
>
> Although convoluted and antiquated, Baltimore's railroads have strategic importance far beyond the confines of their immediate region. Originating and terminating rail freight traffic in the Baltimore region remains significant, largely due to the Port — which ranks fourth among Atlantic Coast ports, and is the closest Atlantic port to major Midwestern markets — and the region's remaining industrial base. Through freight traffic is important on the CSXT's traffic lanes traversing Baltimore between

1

COMMENTS

RESPONSES

CaCa+1
CaC
6
of
23

Note: it is necessary to increase the Howard Street east side setback for the new "super block" to 25 plus feet from the tunnel to permit expansion and reconstruction of the tunnel. The foundations of the Read's Drug Store at Lexington and Howard would need to be stabilized as part of tunnel construction.

Items 3 through 8 should be added to the Consolidated Transportation Plan (CTP) during Governor Hogan's term in office.

Explanation of construction order:
Item 1, conversion of the existing subway to an automated line with an east side extension of the Metro from JHH to the Travel Plaza with a proposed Metro rail yard on the Armco Specialty Steel brownfield site at Orangeville must be done in phase 1 as later work will cut the Subway line (between Lexington and State Center stations) for a west side branch. The Orangeville yard will permit service east from Lexington Market during the later west side branch construction, and the length (more than 6 miles) of the line will justify continued eastside operation. This line, with the west side extension, will provide a rail bridge around Penn Station for MARC passengers to/from Harford and Cecil Counties while the B&P and Union Tunnels are rebuilt during phase 7.

This alignment would be far less costly and provide much better service than the proposed Red Line east side. The direct connection from I-95 and I-895 to the Travel Plaza with its ample free parking and short rail travel time (about 10 to 12 minutes) to downtown will attract a significant amount of traffic from I-95 and I-895. Unlike the Red Line, there will be no temptation for commuters to park on the streets of Canton to avoid downtown parking fees. This subway extension will reduce congestion in the Fort McHenry Tunnel because some fraction of the cars from the north that use the tunnel to access downtown by way of I-395 will switch to the automated metro. Eastside subway service will permit restructuring of the east side bus lines. This will increase bus reliability, reduce bus operating costs, increase the number of buses available for use on over crowded bus lines, and reduce rider travel times. By being farther from the harbor, and higher than Boston Street, this alignment will be immune to the coastal surge flooding that made a Red Line Boston Street portal risky with sea levels rising. This line would likely increase MARC ridership from northeast of Baltimore by providing a quick connection at Orangeville to JHH and the development around it, downtown, and University Center (from Lexington Market Station).

An automated line may be economically operated on much shorter headways than if motormen needs to be paid. For example, 2 car trains every 2 minutes yield the same hourly line capacity as 6 car trains every 6 minutes but with one third the waiting time. Shorter waiting times attract more riders, improve connections with feeder bus lines, increase the transit impact and lower the operating cost per passenger mile.

This project requires only one new underground station and about 1.15 miles of new tunnel. It costs less than half of what the Red Line would cost. The east side portal would be north of Madison and Curley Streets and any current structures.

5

COMMENTS

RESPONSES

CACatt
CAC
7
of
23

Item 2, a two track freight tunnel, is necessary to remove freight traffic from the Howard and B&P and Union Tunnels before any other work can be done on them. (Before this tunnel is done, any work on or near the Howard Street tunnel risks a complete shut down of East Coast freight traffic, with huge port access, national freight movement, and liability issues for the state.) Unlike the current freight alignment and the other alignments proposed in the FRA report, the alignment proposed here keeps hazardous material (Hazmat) freight out of downtown and densely residential West Baltimore and provides the most direct east coast route. Without this improved rail access, especially given the cancelation of the Morrell Park intermodal transfer terminal, the Port of Baltimore will continue to suffer and lose business to other east coast ports, because of the slow continuing loss of competitive rail access and increased transportation costs required to serve the Port of Baltimore. A Norfolk Southern vice president has already said that the railroad would be willing to negotiate a per car toll to use this tunnel, which would permit the construction to be funded by bonds. Toll rates charged to CSX could depend on how quickly it signs onto the deal. The state owned Patapsco and Back River Railroad could guarantee both CSX and Norfolk Southern access to Bayview yard and Sparrows Point. The tunnel should be owned by MDOT. As part of the deal, MDOT would obtain title to the Howard Street Tunnel and the belt line from Russell Street to Bayview yard, the CSX Sparrows Point branch, the Hanover Sub, the Old Western Maryland and Maryland and Midland rights of ways including the Bear Creek trestle. Some of these rights of way will eventually be used for the Baltimore Metro Subway, and others for MARC and/or intercity passenger service.

Item 3 is construction of a branch from the current subway tunnel west to a portal at Fremont Avenue in the median of the Route 40 expressway then continuing above ground to the intersection of Frederick Avenue and Hilton Street (FredHilton) by way of the West Baltimore MARC Station. This would provide a location with sufficient auto catchment (Frederick, Wilkens and I-95 access) to make the line cost effective. The line would eventually be extended northwest under Loudon Park cemetery to Edmondson Village, Westview and on to Normandy, Columbia Mall, and the Maryland School for the Deaf. (See Item 4 for notes about the portal for this.)

During construction, subway service can be provided from Owings Mills to State Center and from Lexington Market to the Travel Plaza. The Central Light Rail, augmented by bus service, will provide bridge service between the two stations. As part of this project, the Metro Subway on the east side is branched to a station at North Point Boulevard on the Northeast Corridor to provide a layover spot for east/west trains. Subway service between Orangeville and West Baltimore Stations is required to provide a MARC rail service bridge during reconstruction of the B&P and Union tunnels in phase 7.

There is infrastructure built into the Lexington Market Station which would permit a west side rail transit line to terminate underground there, which some have recently suggested for a west side light rail instead of the Red Line. That proposal is inferior to branching the current line as proposed here for several reasons. Trains operating north of Lexington Market Station must be run at a higher frequency so as to be well below

6

COMMENTS

RESPONSES

COCAT 4
CAC
15
OF
93

Maps

The following pages show maps of the proposal in steps as it grown.

Page	Description
14	Current Metro Subway line from Owings Mills to Johns Hopkins Hospital
15	Downtown route of current Metro Subway to Johns Hopkins Hospital
15	Phase 1, east side extension from Johns Hopkins Hospital to the Travel Plaza
16	Phase 3, west side, green, extension from Lexington Market Station to FredHilton
16	Phase 6, north/south, blue, route between Westport and Penn Station.
17	View of center city after Metro full build.
18	Full extent of proposed Metro Subway system.
19	Center city view of the full build Metro Subway and MARC systems.
19	Center city view of the full build Amtrak and MARC systems.
20	Full extent of the proposed Metro Subway system with MARC and Amtrak lines.
21	Greater Baltimore region MARC and Amtrak lines.
21	State wide MARC and Amtrak lines.
22	State wide MARC, Amtrak, and freight lines.

Note that all maps on pages 15 to 17 and 19 have the same scale.

Current Baltimore Metro Subway Line



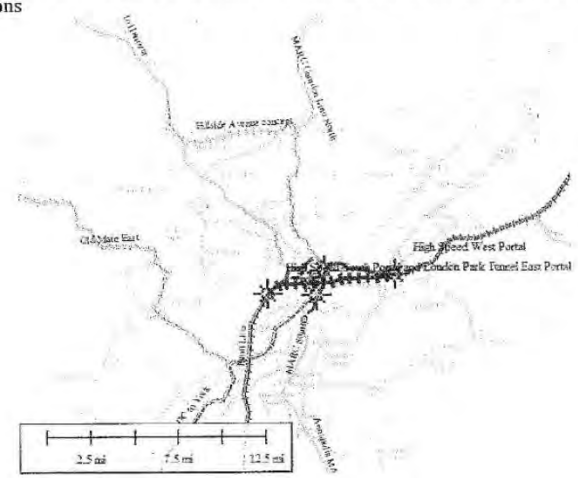
14

COMMENTS

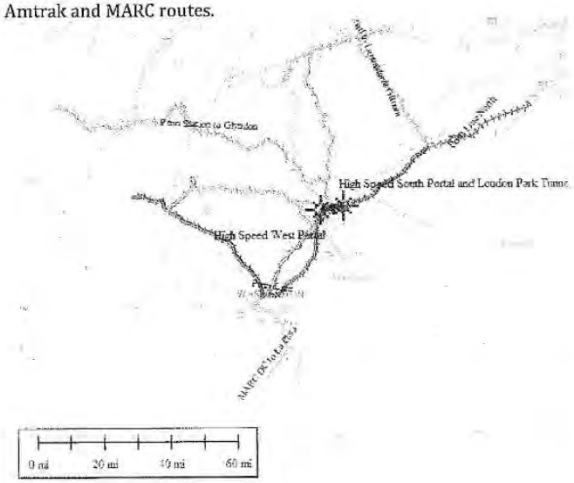
RESPONSES

CACAT+
CAC
22
OF
23

View of the proposed, expanded intercity (Amtrak) and commuter (MARC) passenger routes in the Baltimore Region. Current lines are in wide, bright green. Proposed lines are in a light green (Amtrak and MARC) and purple (MARC only). The high-speed Amtrak tunnel is shown in dark green with cross hatch. See text for a description of routes and destinations



Statewide Amtrak and MARC routes.



21

COMMENTS

DEIS Comment 72:

BARKER B. MUCH

TUESDAY, FEBRUARY 16, 2016

B AND P TUNNEL PROJECT
81 MOSHER ST.
BALTIMORE, MD., 21217

1 IT IS FELT THAT UNDER PRESENT PLAN FOR B & P TUNNEL PROJECT IS FLAWED.
FIRST IT COULD CUT OFF FOREVER RAIL SERVICE TO WESTMINISTER, FREDERICK, HAGERSTOWN AND POINTS WEST.
ALSO IT PREVENT REOPENING A FREIGHT AND PASSENGER LINE OVER THE OLD NORTH CENTRAL ROUTE TO HARRISBURG, PA. AND WOULD PREVENT FUTURE AMTRAK SERVICE INTO PA AND ON NORTHWARD TO TORONTO, CANADA,

IT IS FELT THE BEST ALTERNATIVE IS BRING NEW TUNNEL THROUGH DOWNTOWN UNDER FAYETTE ST, AND FOUR TUBES, ONE PAIR FOR AMTRAK, OTHER PAIR FOR HIGH SPEED RAIL.

2 RATHER THEN ABANDON OLD TUNNEL, IT COULD BE RE GRADED (REPAIRED) TO TAKE MARC TRAINS THEREBY ENABLING MARC TO MAKE MORE STOPS AT FEW MORE LOCATIONS IN THE CITY.

3 FOR ALL FREIGHT TRAFFIC, IT IS IMPORTANT TO GET THIS TRAFFIC OUT OF POPULATED AREAS.
ONE GOOD ALTERNATIVE WOULD BUILD A TUNNEL FROM HAWKINS POINT TO SPARROWS POINT, THERE IS TRACKAGE ALREADY IN PLACE THAT CAN BE CONNECTED BY MEANS OF A TUNNEL UNDER PATAPSCO RIVER.

ONCE FREIGHTS ARE OUT OF HOWARD ST TUNNEL, THIS TUNNEL COULD BE RECYCLED FOR USE BY MARC AND AMTRAK, THERE BY PAVING THE WAY FOR CONVERTING THE LIGHT RAIL SYSTEM TO MARC GOING INTO PENNSYLVANIA, AND FOR AMTRAK GOING INTO PA VIA CAMDEN LINE.

4 RUNNING FREIGHT TRAINS OVER THE PRESENLY PROPOSED TUNNEL WOULD BE SELF DEFEATING SINCE THESE FREIGHT TRAINS CARRY HAZMATS. WITH OPENING UP PROPOSED NEW TUNNEL TO FREIGHTS, IT WOULD ALSO HAVE ADDITIONAL FREIGHTS FROM CSX GOING THROUGH POPULATED AREAS. THAT WOULD BE A MORE HAZARDOUS SITUATION THEN WE HAVE NOW. PLUS THAT MEANS MORE FREIGHTS GOING THROUGH A BUSY PASSENGER STATION.

5 IF NOTHING ELSE IS BUILT, WE SIMPLY NEED A NEW FREIGHT TUNNEL FROM HAWKINS POINT TO SPARROWS POINT.
IF THE AGING HOWARD ST TUNNEL FALLS APART, IT WOULD HAVE BAD ECONOMIC IMPACT ON AREA COMMERCE AND OUR PORT FACILITIES.

SINCERLY,
BARKER B. MUCH

RESPONSES

Response to Comment 1:
This comment is beyond the purview of the Project. The Maryland Department of Transportation oversees comprehensive transportation planning for the State. Prior studies have been performed that evaluate the full network of rail corridors, especially those in and around the Baltimore City. The study of the B&P Tunnel partly resulted from the identification of this Project as a critical component to the greater rail access plan.

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, which include:

- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and

Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

Response to Comment 2:
The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Amtrak desires to reserve the existing tunnel for a future rail transportation use.

Response to Comment 3:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw

COMMENTS

RESPONSES

if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 4:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 5:
Building an additional tunnel for freight in a new location is beyond the purview of the B&P Tunnel Project.

COMMENTS

DEIS Comment 73:

Brittany Rolf

From: noreply@bptunnel.com
Sent: Wednesday, February 24, 2016 6:00 PM
To: BPTunnel Information
Subject: Comment Form

Mr Charles Myers III

1 As a train rider and also a resident of Reservoir Hill, I support the new rail tunnels. However, it would help residents' fears if a memorandum of understanding or other document were put in place prohibiting the transportation of hazardous freight materials through the tunnels. Residents do not want chemical spills, explosions, etc (however unlikely) occurring below their homes, and any such incident would cripple passenger traffic on the NE Corridor. Also, the ventilation plant on Whitelock Street is undesirable and would tower over the neighboring buildings. The old Baltimore Transit Company building at 2480 Druid Hill Avenue would be a better choice. The property is larger than the one at Whitelock, providing room for additional setbacks or a stepped building facade, and the ventilation facilities would be a good adaptive reuse of what's left of the existing historic building. The Whitelock property is in a densely populated area which includes both houses and apartment buildings, and is directly across from a city park, community gardens, and the St Francis Community Center, and two blocks from the elementary school.

2

RESPONSES

Response to Comment 1:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

RESPONSES

DEIS Comment 74:

Brittany Rolf

From: noreply@bptunnel.com
Sent: Friday, February 26, 2016 9:51 AM
To: BPTunnel Information
Subject: Comment Form

Mr Gregg Nesemeier

N/A

I support the Draft Environmental Impact Statement (DEIS) as written. It is a thoughtfully and thoroughly prepared document that appears to have carefully considered all relevant environmental factors for this tunnel project.

As a MARC commuter who travels through the existing tunnel daily during the working week, I support adoption of one of the alternatives (3A, 3B, or 3C) over Alternative 1, the No-Build option. The No-Build option is not a viable course of action because, as the DEIS indicates, the existing tunnel is over 140 years old and is approaching the end of its useful life due to its general structural and physical condition; its capacity does not support future demand for passenger and freight rail transportation in the Northeast Corridor; and it adversely impacts travel times with its 30 MPH speed restriction on a rail line otherwise offering speeds well in excess of 100 MPH. Alternatives 3A, 3B, and 3C all appear to effectively address the issues with the existing tunnel. All offer 50 MPH speeds, capacity increases, double-stack freight capability, and fresh infrastructure with associated lower maintenance costs, among other benefits.

Of the three build alternatives, based on the data presented in the DEIS, Alternative 3A appears to be the most cost-effective option. It offers the lowest overall environmental impact (considering air quality, impact on neighborhoods including environmental justice populations, impact on parks and historical structures, number of existing businesses displaced, etc.) as well as the lowest capital cost to build, without requiring significant additional travel time compared to the other options (only about 30 seconds longer compared to alternatives 3B or 3C). It also does not require relocation or modification of the West Baltimore MARC station, as the other two build alternatives do.

Thank you for the opportunity to comment on this significant project.

Thank you for your comment.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 75:

From: Nneka Nnamdi
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Tuesday, January 12, 2016 12:46:21 PM

1 The proposed routes go around Robin Hood's barn. Perhaps another more direct route would be less disruptive to the environment and community.
A more direct route could potentially be less expensive. Also, any project that
2 transverses such an economically disadvantaged community should include a workforce training and hiring requirement that includes a large percentage of positions for those un- or under-employed members of that community.

Nneka Nnamdi
Self/ICBC

RESPONSES

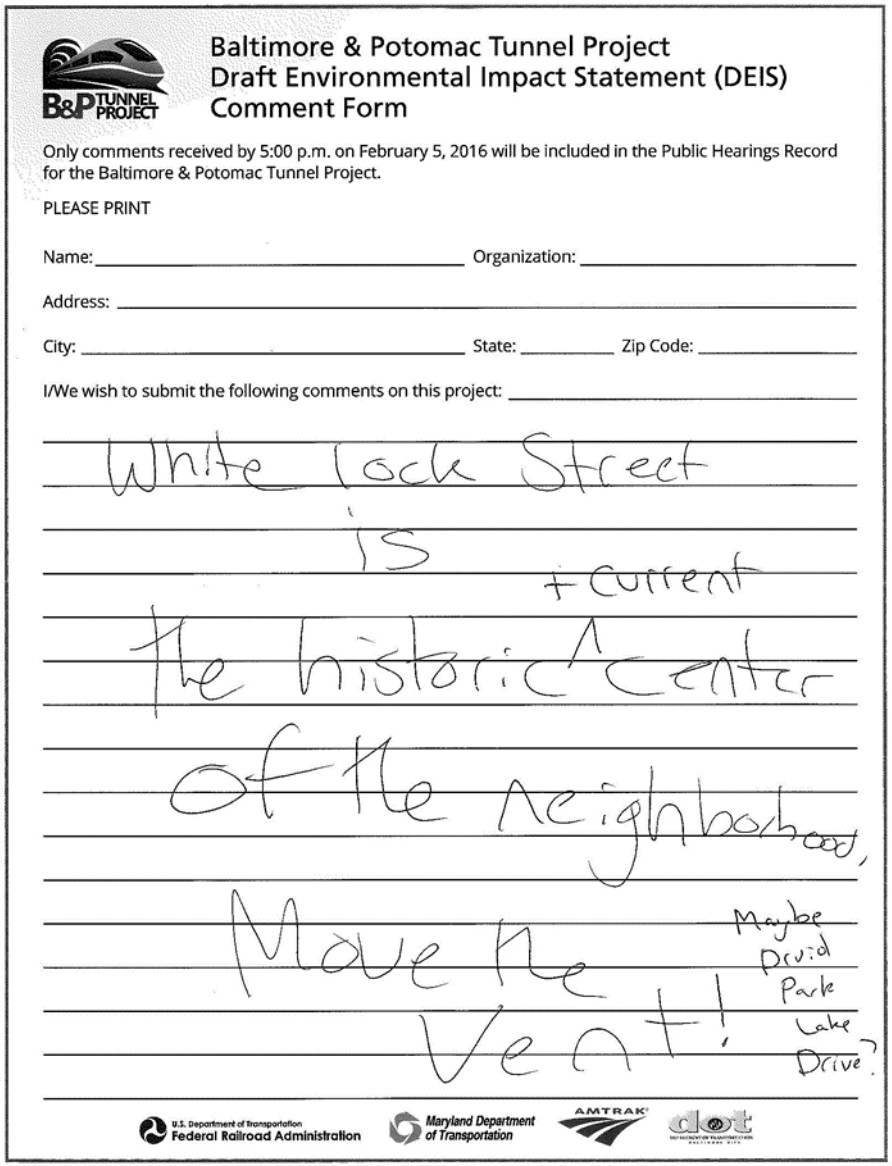
Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. As part of the mitigation efforts, the Project sponsor would provide coordination with local job training organizations to 1) facilitate targeted job training by providing estimates of the type, number, and timing of jobs expected to be created by project contractors, 2) include in construction contracts goals for nationally targeted workers of social and economic disadvantage, and 3) require project contractors to report on a regular basis their progress in meeting contract goals. The Project sponsor will provide public reporting on job creation. These efforts are ongoing and are documented in this FEIS as described in **Chapter VI.**

COMMENTS

DEIS Comment 76:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: _____ Organization: _____

Address: _____

City: _____ State: _____ Zip Code: _____

I/We wish to submit the following comments on this project: _____

White Lock Street
is
+ current
the historic center
of the neighborhood,
Move the
Vent!
Maybe
Prvid
Park
Lake
Drive?

U.S. Department of Transportation Federal Railroad Administration
Maryland Department of Transportation
AMTRAK
dot

1

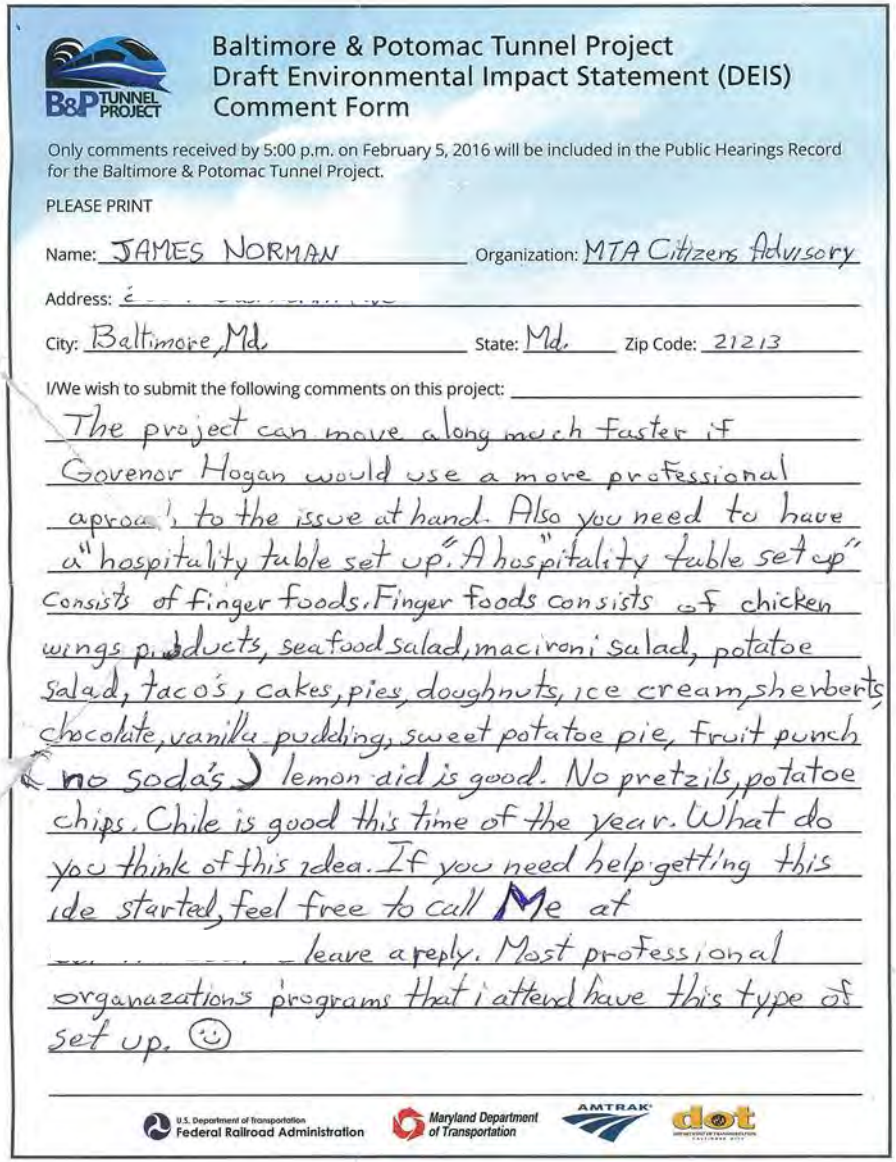
RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

RESPONSES

DEIS Comment 77:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: JAMES NORMAN Organization: MTA Citizens Advisory

Address: [redacted]

City: Baltimore, Md. State: Md. Zip Code: 21213

I/We wish to submit the following comments on this project:

The project can move along much faster if Govenor Hogan would use a more professional aproach to the issue at hand. Also you need to have a "hospitality table set up". A "hospitality table set up" consists of finger foods. Finger foods consists of chicken wings products, seafood salad, macironi salad, potatoe salad, taco's, cakes, pies, doughnuts, ice cream, sherberts chocolate, vanilla pudding, sweet potatoe pie, fruit punch (no soda's) lemon aid is good. No pretzils, potatoe chips. Chile is good this time of the year. What do you think of this idea. If you need help getting this ide started, feel free to call Me at [redacted] leave a reply. Most professional organazations programs that i attend have this type of set up. ☺

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

Thank you for your comment.

COMMENTS

DEIS Comment 78:

From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Saturday, January 16, 2016 6:28:05 AM

Mr Rosemary Peternel

BP Tunnel Project _Comments of Rosemary Peternel, , Reservoir Hill

January 23, 2016 BPTunnel Hearing:

As a resident in the : in Reservoir Hill and in the path of the proposed underground tunnel, I object strongly to the proposed routes under my house and others affected along the routes chosen:. The reasons are outlined below.

1. The strong potential for unrepairable damage to my 123 old fragile mortared-stone foundation from a tunnel shaft during and after construction that may be only 25-30' under the basement of my 3-story 50' high townhouse property in order for the tracks to meet at ground level to existing ones leading to Penn Station.
2. Damage to well-preserved historic townhouse housing on Mount Royal Terrace and Park Ave due to the proximity of the tunnel height and basements/foundations that are already weakened by the age of the structures. It is noted that the existing tunnel is old but little attention is emphasized on the 125-150 year old housing stock that lies atop the proposed tunnels. And a large portion of housing stock under the proposed tunnel is fragile or under planned or proposed construction.
3. There is a lack of attention to evidence/documentation that the vibration studies pertain to fragile housing stock.
4. The lack of a chosen alternative that follows under existing roadways such as North Ave or Druid Park Lake Drive, thereby minimizing the potential impact on fragile historic housing.
5. The lack of sufficient background on repair of the existing tunnel.
6. The purported gain in a few minutes of travel time that is not cost effective.
7. A federal, state, and locally funded proposed project that has huge impacts on neighborhoods in the chosen tunnel path that appears to be an investment project that also aims to provide greater solvency for passenger rail service that is already underwritten in part by government funding. Where does the buck stop for continued investment?
8. The proposed routes selected appear to also allow for the eventual connection to larger freight transport through the city.
9. The idea of a very high speed train (perhaps cutting half the travel time) that would be located outside Baltimore City would be more beneficial if the aim was to decrease demonstrably travel time between Baltimore and Washington, DC and the eastern seaboard. IN which case, should this option come to fruition in the future master plan for the metropolitan area? Four (4) tunnels is excessive.
10. The report details the extent of destruction of property in order to proceed with the tunnels. There is a question as to whether the extent of the damage outlined justifies the gain in 2-3 minutes in travel time. The gain appears to be more in the increased passenger travel capacity

1
2
3
4
5

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take

COMMENTS

and access to increased freight capacity with double-decker containers.

6 11. Particularly glaring is the impact on the social cohesion of the Reservoir Hill community by placing an imposing ventilation building smack dab in the middle of this neighborhood as a central dominating influence and its air exhuasting centrally located in a dense populated area. Not only does it not fit with the development of an organic farm bringing fresh produce to neighbors and a native plant park for restoring nature to a dense urban setting, but commercial development of this block of Whitelock Street is hard to imagine. The efforts to secure tenants for an existing former auto repair building near Whitelock and Park is a good example of the challenges to commercial development within a neighborhood rather than on the periphery such as North Avenue and Druid Park Ave boundaries.

7 12. The potential damage to existing buildings along the proposed route and the social cohesion of Penn-North and other fragile socio-political areas that need an infusion of factors to build community does not justify the routes proposed.

13. There should have been several consultant organizations competing against each other for the best routes instead on just one organization with an inherent interest in the construction of same.

8 It is not that as a former Marc Train ride I am against expanding passenger rail service and improving service, but it seems that the addition of locomotives that do not over heat in the summer, that rain does not flood track and slow or prevent service, and that existing repairs of the electrical lines between DC and Baltimore warrant consideration of improvements as well. The limited scope of just looking at tunnels is shortsighted and denies an inclusive look at the entire complex of factors affecting passenger rail service.

That the idea of improving the existing tunnel and expanding the tunnels is not in itself an unworthy objective. It is a question for me of whether it is worth the tremendous dollars of tax payer money for private enterprise to expand from two tunnels to four with heights to accommodate freight at the expense of existing living dense populations that are sorely discomfited by these proposed changes and the potential and actual damage to existing structures.

RESPONSES

place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 2:

As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 3:

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.

COMMENTS

RESPONSES

In addition, the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 4:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Response to Comment 5:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

COMMENTS

RESPONSES

While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason that the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. Please refer to Response to Comment 3 above for more information regarding Project Purpose and Need.

Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 6:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 7:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section

COMMENTS

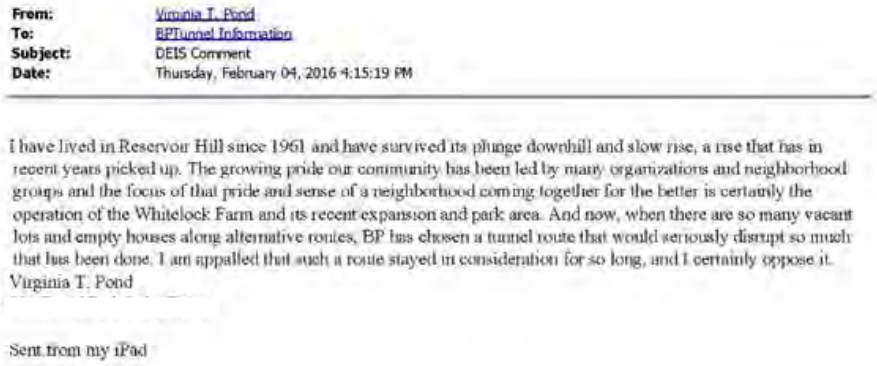
RESPONSES

4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

Response to Comment 8:
This comment is beyond the purview of the B&P Tunnel Project.

COMMENTS

DEIS Comment 79:



From: Virginia T. Pond
To: BPTunnel Information
Subject: DEIS Comment
Date: Thursday, February 04, 2016 4:15:19 PM

I have lived in Reservoir Hill since 1961 and have survived its plunge downhill and slow rise, a rise that has in recent years picked up. The growing pride our community has been led by many organizations and neighborhood groups and the focus of that pride and sense of a neighborhood coming together for the better is certainly the operation of the Whitelock Farm and its recent expansion and park area. And now, when there are so many vacant lots and empty houses along alternative routes, BP has chosen a tunnel route that would seriously disrupt so much that has been done. I am appalled that such a route stayed in consideration for so long, and I certainly oppose it.
Virginia T. Pond

Sent from my iPad

1

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

COMMENTS

RESPONSES

DEIS Comment 80:

Brittany Rolf

From: Alan Pressman
Sent: Thursday, February 25, 2016 11:14 PM
To: BPTunnel Information
Cc: Richard Gwynallen; Rev. Karen Brown
Subject: DEIS COMMENT
Attachments: RHIC Train Opposition Letter Signed Final.pdf

To Whom It May Concern,

Please find attached the RHIC response to the Draft Environmental Impact Statement and the current BP Tunnel plan.

Thank you,

Alan Pressman
Vice President - RHIC Board

COMMENTS

Reservoir Hill
Improvement Council, Inc.
Reservoir Hill . . . A Community Blooming With Opportunity!

February 21, 2016

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

To B&P Tunnel Project Management:

I am writing on behalf of the board of directors of Reservoir Hill Improvement Council to express our concerns regarding the B&P Tunnel project and our objections to the project as currently proposed. The Reservoir Hill improvement Council (RHIC) has worked on behalf of the residents of Reservoir Hill since 1993. The organization has long been a central part of the community, developing a wide range of partnerships around the city, and establishing a track record of bringing investment into the community. Arguably, RHIC's office receives input from more segments of the community than any other organization. This gives us the responsibility of speaking about matters that impact the well-being of Reservoir Hill and articulating the concerns we hear.

Reservoir Hill is a residential neighborhood of ~5600 residents. The neighborhood is experiencing a renaissance with significant investment in our neighborhood elementary school (John Eager Howard), rising homeownership and residency rates together with significant property renovation, and the creation of the Whitelock Community Farm in the center of the neighborhood, bringing together residents toward the goal of improving health outcomes by addressing the lack of available fresh food. The B&P Tunnel Project threatens the stability and health of Reservoir Hill and further underscores decades-old feelings that this racially and ethnically diverse neighborhood is expendable in the eyes of outside interests.

As a residential community, we have several concerns about the tunnel as currently proposed:

1 | 1) The tunnel plan calls for a Vent Stack Facility to be placed in the center of the neighborhood on the site of a community park that was dedicated last year after years of work and community building. It is unclear how much noise will continually be made by
2 | this facility but it is acknowledged that there will be some level of constant noise from the sound of the ventilating fans. In a residential neighborhood with limited traffic, the
3 | noise will be disruptive and invasive to local residents. In addition, the site of the Vent Stack Facility on the community park will not only destroy the park itself, but will also destroy the adjacent community farm by reducing sun exposure and potentially venting toxic particles in the vicinity.

Representing the Neighborhoods and Friends of Reservoir Hill

2001 Park Avenue | Baltimore, Maryland 21217
410-225-7547 (tel), 410-225-7455 (fax) | www.reservoirhill.net

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
The three ventilation plant facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use.

Noise levels in the immediate vicinity of the ventilation plant buildings would be caused by the continual operation of the ventilation fans within each facility. The horizontal fans would operate periodically and would generate sound that would propagate through the louvers at the top of the ventilation facilities. Fans would operate periodically when NO_2 levels in the tunnel exceed a set threshold or in emergencies when smoke is present in the tunnel. NO_2 levels are likely to be highest when the level of diesel locomotive operations is highest, or when congestion causes trains to operate slowly or to idle in the tunnel. However, there is not enough information currently available to determine how many hours per day, on average, the fans would run and whether or not they would run during the night.

The design standard for the ventilation facilities would limit the outdoor noise level, when the fans are in operation, to L_{max} 50 dBA at the facility property lines. 50 dBA is approximately the noise produced by an indoor air conditioner at a distance of three feet. To achieve the required reduction in noise level, cylindrical or rectangular sound attenuators would be mounted directly to each fan or to the ductwork within the system. In addition, the building itself would partially shield noise from the interior of the ventilation plant, which would further reduce noise levels outside of the building. The Preliminary Engineering Team has stated that the ventilation plant facilities, with attenuators installed, will emit noise at 45 dBA. This would meet the design standard of L_{max} 50 dBA at the facility property lines (i.e., the noise level generated would be less than the design standard).

COMMENTS

Reservoir Hill Improvement Council, Inc.

Reservoir Hill . . . A Community Blooming With Opportunity!

2) The current plan does not include any filtering of particles or fumes from the Vent Stack Facility to protect neighborhood residents from the fumes that will be released during normal operations. Should there ever be an accident resulting in toxic materials being released, there will be no protections for local residents as outlined in the proposal. Regardless of cost, the Vent Stack Facility should be located in an area more appropriate for its presence, such as an industrial or commercial area. In addition, safeguards and filtering need to be incorporated to protect the local environment. 3

3) The current plan calls for four tunnels, high enough to allow for double-stacked freight cars. The tunnels will serve both passenger and freight rail, which diverges from the originally presented plan to bring two single-level tunnels through the area, for passenger train use only. Little or no information has been provided about the nature and potential dangers of the freight to be transported. The plan currently states that oil, gas, toxic chemicals, and potentially radioactive material may pass through the tunnels at high rates of speed. The prospect of a potentially catastrophic crash inside the tunnel must be addressed, particularly given that the DOT111 Tank cars used to transport crude oil have an established history of failure in the event of accidents. Such an accident could release toxic fumes, damage property, and cause injuries and death to local residents. Currently, no information has been given about safeguards to protect against this possibility or an emergency response plan should an accident occur. When challenged on this question, project spokespeople have only indicated that hazardous materials must be properly labeled, which clearly does not address residents' concerns about either venting or accidents. 4

4) Both the process of creating the tunnel and the ongoing use and maintenance of a rail tunnel present risks, both known and unknown, to the structural integrity of neighborhood buildings, many of which are more than one hundred years old. Investment in the neighborhood has increased in recent years, with more and more families moving into the neighborhood. They are depending on their investments to grow over time. With the potential for property damage in the short and long term, and with unknown environmental impacts, property owners are likely to find their investments losing value. The current plan indicates no willingness to protect the investments of homeowners should their properties be damaged or lose value as a result of the tunnel project. This is a particularly prevalent issue for property owners in the immediate vicinity of the Vent Stack Facility and those on the side of the neighborhood closest to Penn Station, where the tunnel will be closer to the surface and therefore closer to their homes' foundations. 5

Representing the Neighborhoods and Friends of Reservoir Hill

2001 Park Avenue | Baltimore, Maryland 21217
410-225-7547 (tel), 410-225-7455 (fax) | www.reservoirhill.net

RESPONSES

Response to Comment 3:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality; emissions would fall within all acceptable federal air quality standards. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, which have been set to safeguard public health. Because the concentrations of NO_2 were modeled to be within acceptable levels, all other criteria pollutant concentrations would be within NAAQS, as NOx is the most strictly regulated air pollutant generated from diesel locomotive operation. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the Tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

Response to Comment 4:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE

COMMENTS

Reservoir Hill
Improvement Council, Inc.

Reservoir Hill . . . A Community Blooming With Opportunity!

As residents of Baltimore City, we understand the importance of supporting our local economy and infrastructure. We understand that moving more freight through the Port of Baltimore has the potential to add jobs and support local residents, and that increasing high speed rail access has benefits for commuters and freight movers alike. We have no desire to stand in the way of safe progress that benefits the city we all call home. However, the well-being and safety of the residents of Reservoir Hill cannot be sacrificed for any economic gain, nor can we quietly accept the risks to our homes and our lives while receiving no direct benefits and little to no assurances of safety. Other options that do not run the tunnel substantially under any neighborhoods should be pursued, including options to align the tunnel's path with an existing major traffic thoroughfare.

We ask that the B&P Tunnel project not move forward until environmental studies are fully completed, risks safely addressed, and a plan is created to ensure the safety, well-being, and economic stability of the Reservoir Hill community and all neighborhoods in the path of the train tunnels.
We thank you for your consideration.

Sincerely,

Rev. Dr. Karen V. Brown
President - RHIC Board

Representing the Neighborhoods and Friends of Reservoir Hill
2001 Park Avenue | Baltimore, Maryland 21217
410-225-7547 (tel), 410-225-7455 (fax) | www.reservoirhill.net

RESPONSES

Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future

Response to Comment 5:

COMMENTS

2. "Dangerous Cargo. Hazardous Materials That Travel Through D.C.," Channel 4 NBC Washington, http://www.nbcwashington.com/investigations/Dangerous-Cargo-Hazardous-Materials-That-Travel-Through-DC-287852791.html
3. Sierra Club, July 7 2015, http://www.sierraclub.org/michael-brune/2015/07/oil-trains-lac-megantic
4. Wikipedia, Howard Street Tunnel Fire, https://en.wikipedia.org/wiki/Howard_Street_Tunnel_fire
5. Wikipedia, Reservoir Hill, Baltimore, https://en.wikipedia.org/wiki/Reservoir_Hill,_Baltimore
6. "What Do the Ferguson Movement, the Charleston Killings and Oil Trains Have in Common?", Todd Paglia, Huff Post, 7 July 2015, http://www.huffingtonpost.com/todd-paglia/what-do-the-ferguson-move_b_7722300.html
7. "Washington's rails, part 5: Unbottlenecking Baltimore," Matt Johnson, 14 September 2009, http://greatergreaterwashington.org/post/3467/washingtons-rails-part-5-unbottlenecking-baltimore/

7

RESPONSES

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

COMMENTS

RESPONSES

DEIS Comment 81:

From: Amber Reed
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Sunday, February 21, 2016 5:24:34 PM

Hello,

As a Baltimore homeowner, I support the B&P tunnel replacement. I liked it better when it was just a 2-track tunnel for Amtrak because the cost was lower, which may have made it easier to fund. The 4-track tunnel that's proposed now is still a good thing though, if those extra tracks make it easier for freight rail to connect to Baltimore ports. Better connections to ports make Baltimore more competitive and will bring more jobs to our city.

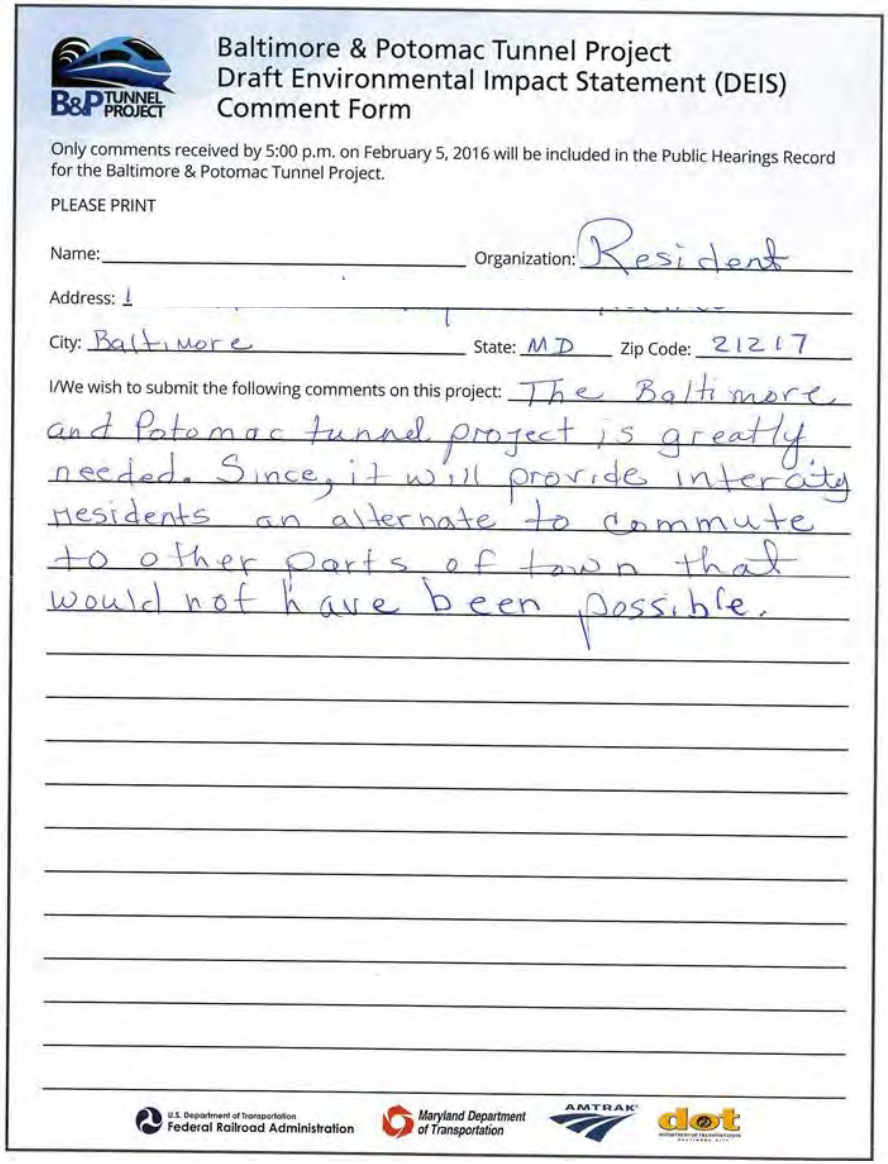
Amber Reed, Greenmount West

Thank you for your comment.

COMMENTS

RESPONSES

DEIS Comment 82:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: _____ Organization: Resident

Address: 1

City: Baltimore State: MD Zip Code: 21217

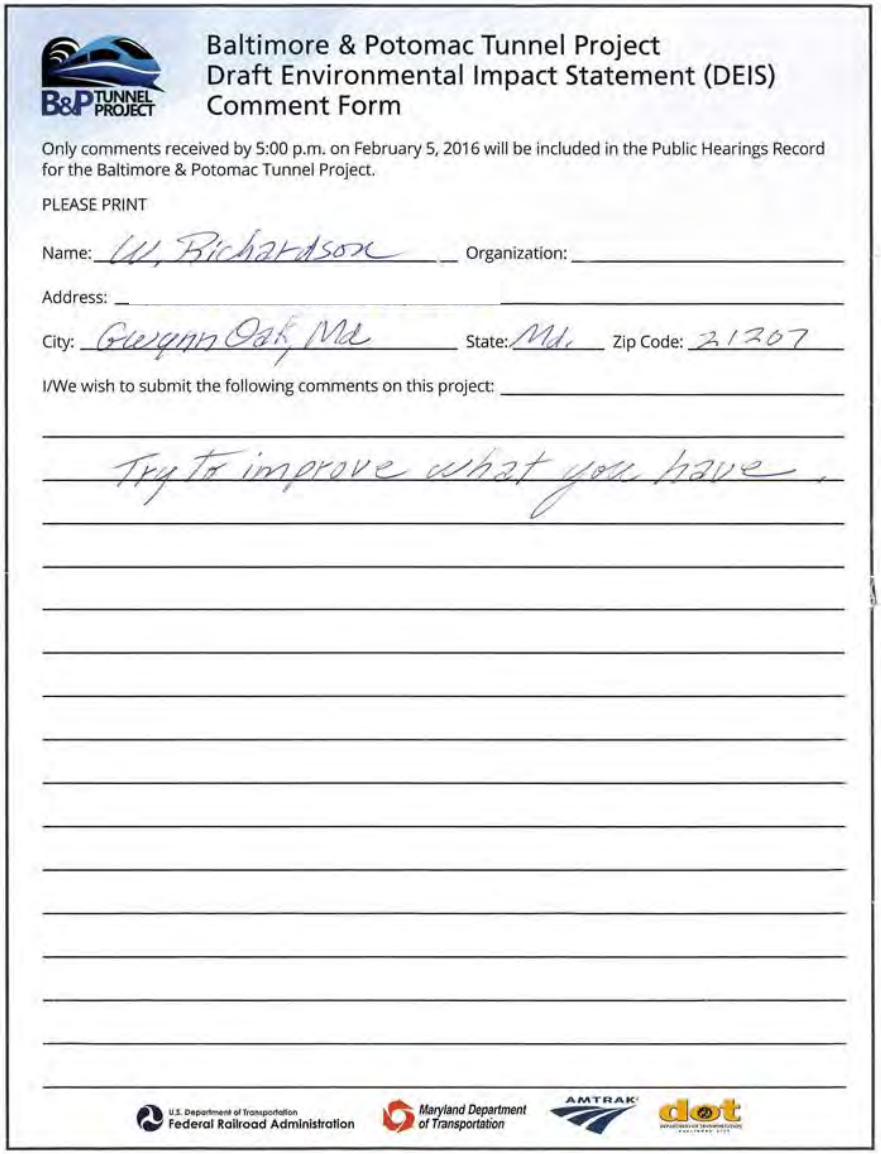
I/We wish to submit the following comments on this project: The Baltimore and Potomac tunnel project is greatly needed. Since, it will provide intercity residents an alternate to commute to other parts of town that would not have been possible.

U.S. Department of Transportation Federal Railroad Administration
Maryland Department of Transportation
AMTRAK
dot

Thank you for your comment.

COMMENTS

DEIS Comment 83:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: W. Richardson Organization:

Address:

City: Glen Arm State: Md. Zip Code: 21207

I/We wish to submit the following comments on this project:

Try to improve what you have.

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

1

RESPONSES

Response to Comment 1:

As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 84:

Brittany Rolf

From: Elizabeth Ryan
Sent: Friday, February 26, 2016 3:42 PM
To: BPTunnel Information; Odessa Phillip
Cc: Flint Arthur
Subject: DEIS Comment
Attachments: Nino!.jpg

Dear BP Project Team,

1 My name is Elizabeth Ryan and I am a resident of [redacted]e, a row house in Reservoir Hill, just one block from where you are proposing to build a ventilation plant.

Owning a home was a lifelong dream for my husband and me. After paying rent in American cities for the past 20 years, we finally got the chance to make our dream come true, thanks to the Healthy Neighborhoods Loan program. We have spent the last year, designing and diligently managing a massive renovation to transform this once dilapidated house into a home for our family. One of the design details we included was a new side door on the southern side of the house so that we can walk out our kitchen and harvest vegetables from the raised beds we plan to plant there. In December 2015, we finally moved in with our infant son, Giancarlos. I've a attached is a photo of him at Christmastime.

Despite everything we went through to become homeowners, our arrival in the neighborhood felt like an affirmation, thanks to the reception we received from our neighbors. I've lived in more places than I can count, and never before have we had such warm, community-oriented neighbors. We've already helped one another shovel, exchanged keys, shared pot luck dinners and borrowed ladders.

2 It therefore comes as a shock to us that you would even propose putting our family's health, our community's well-being and our financial future at risk with the proposed tunnels and ventilation plant. Our home would be one block from the ventilation plant. The proposed tunnels, which would run directly below our house, a mere 60 feet beneath our feet.

3 We did not purchase a home above a tunnel used to transport hazardous materials; we chose a house in a quiet neighborhood one block from the Central Park of Baltimore. We did not choose a home for our newborn ear a significant source of carcinogenic emissions; we added extra insulation to the walls of his room to ensure that he would never be cold. We did not buy a house in a place that no one loves; we chose a community where residents are committed to one another and to developing a vibrant commercial strip--on Whitelock Street.

4 When considering the 'cost' of a project such as this, there are powerful forces shaping the analysis, vested in an outcome that treats public comments such as this as perfunctory. But the costs to our family, our neighborhood, our health and our financial future are not intangible or irrelevant. They are devastating and irrevocable. I hope you will honestly explore those impacts before reaching your final decision, and ask yourself how you would feel if someone proposed this in your neighborhood?

Elizabeth Ryan, Carlos Payes and Giancarlos Payes

Baltimore, MD 21217

1

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

The build alternatives will have an average tunnel depth of 115 feet. All of the proposed project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal conditions and safety throughout construction.

Response to Comment 3:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate*

COMMENTS

RESPONSES

compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

Response to Comment 4:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 85:

RESIDENTS AGAINST THE TUNNELS
RATT

1 of 2

Questions, for the hearings, concerning the proposed B & P tunnels impact

SOLEDAD SALAME | MARK WEST, | MICHAEL KORYTA

Page one of two

1- Projected estimates are that, by 2040, the B&P Tunnels will have 338 trains passing through them every 24 hours. Since the tunnels are 2 miles long, this equates to generating, and concentrating, 676 miles worth of toxic diesel exhaust in the tunnels every day.

1A - Exactly how much of this 676 miles worth of pollution will be released through the center vent and spread over our community each day?

All Reservoir Hill is very worried, because the vent is like a giant exhaust pipe located in the very heart of our neighborhood. The building's huge footprint would wipe out almost half of our, much loved, park and farm on Whitelock Street and the farm produce will have to grow directly under this pollution.
The enormous, five story building would loom ominously over the historic architecture and degrade its beauty by juxtaposition. Not only will what little park remains be ruined by the noise & gasses but the residents in that area, John Eager Howard Elementary School, Saint Francis Center and Historic Gertrude Stein Retreat House will be heavily impacted.

2- Technology is changing at a fast pace, moving toward a more sustainable environment. It is very short sighted that diesel passenger trains will still be passing through the tunnels. These trains should be state of the art, electric passenger trains that will comply with the highest standards we can envision.

2A- What plans are in place to correct this oversight and address the universal optimum standards for future development?

3- 3A- What are the specific particulate matters, corrosive gasses and acidic gasses that will emerge from the center vent, and in what amounts, when the tunnels are in their full projected operation?

3B –Which of these substances are damaging to - A - health concerns *(respiratory & cancer rates, development of children & infants)* - b – food farming, parks and gardens – C – acid erosion to our historic architecture and how?

4- Increases to background pollution: Maryland has 20 Superfund sites; it is one of the most contaminated areas in the United States. Not coincidentally, Maryland also has one of the highest incidents in cancer; one in every five women has breast cancer. Neighbors with respiratory challenges could be driven out of their homes.

4A-What is being planned to alert & educate residents about the risks from the additional emissions through the tunnels & vents and how will it affect the health of the residents and kids living near all these fumes?

5- 5A - Is there any study being done to calculate the stress damage, to Baltimore citizens, from psychological stress from worrying that trains carrying potentially explosive & toxic freight will be directly under our homes?

6- 6A - What conditions would require evacuations and plans to house residents, and schools, and for how long?

6B - Where would residents go in the event of fire, explosions, caustic fumes, acid fumes, poisonous gases, smoke, oil fumes, radioactive and bio hazard releases?

7- 7A - If there were an explosion, like the so called "BOMB TRAIN" that exploded in Canada, killing citizens & destroying over two square miles of the community, what would happen to residents along the tunnels?

7B - Would the tunnel collapse and/or the vents have a meltdown and cease to function

7C - Would debris shrapnel flames & poison gasses be blown out the ends and vents like a giant cannon?
Please clarify this scenario because the prospect frightens residents & developers more than anything else.

RESPONSES

Response to Comment 1:

Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am and 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am, and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are in **Chapter VI**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. National Ambient Air Quality Standards have been established for six common air pollutants, referred to as criteria pollutants--carbon monoxide (CO), lead, nitrogen dioxide (NO2), ozone, particulate matter (PM) which includes particulate matter with a diameter of 10 microns or less (PM10) and PM2.5, and sulfur dioxide (SO2). Nitrogen oxides (NOx) and volatile organic compound (VOC). The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold. NAAQS are set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

The proposed tunnel ventilation system would be designed such that ventilated air will meet federal air quality standards without the use of a filtration system. The ventilation system would be designed to dilute and disperse pollutant levels, so the air quality standards would be met at any location where people may be exposed.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the

COMMENTS

RESPONSES

2 of 2

RESIDENTS AGAINST THE TUNNELS
RATT

Questions for the hearing concerning the proposed B & P tunnels

SOLEDAD SALAME - [illegible] MARK WEST - [illegible] and MICHAEL KORYTA

Page two of two

8- 7A - What 24/7 emergency warnings siren systems are planned to alert residents?

7B - Will there be clearly marked emergency evacuation route signs to direct us, in case we have to evacuate?

9- 9A - Will B&P provide 24/7 visible digital air quality signs, near the vents and entrances, that link the vent emissions to citywide air quality monitoring, and alert citizens with respiratory conditions about the dangerous additional levels of emissions, near the vents, whenever there are critical air quality alerts?

10- 9A - What are the projected plans for oil and compressed gases to be transported to the harbor through the 4 tunnels, to feed the proposed Sparrow's Point oil shipping terminal and oil tankers in the Chesapeake Bay?

9B – How will the Chesapeake Bay restoration be impacted by trains delivering oil to tankers in its waters and has anyone addressed their conservation groups?

9C - Has not oil shipment through the bay actually been a major part of the agenda to develop the tunnels from the very inception of the tunnel planning ?

9D– Why has Maryland Dept. of Transportation not had representatives from the freight industry, to inform the public about their part of the tunnels, included in their presentations ?

9E - When two tunnels suddenly morphed into FOUR, half way through the presentations, Baltimore residents became suspect that the public has been victim of a "bait & Switch" trick. It appears that the, whitewashed, freight agenda is disguised as Maryland Department of Transportation and will have little impact, which would not be the case. What explanation is there for this ,seemingly deceptive procedure?.

11- 11A - Why can't the two freight tunnels be located safely away from Baltimore's, economically challenged, high density populated areas, and neighborhoods, to eliminate social discrimination and potential environmental disasters?
If there were only two passenger tunnels the lines could go directly to Pennsylvania Station, more ideally, under North Avenue. Secondly, to eliminate pollution, the trains should be electric.

12- 12-A Can you give us a comprehensive list of hazardous freight materials that could be shipped through the tunnels - Including all items of concern as well as those mentioned in the following list -A - compressed gas – B - biological waste – C - nuclear or radioactive materials - D - acidic chemicals – E - caustic chemicals – F – chlorine – G - oil from fracking - G - explosive materials – H – flammable materials. We would like to be aware of every potentially dangerous chemical that would cause concerns and anxiety ?

13- 13A - Given the history of disaster events that have occurred in the existing tunnels, with two freight trains a day, how many incidents are expected with the projected, estimated increase of traffic to 338 trains in four tunnels every day?

14- 14A - Will you do any studies showing the economic & psychological cost of the demoralizing effect the tunnels have on our residents of Reservoir Hill. How do the tunnels discourage hope and development?

15- 15A - For many residents, their home is a major part of their financial security. How will fear of the tunnels devaluate properties and take money and hope from the current residents who have worked so hard, for so many years, to make Reservoir Hill a desirable place to live?

16- 16A - Why is the train being routed in such a way that affects so many poor and minority residents and avoids the more affluent neighborhoods surrounding the propose routes?

17- 17A - Fragile historic homes are part of the urban environment all along the tunnel pathways. Soft, low fire bricks, marble, sandstone and limestone, all susceptible to acid erosion, are the primary building materials used in these houses; what, long term, damaging effects will the acidic and particulate pollution have on the fabric of our houses?

Our houses all shake when trucks and busses pass by and we all have cracks from their vibrations. We think that we will experience irreversible deterioration from construction and vibrations, especially if the four tunnels are handling hundreds of trains a day.
We feel there is no acceptable compensation for the damages and don't want the tunnels under Baltimore residential neighborhoods.

Thank you for your time and attention to addressing our concerns.

Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
The type of locomotive traveling through the tunnel is determined by the train service operator. As per the 2040 projections, of the 388 daily vehicles running through the Tunnel, 222 will be electric (Acela, NE Regional, and Metropolitan), and 166 will be diesel (2 freight and 164 MARC). Please refer to **Chapter VI** for additional information.

Response to Comment 3:
Analysis of ventilation plant emissions included an air dispersion modeling analysis, which followed the latest US Environmental Protection Agency modeling guidelines for predicting air quality effects for regulated pollutants. The results of the analysis were compared to the stringent 1-hour NO_2 National Ambient Air Quality Standards (NAAQS) of 100 parts per billion (ppb) as opposed to the annual standard of 53 ppb. Emission studies have demonstrated that if NO_2 concentrations are maintained within acceptable levels, then other pollutant concentrations associated with diesel exhaust emissions will also be within acceptable limits. The maximum predicted 1-hour NO_2 concentration from the three ventilation facilities as well as north and south portals was 12.8 ppb. When added to the NO_2 background concentration of 51 ppb, the total predicted 1-hour concentration amounted to 63.8 ppb, which is below the NAAQS of 100 ppb. The maximum predicted 1-hour NO_2 concentration of the intermediate ventilation plant is 2.9 ppb and when combined with NO_2 background concentration of 51 ppb the total NO_2 concentration would be 53.9 ppb, below the NAAQS threshold limits of 100 ppb.

Response to Comment 4:
Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water. 112 sites of concern were identified within 1 mile of the Preferred Alternative; once type and

COMMENTS

RESPONSES

extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

The Project meets air quality standards; therefore, public alerts regarding emissions will not be required.

Response to Comment 5:
No impacts to public health are anticipated. For more information, please refer to **Chapter VI.**

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

COMMENTS

RESPONSES

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 6:
To minimize risk to the public, FRA requires a range of measures, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the Tunnel would be projected up and away from the community.

Response to Comment 7:
The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than an above-ground track running through the neighborhood The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

In terms of structural integrity, all of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The

COMMENTS

RESPONSES

Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

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 reduce the ability of particles to travel through the fans and louvers.

Response to Comment 8:
In the event of an emergency, local first responders will alert the community. Evacuation routes, if needed, would be established following an event. Evacuation routes cannot be established prior to knowledge of the location of the event.

Response to Comment 9:
As stated above, the Project meets air quality standards; therefore, public alerts regarding emissions will not be required.

Response to Comment 10:
For the past several years, only one local freight train (Norfolk Southern) has been operating through the B&P Tunnel daily, serving customers south of the B&P Tunnel between Baltimore and Washington, DC. Currently, 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.

As stated above, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

The Project was initiated because the B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Representatives from Maryland Department of Transportation (MDOT) and the Federal Railroad Administration were present at various meetings on 10/15/2014, 05/20/2015, 06/17/2015, 04/20/2016, and 06/17/2015, respectively. MDOT tracks the movement of freight within the State and works with the local jurisdictions to ensure that plans are in placed in the event of an accident involving freight trains.

COMMENTS

RESPONSES

The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Response to Comment 11:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 12:
As described above, currently, cargo 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

COMMENTS

RESPONSES

accordance with federal transportation rules. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Response to Comment 13:
It is not clear what disaster events are being referenced. It is not possible to project the number of incidents in the tunnel. Potential incidents would be less likely due to the updated design and modern construction of the tunnel.

Response to Comment 14:
The requested psychological study is beyond the scope of the National Environmental Policy Act.

The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 15:
Please refer to the comment above.

Response to Comment 16:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing

COMMENTS

RESPONSES

transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in

COMMENTS

RESPONSES

the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 17:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

COMMENTS

DEIS Comment 86:

From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Wednesday, February 17, 2016 4:40:24 PM

Mr Ashe Smith

Understand that progress sometimes hurts and takes change. The need and the desire to have a 21st century mass transit system is something that we need on the East Coast and something that Baltimore needs to grow and to keep solid talent in the city. What I do not understand and can comprehend is how one of the pieces to that puzzle is a very large (100 by 200 square feet) building that will act as a smoke stack in the middle of my community.
1 Not only is it taking away the ONLY commercially zoned area of Reservoir Hill, it has the potential to hurt all of the years (YEARS) of hard work to rehab homes, reclaim vacant lots, expand a community center that is currently on a $3 million dollar campaign, rehab a school that is being renovated worth $30 million, provide future opportunity and progress and jobs for a community that so desperate needs them.

I do not feel the need to continue this email as it is very clear that I am in support of the train but I am NOT in support of the massive build that will act as ventilation in the middle of my community, next to a community center, a school, an amazing park, and where I walk my dog every morning.

Find another solution for the ventilation, do not ruin the chance of my community truly bouncing back and reclaiming and rebuilding its commercial corridor.

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 87:

Brittany Rolf

From: Sharon Snead <[redacted]t>
Sent: Friday, February 26, 2016 4:14 PM
To: BPTunnel Information
Cc:
Subject: DEIS Comment

As co-owners of [redacted], Baltimore, Maryland 21217, my sister and I vehemently oppose the Draft Environmental Impact Statement (DEIS) for the Baltimore and Potomac (B&P) Tunnel Project which so adversely and negatively impacts our Reservoir Hill historic homes, businesses, schools, and community farm.

As residents of this community for 32+ years, we've invested an inordinate amount of sweat equity to preserve/maintain the safety, integrity and well-being of our homes (as well as our persons) - - many times supplementing lacking and/or non-existing city resources/services for which we have already paid taxes.

In 1983, property values were the lowest ever due to violent crime, vacant housing, rampant drugs and a lack of viable businesses - including a dearth of markets and convenience stores. Today our homes have historical preservation status (comparable to Bolton Hill and Mt Royal), property values have skyrocketed, many vacant homes have been renovated/restored and are now occupied; and there are now cafes, coffee shops, restaurants and the Whitelock Street Community Farm. In addition, the annual Reservoir Hill Garden Tour has become very successful/profitable and the John Eager Howard Elementary School is finally scheduled for long overdue renovations.

1 After attending many B&P Tunnel meetings, it has now become increasingly clear, unfortunately, this project is **now focused unjustly on the poor and minority residents of Reservoir Hill** after Bolton Hill and Mt. Royal residents managed to successfully lobby against those alternatives which would have adversely impacted their neighborhoods - - this is an **economic injustice to Reservoir Hill.**

2 As a federal employee, I spent half of my 34+ career commuting between Baltimore (Reservoir Hill) and DC on the MARC and the service was accessible and convenient; however, I can also painfully recall many late/delayed/cancelled passenger trains due to freight train issues. My family and I also enjoy use of AMTRAK to visit family in NJ/Christmas in NY and recognize the need to upgrade an aging system; however, **there must be other alternatives and/or options that would be less disruptive to our homes, personal well-being, and public safety.**

Therefore, respectfully recommend/request your re-visiting your project alternatives and assessment of environmental considerations to find those which are less damaging to the moral fabric of our livelihood in Reservoir Hill. Thank you for your time and attention to this matter.

Sharon Jones Snead
Saundra V. Jones
Co-owners, [redacted], Baltimore, Maryland 21217 (Reservoir Hill)

RESPONSES

Response to Comment 1:
The existing B&P Tunnel tracks are in Bolton Hill. Options as to where the new B&P Tunnel should reside are limited. Due to the geography and the shallowness of the area beneath Bolton Hill, this area was not a feasible option for the proposed tunnel, whereas the area underneath Reservoir Hill is deeper and more practicable.

Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the EO on environmental justice is public outreach. The Project Team has engaged extensively with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three public open houses and ten community meetings were held where the public was given the opportunity to learn about the project development, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter Claver Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School. Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity

COMMENTS

RESPONSES

populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 2:
Consistent with Northeast Corridor (NEC) long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Amtrak's first priority is to its passenger services. Therefore, although Amtrak must accommodate requests from NS or other freight operators with trackage rights agreements for additional train moves on the NEC, Amtrak need only schedule such moves as space

COMMENTS	RESPONSES
	between passenger trains can be made available. Where the freight operator and Amtrak have a dispute about scheduling of freight moves, the Surface Transportation Board (STB) adjudicates trackage rights agreements. As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)). Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

COMMENTS

DEIS Comment 88:

From: [redacted]
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Tuesday, February 02, 2016 2:46:36 PM

Hello!

I oppose alternatives 3A, 3B and 3C because I feel construction of this magnitude will surely compromise the aging residential homes in this area. I understand the need for improvement but my primary concern is MY HOME! You've stated "Federal agencies are required to take into account the effects of their undertakings on architectural and archeological historic properties." Whether historic or not, these are people's homes. However, Reservoir Hill has some of the best examples of Victorian and empire style homes in Baltimore which features a wide variety of nineteenth century architecture, including Victorian mansions overlooking Druid Hill Park. Most of the homes in this area were built in the 1900's.

1 I've work for many years to have and maintain my home! And although you may feel there is no immediate threat to the structure of homes, what is in place to financially compensate residents who will need to make critical repairs to structural damage incurred because of **this** construction?

2 I must say, it is very obvious to me that all 3 Alternatives are set in one of the poorest economic areas of Baltimore city. Anyone who lives in this area is already plagued visually by the dilapidated and crumbling homes already in existence, and this is prior to additional heavy construction and excavation. How much more destruction will be realized due to excavation?

I'm submitting my comment for the protection of my home. I want this statement on record because I believe in my heart there **will be** structural problems in the near future because of **this** construction and I want something recorded in your file and mine for future reference and litigation.
(Submitted via email On February 2, 2016)

Sincerely,
Mrs. Denise G. Speaks

Denise G. Speaks

[redacted]

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Response to Comment 2:
The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM

COMMENTS

RESPONSES

would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

COMMENTS

RESPONSES

DEIS Comment 89:

Brittany Rolf

From: Remington Stone <
Sent: Friday, February 26, 2016 4:56 PM
To: BPTunnel Information
Subject: DEIS COMMENT

I wish to offer the following comments into the record regarding the Draft Environmental Impact Statement prepared for the B&P Tunnel Project.

Having read almost all the materials offered and the citations of past studies, as well as engaged in conversations with project engineers and planners, I find that this project is an elaborate deception to over-forecast demand and over-build capacity (for an admittedly problematic tunnel), in a way that will serve primarily to benefit freight rail interests at the expense of both taxpayers and the residents of Reservoir Hill and Midtown-Edmondson.

Capacity

1 Despite claims being made in Purpose and Need, no actual projections appear to have been done that result in a need for four single-bore tunnels that can each accommodate two trains. I have read through and listened to presentations mentioning NEC Future reports that state a 2040 demand level, only to investigate these and not find anything that produces a need for these four tunnels. At best there is a citation to a MARC Growth and Investment Plan ... which again does not show this need. Certainly it mentions a *desire* for four tracks on many parts of the Penn Line, and it notes past 15-year growth that *if* continued for 25 more years (a very dubious assumption) would net a doubling of ridership by 2040. But still this does not lead to the four-track projection. No mention is made of efforts to increase seating and cars on each train-set, which have already netted the historic growth seen. Additionally the MARC service is almost entirely in a single direction (Baltimore-area residents commuting to DC jobs) which is reflected in scheduling on both the Penn and Camden lines. And yet the NEC Tier 1 Alternatives Report ludicrously suggests that service needs to be made bi-directional to accommodate growth, with (again) no citations given (pg.41 Sec 4.3.1). I find myself having to hunt for possible ways in which your reports might be justifying the demand increase without actually stating because, well, YOU HAVEN'T SHOWN YOUR WORK that would lead to such a forecast. I asked several planners at a recent open house to provide the citations which led to the four tunnels being needed. I left email address and phone number, but didn't hear back. I was told vaguely that the NEC Future report said, even though past versions hadn't said this from what I could tell. And I was told that maybe the recent revisions mentioned it (since a DEIS for that separate project had recently been finished) but still I found nothing there.

I dug further into the NEC Future DEIS to see if I could at least appreciate the extra demand being forecast, even if no true justification for four tunnels was being given. It's clear from Section 4.2.4 that the only inputs into this demand model are population and employment forecasts FOR THE ENTIRE REGION with base growth assumptions of 13% and 23% respectively between 2013 and 2040. The report then briskly proceeds as if said figures (with high and low bounds) are the inputs for demand. This is frankly ludicrous as the vast majority of growth taking place in our metro area (again, entire region as defined by Metropolitan Statistical Areas in the Census) is occurring on the exurban and rural fringe, not close to main infrastructure, and increasingly far from the downtown. While I wish this was not so (witness myself living less than a mile from Penn Station) it is an obvious reality completely ignored by NEC Future. And worse, because the employment growth in Washington DC is similarly slanted toward suburban and further areas, the point-to-point transit provided from Baltimore Penn Station to DC Union Station is almost entirely irrelevant to the growth that will be seen in these metro areas. Any serious analysis of point-to-point commuter pairs would have shown this, but the NEC Future report does not attempt anything like it.

In addition to flawed demand estimates for additional tracks, the design is taking further steps to increase speed and capacity well beyond what the existing two provide. This is of course natural to do when designing a new segment, but perhaps unnecessary if four tunnels were to be built. Specifically the "design guideline" that requires two trains be able to occupy a single bore at a given time looks unneeded. This requirement is single-handedly creating the need for a mid-line vent plant which is creating so many negative impacts above ground in my neighborhood of Reservoir Hill.

Freight

Response to Comment 1:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Response to Comment 2:

COMMENTS

There have been clear attempts throughout this process to obscure the nature of these tunnels and their future use for freight traffic. While this DEIS is being done under the guise of passenger traffic need, the clear effect will be a dramatic capacity boost for freight rail traffic that will partially solve the bottlenecks noted in 2005 and 2011 Baltimore Rail Network studies by the FRA. Obviously the 2011 report noted a joint Great Circle tunnel as a solution to freight challenges, but this 2
DEIS acts as though freight needs had no part to play in the design. But if that were true then you could be designing the bores so as not to accommodate double-stacking (Plate H). Furthermore there seems to be bad faith by the planners in estimating environmental impacts from this project AS IF NO FREIGHT GROWTH were going to occur. Again this can't possibly be the case with the massive capacity increase, and given that there is a longstanding stated demand for freight infrastructure and replacement as noted in the 2005 and 2011 reports. If this new tunnel is being built to solve passenger and freight challenges then the DEIS must be written in a way that addresses the reality of future freight traffic. Meanwhile the public statements of planners have been that future freight traffic would be based on "market demand," trying to obscure that there would obviously be massive excess capacity for such freight traffic.

Pollution

The DEIS is shockingly deficient in its estimates of pollution impacts. First it includes only an estimate only of the total additional tons of harmful emissions, with not the slightest concern for where these additional emissions are likely to go. While the emissions are assumed to be spread across the entire project area (2+ miles), in reality there are only three possible venting points from the tunnel, and only one of these that will actively be blowing emissions out into a neighborhood. This analysis provides absolutely no estimate on what the air that residents breathe will be like, which 3
should be clearly stated in ppm or ppb (parts per million or billion) for before and after build scenarios, and at multiple distances surrounding the vent and tunnel entrances. THIS IS A POINT SOURCE POLLUTION because it is coming directly from these three places!. Nothing could support an estimate that a doubling of pollutants will lead to a simple double increase across the entire area, since in the current scenario no estimate is made of ppm or ppb around these points. Even more disgracefully, the analysis assumes that freight traffic will stay static at 2 trains per day, a laughable assumption. No estimate is made of how much more polluting a freight train is compared to a MARC diesel train or an Amtrak electric.

In my neighborhood of Reservoir Hill you plan to construct a vent that will be in the very center of our neighborhood, adjacent to the Saint Francis Neighborhood Center and the several dozen children who use it, adjacent to German Park, and a block from John Eager Howard Elementary School and the hundreds of children there. I would very much like to know how many more respiratory diseases, cases of asthma, and other harmful impacts we should expect.

Land Use

Perhaps most troubling to me is the way in which your planners have totally ignored the history, current use, and future plans for the vent site directly in the middle of our neighborhood. It appears serious efforts were made to disguise your intentions for the site in the lead-up planning, as several city Planning and Housing officials stated they were not aware or were not consulted about the site. Instead your analysis matrix assumes that the site is a single parcel having no economic value and no use at present, neither economic or park, and thus looking attractive as you try to justify a vent 4
plant. In actuality this is a linchpin site for any future residential and commercial development of this neighborhood, holding the key to both redevelopment of vacant houses and lots, and necessary to stop any further deterioration.

Some history first - this site and the Whitelock corridor used to be the heart of the neighborhood with a mix of commercial buildings and residences. And it was one of the unfortunate flashpoints for the 1968 riots. Things got bad enough with drugs, crime, and vacancy that residents told the city in the '80s and '90s to tear them down ... and rebuild when the time was right. That promise and that hope was always there and plans for rebuilding have been discussed ever since. Most recently in 2008-9 a study was commissioned by Reservoir Hill Improvement Council (paid for by the Housing Department, I believe) and prepared by Parameter Inc (planning) and Lippman, Frizell, Mitchell (market). Unfortunately it landed right in time for the Great Recession and hardly any new construction has happened since. When the Whitelock Community Farm got organized on the north lots in 2010 that was viewed as a positive for the middle of the neighborhood, but not a permanent use. Similarly use of the south lots as a joint extension of the Farm and park (with funding from Healthy Neighborhoods) was a positive continuation, not a permanent change. After all, the land was owned and controlled by the city (Housing Department) and promises had been made.

The effect of building this terrible five-story structure, out of all proportion and use in our neighborhood, cannot be understated. There will be no housing and commercial that will locate near it. You have not begun to estimate the effects of pollution on the Whitelock Farm adjacent to it. The developer/owner of the two adjacent apartments building to the east has stated that he would not have redeveloped them had he known this was to be built. He had hopes to continue

2

RESPONSES

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

Response to Comment 3:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2

COMMENTS

rehabbing vacants along Whitelock to the east but those plans are now very much on hold. There are other vacant lots in the vicinity which will not be built on if this vent is built. Investment in structures will decrease as property values will surely suffer. This is not insignificant - based on current market prices as compared to cost of rehabilitation, it is not even a break-even investment to rehab a house here. Some expected increase in housing values is the only thing that will allow vacant buildings to be rehabbed, and you are going eliminate that potential. The effects of continued vacancy (reversing a course we were on) is that existing houses will see less investment and vacancy will increase again. The biggest driver of investment to date has been the historic character of our housing stock and neighborhood, which you will severely compromise with this massive vent tower.

The DEIS also obscures how deleterious the vent plant will be by providing examples that have no relation to our situation. The one building shown for comparison is a "draft" that looks nothing like the actual (finished in 2013), and that's next to a 60-story building in Manhattan and the on-ramp for the Lincoln Tunnel. Check out a street view of the NW corner of 41st St and Dyer Ave in Manhattan (AKA Site L for the 7th Line Subway Extension). These are not comparable situations to ours, yet that's what we're being offered up. And apparently that one isn't even as big as ours, which requires 3000+ square feet of louvers to get enough air out. The other example shown (a townhouse) seems to be totally misleading – the actual Weehawken vent shaft is in the middle of the Lincoln Tunnel looping ramps ("helix") surrounded by acres of bus parking. The address in Brooklyn shown in other versions ("58 Joralemon Street") is both an emergency exit and vent for the IRT Lexington Ave subway. Of course that's the example of what we can never have on this site because no townhouses will ever be built near it and the actual building we'll get will be bigger by a factor of 30.

5 Finally the public statements in email of Odessa Phillips, that "no assessment could be made of property value effects" is clearly false. You don't need to study the effects of every other factor (market trends, municipal investments, mass transit, crime, etc.), you just have to study the effect of this one massive change. Ceteris Paribus, it's really simple principle of any analysis.

Thank you. You will be hearing a great deal more from our neighborhood in the coming months and years.

Remington Stone

3

RESPONSES

concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

In response to your concern regarding air pollution near the school, Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

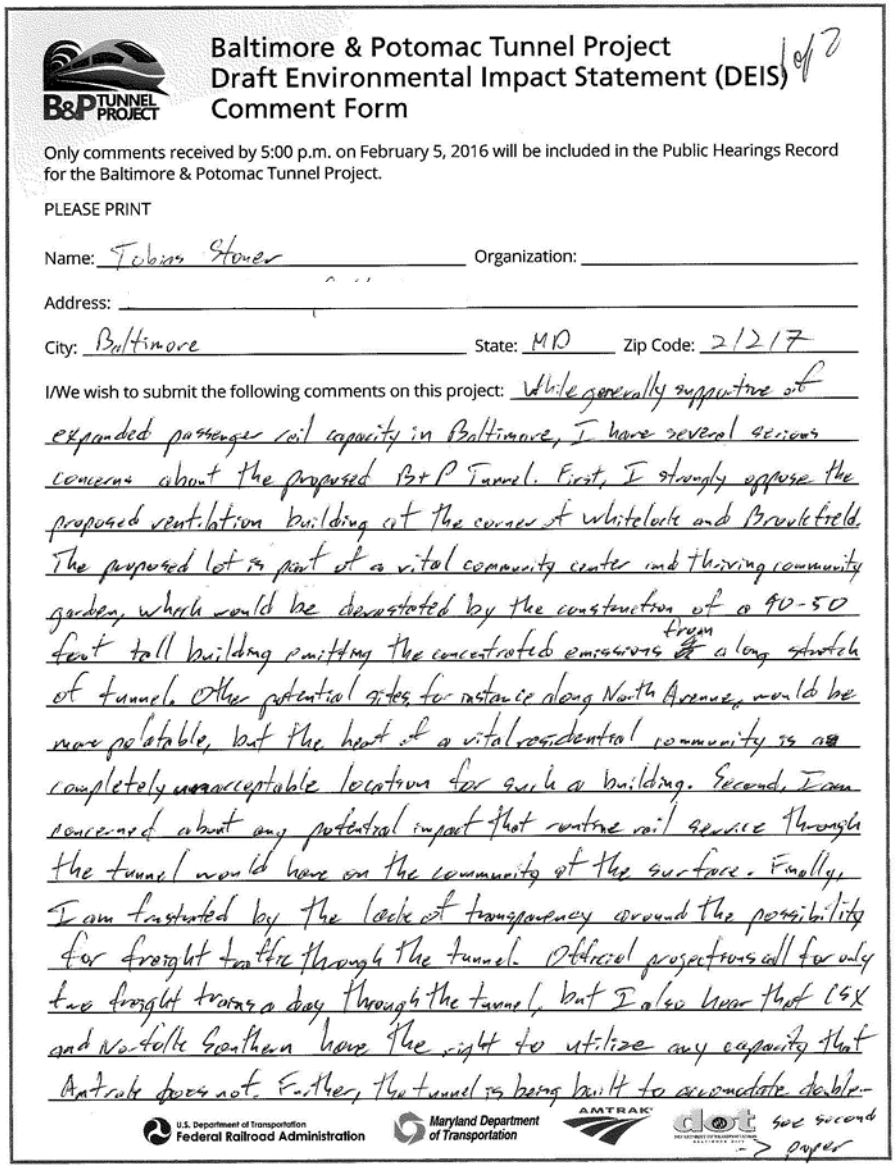
Response to Comment 4:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 5:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

DEIS Comment 90:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

1 of 2

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Tobias Stoner Organization:

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project: While generally supportive of expanded passenger rail capacity in Baltimore, I have several serious concerns about the proposed B+P Tunnel. First, I strongly oppose the proposed ventilation building at the corner of Whitelock and Brookfield. The proposed lot is part of a vital community center and thriving community garden, which would be devastated by the construction of a 40-50 foot tall building emitting the concentrated emissions from a long stretch of tunnel. Other potential sites, for instance along North Avenue, would be more palatable, but the heart of a vital residential community is a completely unacceptable location for such a building. Second, I am concerned about any potential impact that routine rail service through the tunnel would have on the community at the surface. Finally, I am frustrated by the lack of transparency around the possibility for freight traffic through the tunnel. Official projections call for only two freight trains a day through the tunnel, but I also hear that CSX and Norfolk Southern have the right to utilize any capacity that Amtrak does not. Further, the tunnel is being built to accommodate double-

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

see second page

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

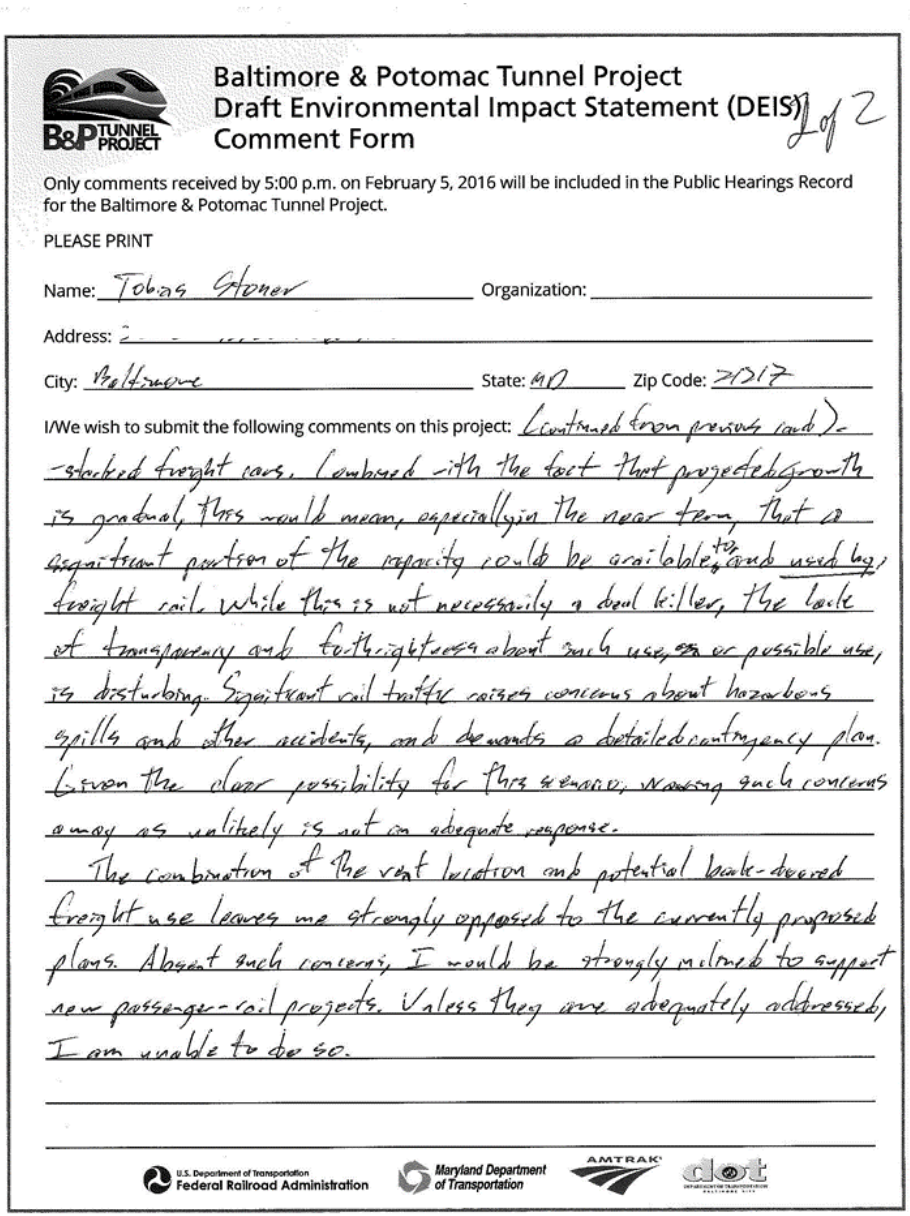
Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

Response to Comment 3:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be

COMMENTS



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

1 of 2

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Tobias Stoner Organization:

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project: (Continued from previous card).

-stacked freight cars. Combined with the fact that projected growth is gradual, this would mean, especially in the near term, that a significant portion of the capacity could be available to and used by freight rail. While this is not necessarily a deal killer, the lack of transparency and forthrightness about such use, or possible use, is disturbing. Significant rail traffic raises concerns about hazardous spills and other accidents, and demands a detailed contingency plan.

5

Given the clear possibility for this scenario, waiving such concerns away as unlikely is not an adequate response.

6

The combination of the vast isolation and potential back-door freight use leaves me strongly opposed to the currently proposed plans. Absent such concerns, I would be strongly inclined to support new passenger-rail projects. Unless they are adequately addressed, I am unable to do so.

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 4:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

COMMENTS

RESPONSES

Response to Comment 5:
Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

Response to Comment 6:
NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

COMMENTS	RESPONSES
	FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection. The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

COMMENTS

DEIS Comment 91:



From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Wednesday, February 17, 2016 2:38:48 PM

Ms Page Stroup

N/A

As a resident of Reservoir Hill, I have serious concerns about the proposed tunnel under our neighborhood. In fact, one of the 4 tunnels appears to be designed to go directly under my home. Reservoir Hill is a historic neighborhood that Baltimore has been trying to revive for decades with historic tax credits, purchasing incentives, and more. Many of its residents are dedicated to improving the historic housing stock and are committed to seeing the neighborhood preserved and improved. This tunnel project severely jeopardizes Reservoir Hill's prospects due to air quality concerns from a proposed vent stack, vibration concerns from boring to construct the tunnel and the rail traffic in the tunnel traveling at high speeds. 1

There has been no information provided to residents about compensation for damage to these homes...either in the short term due to construction, or the long term due to vibration. 2

In short, this is not the neighborhood where this tunnel should be constructed.

RESPONSES

Response to Comment 1:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the

COMMENTS

RESPONSES

surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

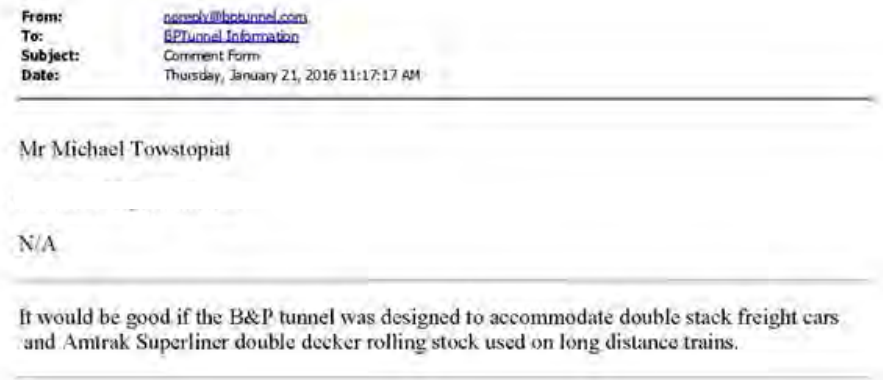
All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The tunnel will be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of trains within the tunnel.

Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

COMMENTS

DEIS Comment 92:



From: [redacted]
To: BPTunnel Information
Subject: Comment Form
Date: Thursday, January 21, 2016 11:17:17 AM

Mr Michael Towstopiat

N/A

1 It would be good if the B&P tunnel was designed to accommodate double stack freight cars and Amtrak Superliner double decker rolling stock used on long distance trains.

RESPONSES

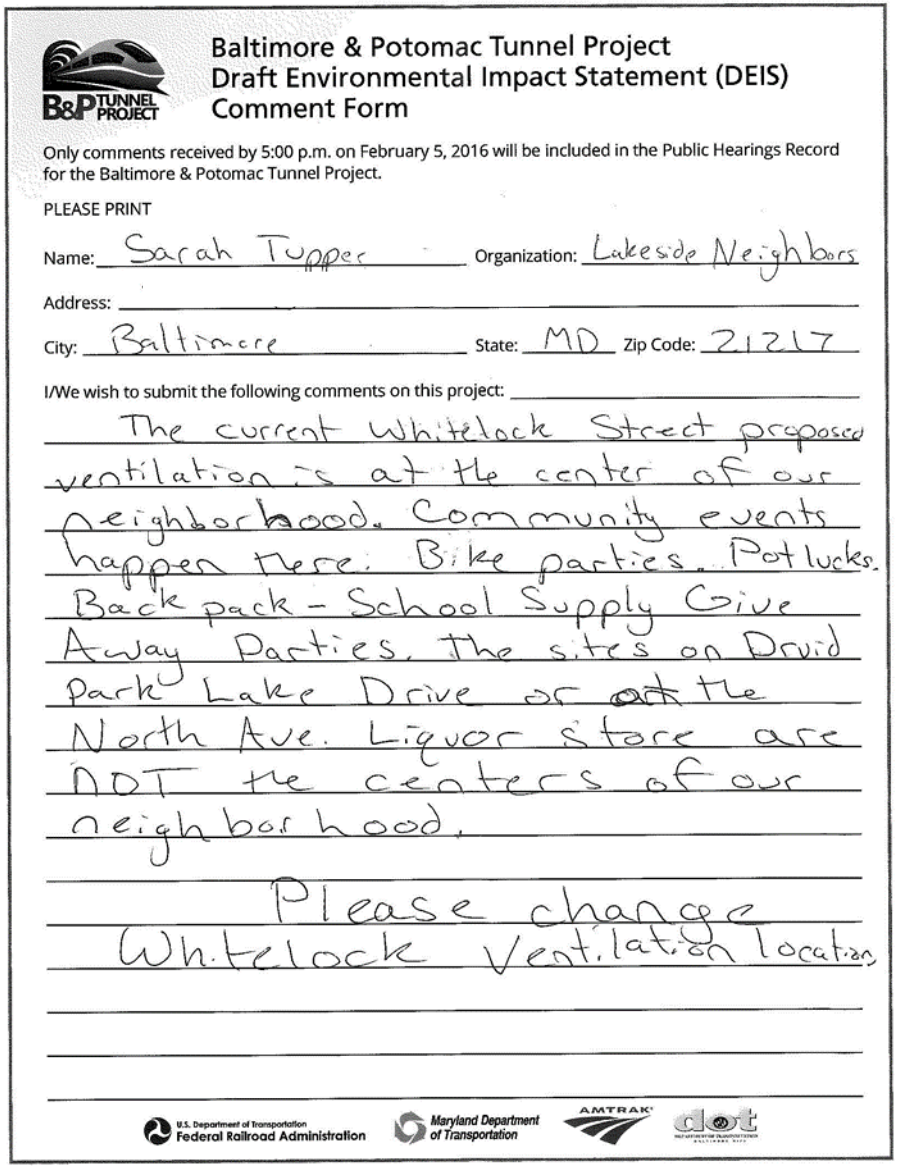
Response to Comment 1:
Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

COMMENTS

DEIS Comment 93:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Sarah Tupper Organization: Lakeside Neighbors

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project:

The current Whitelock Street proposed ventilation is at the center of our neighborhood. Community events happen here: Bike parties. Pot lucks. Back pack – School Supply Give Away Parties. The sites on David Park Lake Drive or at the North Ave. Liquor store are NOT the centers of our neighborhood.

Please change Whitelock Ventilation location

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

1

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 94:

Brittany Rolf

From: noreply@bptunnel.com
Sent: Thursday, February 18, 2016 11:11 AM
To: BPTunnel Information
Subject: Comment Form

Mr Marco Turra

Dear Ms. Phillip:

Thank you for the planning work that is taking place to examine possible improvements to the Baltimore and Potomac (B&P) Tunnel in Baltimore, Maryland. We understand that the Federal Railroad Administration (FRA), Maryland Department of Transportation (MDOT) and Amtrak are developing and evaluating alternatives to improve rail service, reliability and address a longstanding bottleneck along Amtrak's busy Northeast Corridor (NEC). As you may know, CSX Transportation (CSXT) has trackage rights to operate freight trains via the NEC between Washington and New York, including through the B&P Tunnel.

As you advance the engineering and environmental study to examine various improvements to the B&P Tunnel, CSXT wants to make sure that the specifications and standards used will also be consistent with safe and efficient freight operations that preserve CSXT freight rights. 1

For example, in the Draft Environmental Impact Statement and Section 4(f) Evaluation, most of the remaining alternatives propose a vertical grade as steep as 2%, which may pose challenges for freight operations. Additionally, there may be impacts requiring acquisition or alteration of CSXT property or properties owned by customers served by CSXT, particularly near the proposed tunnel entrances.

Consequently, CSXT would appreciate the opportunity to review any additional engineering plans used in the creation of this study. CSXT would like to examine the detailed track geometry and elevations of the remaining alternatives so we can better understand impacts to future freight operations.

Thank you for the opportunity to review and comment on the study. We look forward to participating in the study as this project progresses.

Sincerely,

Marco Turra

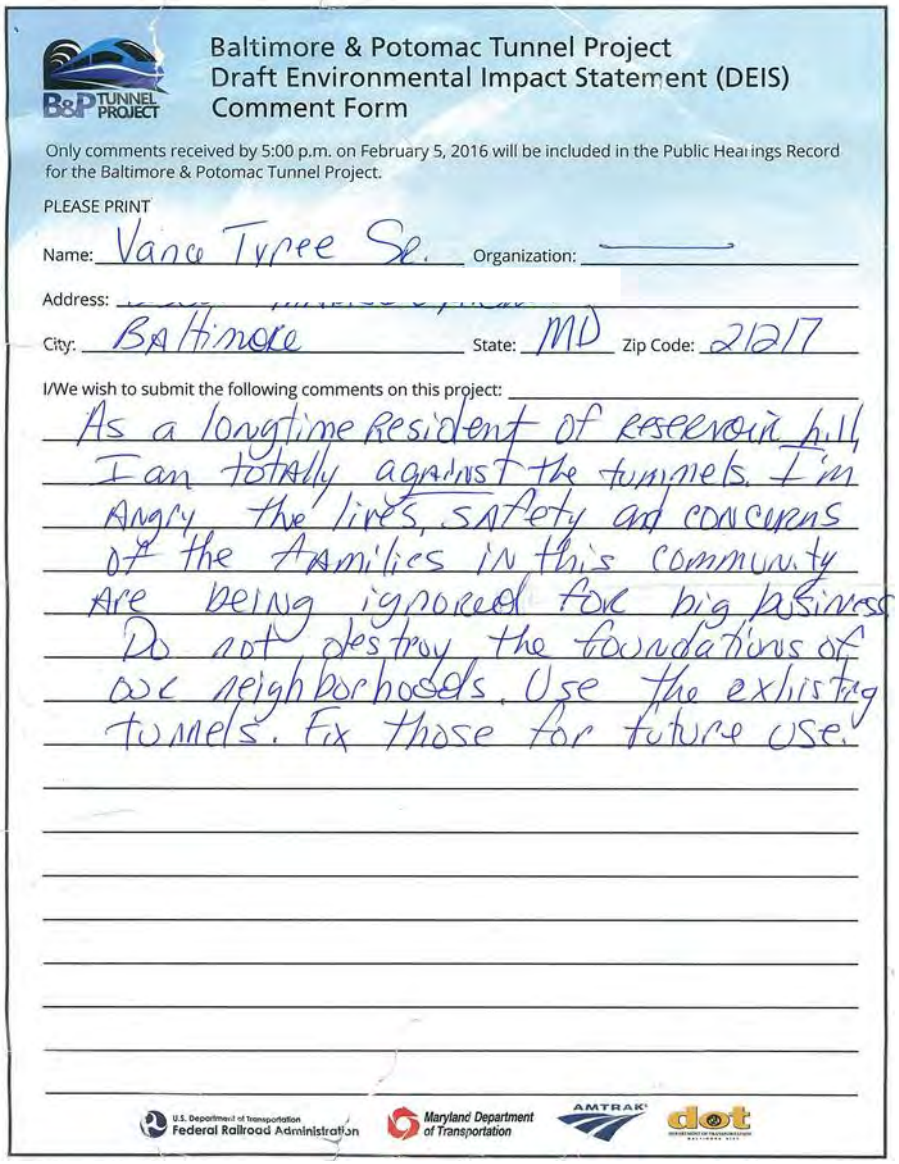
RESPONSES

Response to Comment 1:

Design development and environmental evaluation were based on refined design goals that considered existing and future NEC operations, the Baltimore Penn Station Master Plan, and input from agencies and the public. Design criteria are detailed in **Chapter III.**

COMMENTS

DEIS Comment 95:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Vance Tyree Sr. Organization: ———

Address: [illegible]

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project:

As a longtime resident of reservoir hill, I am totally against the tunnels. I'm Angry the lives, safety and concerns of the families in this community Are being ignored for big business Do not destroy the foundations of our neighborhoods. Use the existing tunnels. Fix those for future use.

1

2

U.S. Department of Transportation Federal Railroad Administration · Maryland Department of Transportation · AMTRAK · dot

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

- Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction;
- No parking along Wilson Street or Winchester Street during construction;
- Limitations for residential and commercial access along Wilson Street and Winchester Street during construction;
- Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park;
- Substantial residential property impacts; and
- Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds.

Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

COMMENTS

DEIS Comment 96:

From: Verthein, Jeffrey M.
To: BPTunnel Information
Subject: DEIS Comment
Date: Friday, February 05, 2016 8:01:41 PM

Dear Sir or Madam,

I completed my review of the tunnel impact statement. Even though Option 3C would go directly beneath my home, I find that I don't share the same doomsday concerns of some of my neighbors in Reservoir Hill. Unless I have misread the document, the tunnels would be 150+ feet below my house, tunneled through rock (at this location) whilst being monitored for any surface soil shifting which would be mitigated by established means if any structural issues are noted. My statics education tells me that the city buses on my street already vibrate the surface soil more than any trains underneath ever would, and if my home were to be damaged due to the tunnel project, I'd simply join whatever class action suit were to spring up and cash out. Honestly, I'm not even expecting to be living in this house in the year 2040, which appears to be the target date for this project.

That being said, based upon current neighborhood trends and the continued urbanization of younger generations, I fully expect the neighborhood to be denser, wealthier, more vibrant, and a more completely renovated and desirable location by the time any of your option 3 routes were to begin construction. You can bank on facing expanding resistance to the ventilation building in particular, which I see as the only true evil necessary to complete any of these plans. So I implore you to please compensate the neighborhood with some benefit to offset your 25 year hold on vacant land for something that will only detract and harm the neighborhood – please build a subway line in parallel with the tunnel project! Or at least reserve the right-of-way in one of the tunnels for an occasional subway train. Give the neighborhood the benefit of a transportation stop that can connect us with Penn Station, or Mondawmin, or wherever else an expanded future subway system might be able to take us. Incorporate the subway entrance into the ventilation building – you will have to dig down there anyway. From what I understand, the fees and tax hikes on gasoline and tolls that occurred during Governor Ehrlich's administration were supposed to result in another city line, and this seems to be a tailor-made opportunity to finally get another line dug. Please work with the owners of the project, the city of Baltimore, the state, and any federal agency that donates dollars to public transportation projects, and please compensate the neighborhood for the ventilation building and improve this city at the same time. It only makes sense. Everyone wins in the end.

Regards,
JM Verthein

1
2
3
4

RESPONSES

Response to Comment 1:
The build alternatives will have an average tunnel depth of 115 feet.

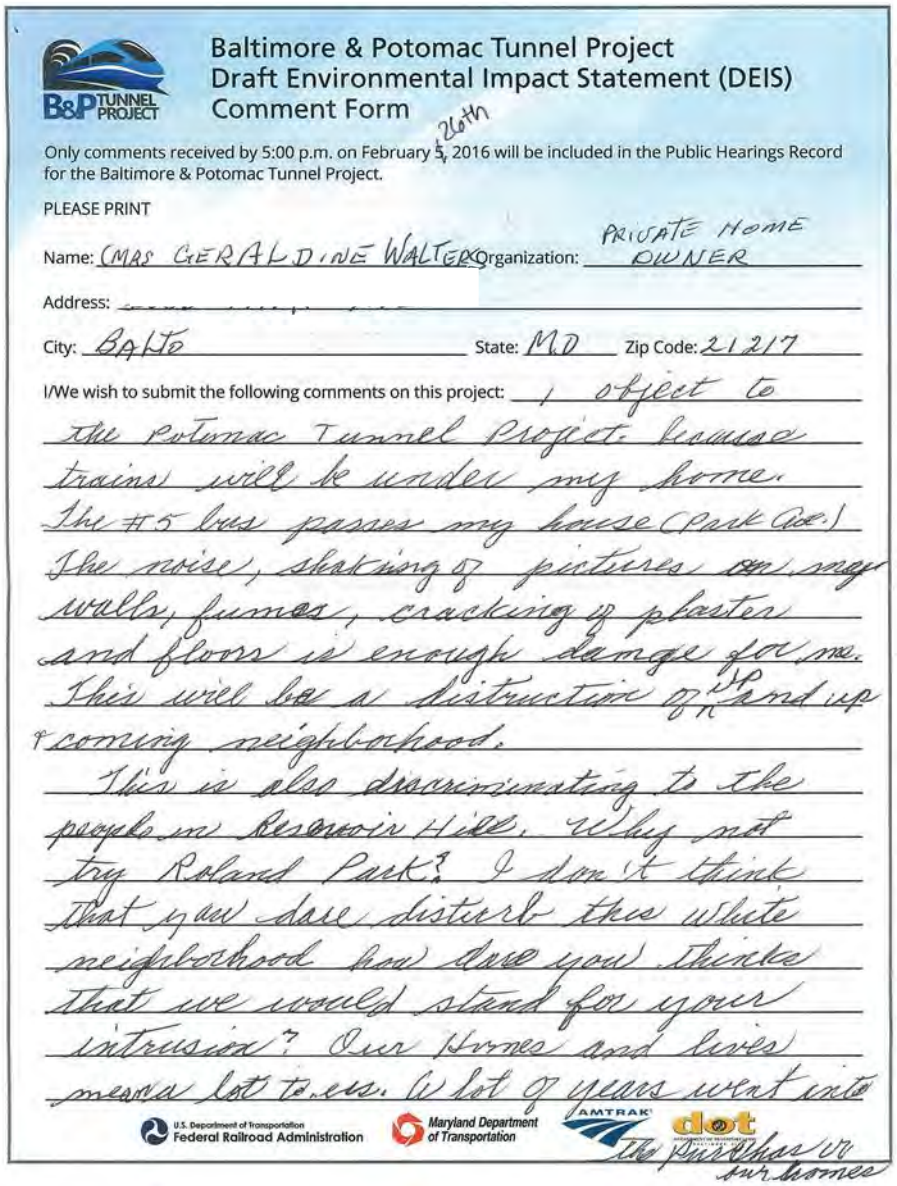
Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 97:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 26th, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: CMRS GERALDINE WALTERS Organization: PRIVATE HOME OWNER

Address: [illegible]

City: BALTO State: MD Zip Code: 21217

I/We wish to submit the following comments on this project: I object to the Potomac Tunnel Project because trains will be under my home. The #5 bus passes my house (Park Ave.) The noise, shaking of pictures on my walls, fumes, cracking of plaster and floors is enough damage for me. This will be a distruction of the up & coming neighborhood.

This is also discriminating to the people in Reservoir Hill. Why not try Roland Park? I don't think that you dare disturb this white neighborhood how dare you thinks that we would stand for your intrusion? Our Homes and lives means lot to us. A lot of years went into our homes

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

1

3

RESPONSES

Response to Comment 1:

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am and 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am, and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are in **Chapter VI**.

COMMENTS

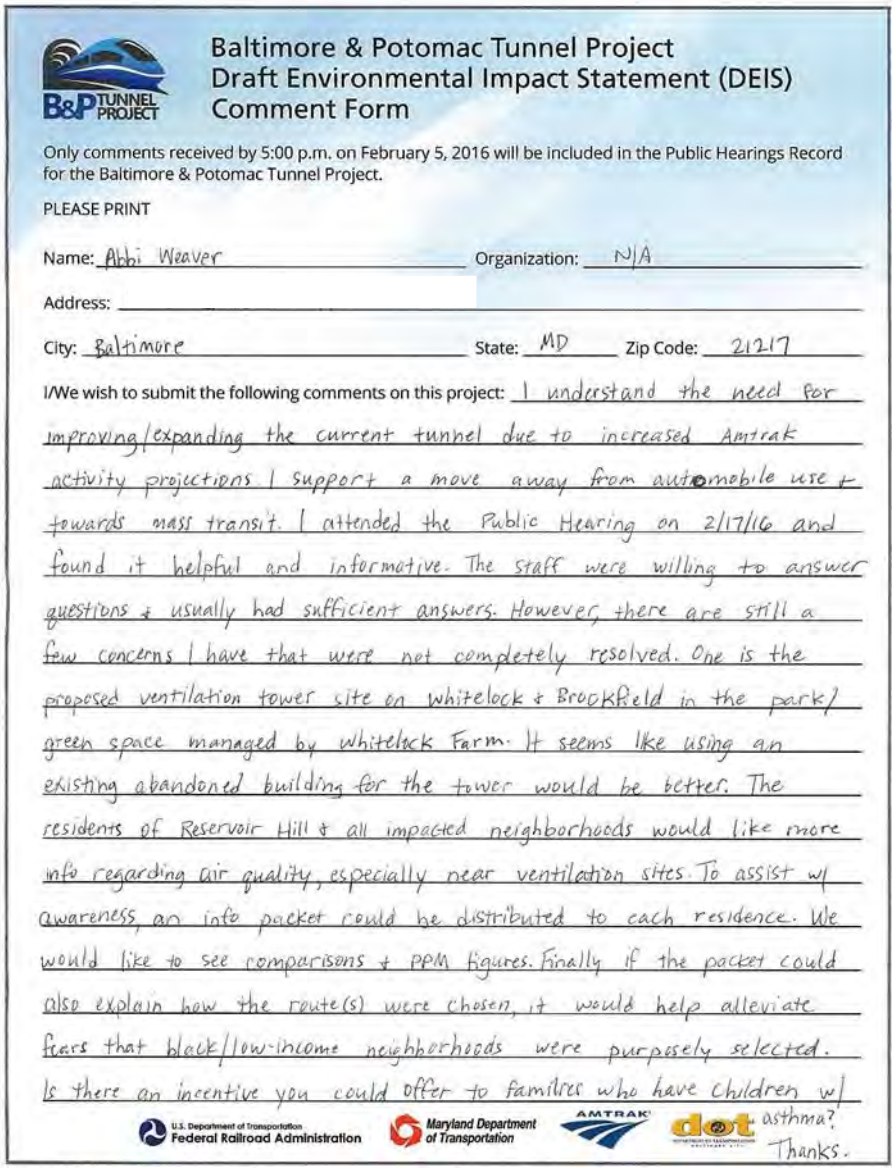
RESPONSES

Response to Comment 3:
Siting the Tunnel in Roland Park would not take advantage of existing infrastructure, including Baltimore Penn Station or the Gwynns Falls Bridge, which was a necessary condition for an alternative to be retained. The existing B&P Tunnel tracks are in Bolton Hill. Options as to where the new B&P Tunnel should reside are limited. Due to the geography and the shallowness of the area beneath Bolton Hill, this area was not a feasible option for the proposed tunnel, whereas the area underneath Reservoir Hill is deeper and more practicable.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

COMMENTS

DEIS Comment 98:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Abbi Weaver Organization: N/A

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project: I understand the need for improving/expanding the current tunnel due to increased Amtrak activity projections. I support a move away from automobile use & towards mass transit. I attended the Public Hearing on 2/17/16 and found it helpful and informative. The staff were willing to answer questions & usually had sufficient answers. However, there are still a few concerns I have that were not completely resolved. One is the proposed ventilation tower site on Whitelock & Brookfield in the park/green space managed by Whitelock Farm. It seems like using an existing abandoned building for the tower would be better. The residents of Reservoir Hill & all impacted neighborhoods would like more info regarding air quality, especially near ventilation sites. To assist w/ awareness, an info packet could be distributed to each residence. We would like to see comparisons & PPM figures. Finally if the packet could also explain how the route(s) were chosen, it would help alleviate fears that black/low-income neighborhoods were purposely selected. Is there an incentive you could offer to families who have children w/ asthma? Thanks.

U.S. Department of Transportation Federal Railroad Administration · Maryland Department of Transportation · AMTRAK · dot

1

2

3

4

5

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation plant air dispersion modeling.

Analysis of ventilation plant emissions included an air dispersion modeling analysis, which followed the latest US Environmental Protection Agency modeling guidelines for predicting air quality effects for regulated pollutants. The results of the analysis were compared to the stringent 1-hour NO_2 National Ambient Air Quality Standards (NAAQS) of 100 parts per billion (ppb) as opposed to the annual standard of 53 ppb. Emission studies have demonstrated that if NO_2 concentrations are maintained within acceptable levels, then other pollutant concentrations associated with diesel exhaust emissions will also be within acceptable limits. The maximum predicted 1-hour NO_2 concentration from the three ventilation facilities as well as north and south portals was 12.8 ppb. When added to the NO_2 background concentration of 51 ppb, the total predicted 1-hour concentration amounted to 63.8 ppb, which is below the NAAQS of 100 ppb. The maximum predicted 1-hour NO_2 concentration of the intermediate ventilation plant is 2.9 ppb and when combined with NO_2 background concentration of 51 ppb the total NO_2 concentration would be 53.9 ppb, below the NAAQS threshold limits of 100 ppb.

Response to Comment 3:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The

COMMENTS

RESPONSES

14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 4:
The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 5:
In regards to your concern for the health of children, Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss Project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 99:

From: noreply@bptunnel.com
To: BPTunnel Information
Subject: Comment Form
Date: Wednesday, December 30, 2015 7:59:13 PM

Mrs Denise Wesolowski

1 My husband and I are for Alternative 3C.

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 100:

From: Sheila Wiggins
To: BPTunnel Information
Subject: DEIS COMMENT
Date: Monday, February 22, 2016 7:07:50 PM

To Whom It May Concern:

1 My concern is that Alternative 3C will require the demolition of the firehouse located at Edmondson Avenue and North Bentalou Street. The firehouse was built in 1910 and Engine Company 36 has occupied the building the entire 105 years. The firehouse is located within the Midtown Edmondson Avenue Historical District.

Engine Company 36 is considered to be an essential part of the community. There are at least five Baltimore City Public Schools that it serves; Carver Vocational-Technical High School, where one of the B&P Tunnel Project public hearings was held, is one of the five schools. Emanuel Tire, a company that shreds and stores tires, and P. Flanigan Company are also served by Engine 36; a major fire at these businesses would severely affect the area. Most of the rowhouses in the service area are wood-framed structures built during or shortly after World War I.

Removal of the firehouse and the engine company it houses would endanger the immediate area. The next closet engine companies (North Avenue and Poplar Grove Street; and Lafayette Avenue near Gilmor Street) are at least 3 to 5 additional minutes away from Carver Vo-Tech High School. Given the schools, businesses, and types of structures in the area, considerable damage to property and harm to persons could occur during the increased response time. Within the past seven years the neighborhood associations in the service area have rallied twice to prevent scheduled closing/removal of Engine 36 for the reasons given above.

I hope that you will consider my comments concerning Alternative 3C during your impact studies.

Thank you.

Yours truly,

--Sheila R. Wiggins

Baltimore, MD 21216

Wisdom is the principal thing; therefore get wisdom: and with all thy getting get understanding. Proverbs 4:7 KJV

RESPONSES

Response to Comment 1:
The Preferred Alternative, as well as build alternative 3A, would have no impact on Engine Company 36. Under alternative 3C there would be substantial impacts to the firehouse.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 101:

Brittany Rolf

From: Rebecca Wilson
Sent: Friday, February 26, 2016 1:06 PM
To: BPTunnel Information
Subject: DEIS Comment

DEIS Comment

Rebecca Wilson

Baltimore MD 21217
Reservoir Hill Neighborhood
Neighborhood of proposed venting facility; near east end boring site; above proposed route of 4 double-stack train tunnels

Hello.
Engineers, environmental scientists, designers and others involved with this B & P Tunnel Project's Draft Environmental Impact Study appear to have given it their all...looking for a solution to a problem within the parameters set forth for them. They are tasked by the Federal Government, the Federal Railroad Administration, the Maryland Department of Transportation, and Amtrak to design a plan to widen the B & P tunnel bottleneck and make the Northeast Corridor train travel faster. As many of them have indicated at the hearings, their designs and calculations must include flexibility for "increasing market needs" including a higher frequency and speed of passenger trains and a higher frequency of Norfolk Southern and other freight trains carrying UNLIMITED **amounts and types of double-stack** FREIGHT, which is allowed by federal regulations to sometimes be kept secret. They must try to plan for HAZMAT freight emergencies, including Fracking Oil, and for increasing diesel train exhaust.

1

2

And they are tasked to fulfill all these requirements along the aging tunnel section of track between Penn Station and West Baltimore Marc Station under our densely populated, historically significant, economically blighted, majority black-owned Baltimore City neighborhoods.

But all these problems do not need to be solved along this one section of track. In fact they should not be! There is an alternative.

3

I would draw your attention to Final Draft of the "Proposal to Unravel Baltimore's Tangled Rail Lines" put forth by the Joint Open Infrastructure Subcommittee of the MTA Citizens Advisory Committee; the MTA Citizens Advisory Committee for Accessible Transportation; & MARC Riders Advisory Committee completed September 2015.

Please consider their proposal, which has been submitted at a DEIS public hearing.
It offers an alternative plan for our rail system that makes this **Draft Environmental Impact Study unnecessary and based on flawed parameters.**

Relevant highlights of the 19 page, carefully proposed, alternative include:

1

RESPONSES

Response to Comment 1:
While Project goals include addressing the bottleneck and improving travel time, the Project Need articulates that the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 2:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum,*

COMMENTS

1. B & P tunnel would accommodate Marc trains only.
It could serve as a backup rail for regional trains in emergencies. The MARC would expand.

3

2. Freight trains would be routed south of the city. (Tighter regulations on hazardous materials would be demanded of Federal Regulators to stop Oil Trains.)

3. Regional and high speed trains (including Acela and later Maglev) would be routed through Charles Metro Center, not through B&P tunnel or Penn Station, and would connect to a more robust local system, closer to points of interest.

Baltimore City residents demand a full system approach with 21st century technology.
We demand the health and safety of our citizens.
We demand hazardous materials be banned from passing through our city even as Big Oil is planning to use Baltimore as a gateway for extreme crude oil.
We demand that our new infrastructure not be built for outdated fossil fueled diesel trains and for trains already considered to have mediocre speeds compared to high speed trains in California and around the world.
4 We demand huge venting systems not be built to accommodate diesel and HAZMAT emergencies in the hearts of our neighborhoods.
5 We demand neighborhoods impacted by civil-rights issues be respected and helped to thrive.
6 We demand our historic properties not be threatened with vibrations of an unprecedented amount of underground heavy train traffic and construction.
We demand the hubs of transportation be designed effectively.

Most Mayoral candidates for Baltimore City have raised their hands in a public forum when asked if they will oppose this tunnel project when elected.

7 And so I would ask that the conclusion of this B & P Tunnel Project's Draft Environmental Impact Study should be **Alternative 1 or Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and in accordance with the proposal** of the MTA Citizens Advisory Committee...that the tunnel transition and improve to **accommodate only MARC passenger trains** after freight trains (Norfolk Southern and others), regional (Amtrak) and High-Speed Intercity Passenger rail lines (Acela and Maglev) are shifted to more appropriate pathways.

Thank you for your consideration,
Rebecca Wilson

2

RESPONSES

chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 3:
The report referenced, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding The Purpose and Need for the Project, please see **Chapter II** of this FEIS. To review the September 2015 report in its entirety, please refer to **DEIS Comment #11.**

Response to Comment 4:
As described in **Chapter III** of the FEIS, the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel

COMMENTS

RESPONSES

into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

Response to Comment 5:
The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 6:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be fully compensated for the cost of repairs.

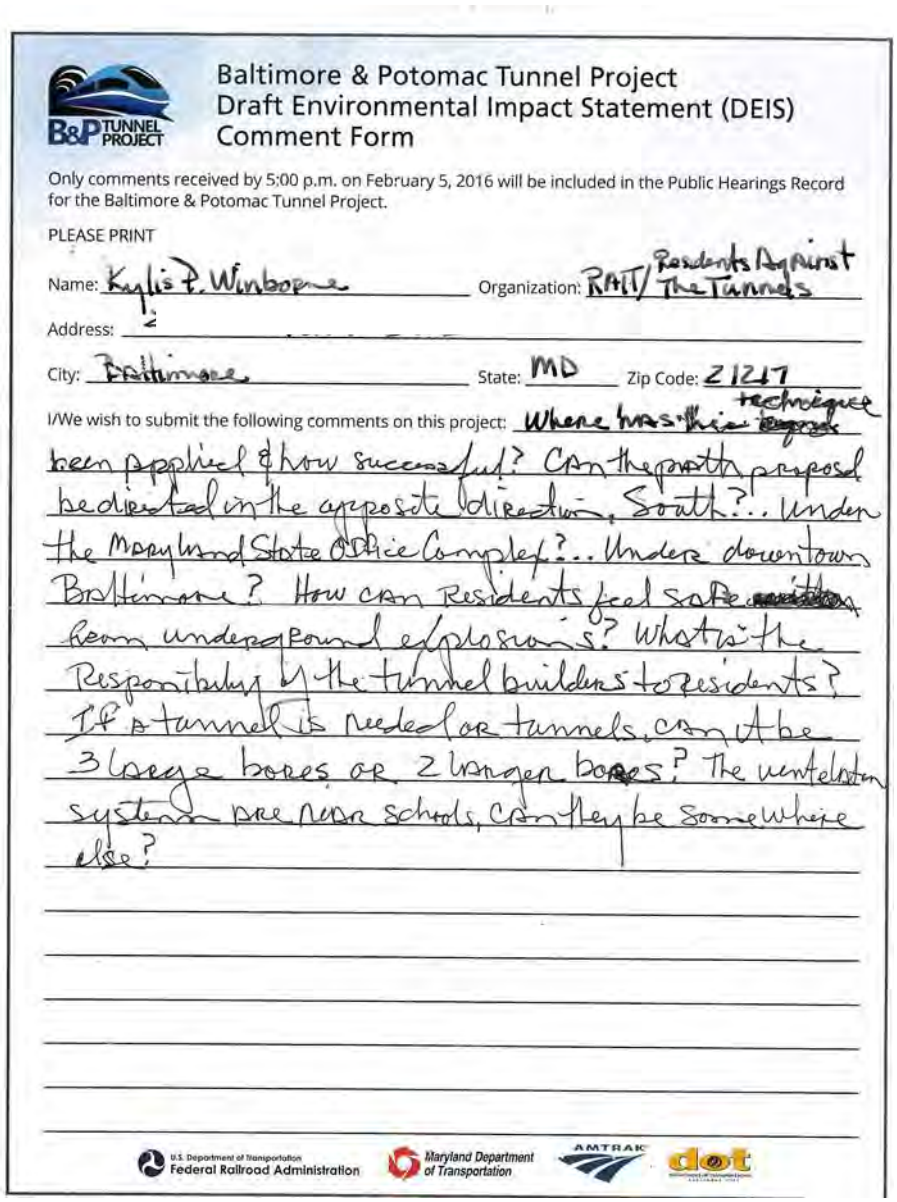
Response to Comment 7:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

As described in **Chapter III** of the FEIS, Alternative 2: Reconstruct/Modernize Existing Tunnel was eliminated from further consideration for specific engineering and operational reasons. Due to the shallow depth of the existing tunnel, the only viable construction approach is open excavation along the entire tunnel length. This excavation would have significant impacts on the community, including:

COMMENTS	RESPONSES
	• Full or partial closure of Wilson Street, Winchester Street, and numerous cross streets throughout construction; • No parking along Wilson Street or Winchester Street during construction; • Limitations for residential and commercial access along Wilson Street and Winchester Street during construction; • Minor impacts to four parks—Eutaw Place Median Park, Park Avenue Median Park, Mount Royal Median Park, and Fitzgerald Park; • Substantial residential property impacts; and • Severe impacts to North Avenue, central Light Rail line, and CSX Main Line operations due to open cut construction through North Avenue, light rail, and CSX track beds. Additionally, for construction to advance, at minimum, one track would have to be removed from service. It would be impossible to provide adequate NEC service using a single track, particularly as ridership and train frequency increase over time.

COMMENTS

DEIS Comment 102:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Kaylis F. Winborne Organization: RAFT/ Residents Against The Tunnels

Address:

City: Baltimore State: MD Zip Code: 21217

I/We wish to submit the following comments on this project: Where has this technique been applied & how successful? Can the path proposed be directed in the opposite direction, South?... under the Maryland State Office Complex?... Under downtown Baltimore? How can Residents feel safe from underground explosions? What is the Responsibility of the tunnel builders to residents? If a tunnel is needed or tunnels, can it be 3 larger bores or 2 longer bores? The ventelation systems are near schools, can they be somewhere else?

1
2
3
4
5

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

Response to Comment 1:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

Response to Comment 2:
A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 3:
Local responders receive training for a variety of incidents related to specific facilities, including the B&P Tunnel. The tunnel would be constructed to meet current standards for fire protection. Additionally, the Project sponsor will develop an Emergency Management Plan to be implemented in the event of a tunnel emergency.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The*

COMMENTS

RESPONSES

Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be fully compensated for the cost of repairs.

Response to Comment 4:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to

COMMENTS

RESPONSES

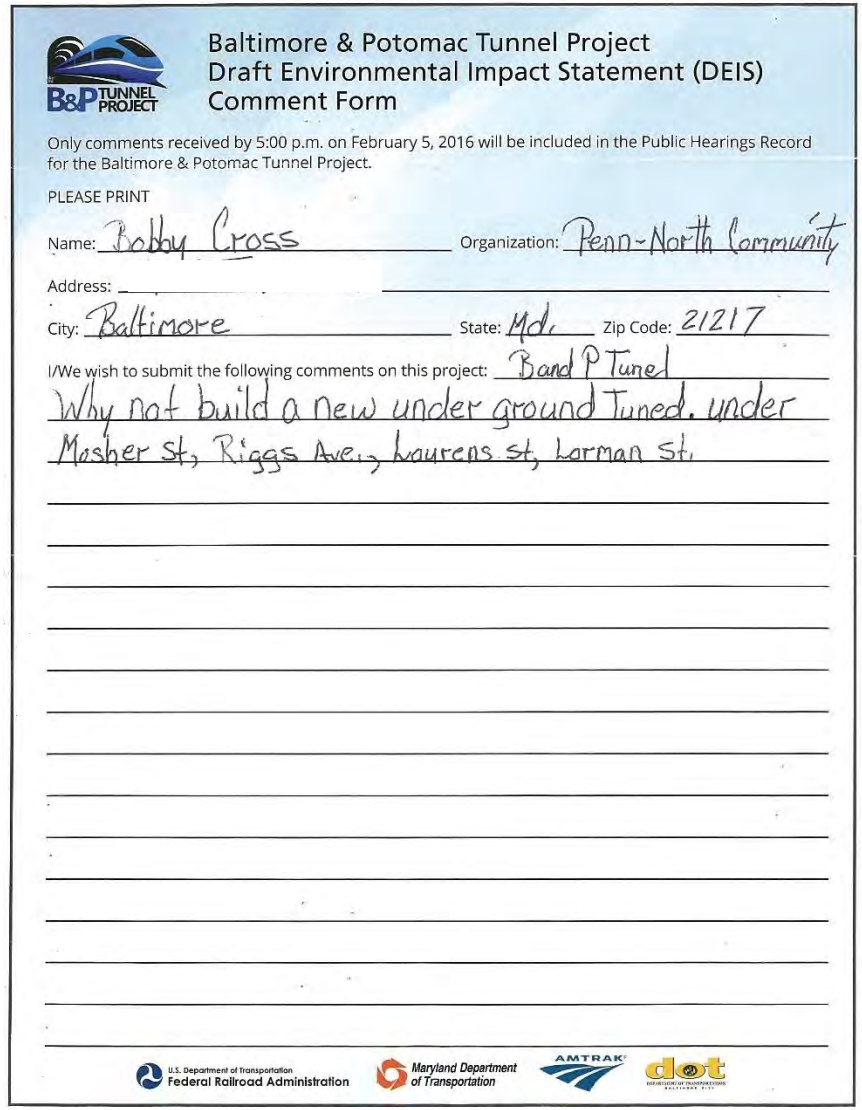
service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Response to Comment 5:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

In response to your concern regarding ventilation system emissions and schools, please see **Chapter VI** of this FEIS, where Children's Health was assessed for Project impacts to Air Quality, Water, Soil and Hazardous Material. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

COMMENTS

DEIS Comment 103:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 5, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: Bobby Cross Organization: Penn-North Community

Address:

City: Baltimore State: Md. Zip Code: 21217

I/We wish to submit the following comments on this project: B and P Tunel

1 Why not build a new under ground Tuned. under Mosher St, Riggs Ave., Laurens St, Lorman St.

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

RESPONSES

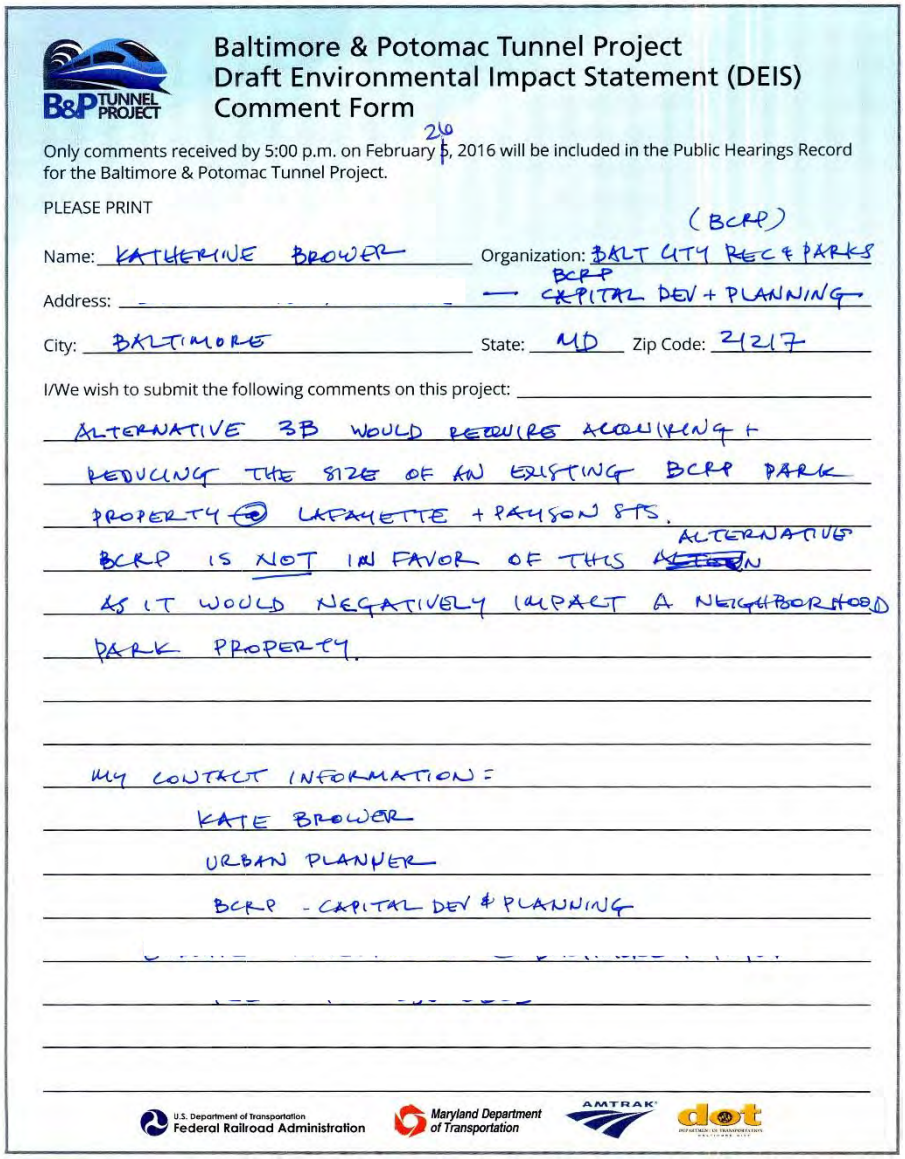
Response to Comment 1:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and fourteen new location alternatives. The new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 104:



Baltimore & Potomac Tunnel Project
Draft Environmental Impact Statement (DEIS)
Comment Form

Only comments received by 5:00 p.m. on February 26, 2016 will be included in the Public Hearings Record for the Baltimore & Potomac Tunnel Project.

PLEASE PRINT

Name: KATHERINE BROWER (BCRP) Organization: BALT CITY REC & PARKS BCRP CAPITAL DEV + PLANNING

Address:

City: BALTIMORE State: MD Zip Code: 21217

I/We wish to submit the following comments on this project:

ALTERNATIVE 3B WOULD REQUIRE ACQUIRING + REDUCING THE SIZE OF AN EXISTING BCRP PARK PROPERTY @ LAFAYETTE + PAYSON STS. BCRP IS NOT IN FAVOR OF THIS ALTERNATIVE AS IT WOULD NEGATIVELY IMPACT A NEIGHBORHOOD PARK PROPERTY.

MY CONTACT INFORMATION:
KATE BROWER
URBAN PLANNER
BCRP - CAPITAL DEV & PLANNING

U.S. Department of Transportation Federal Railroad Administration | Maryland Department of Transportation | AMTRAK | dot

1

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. As a result of these changes, Alternative 3B would avoid impacts to the Baltimore City Recreation and Parks Department property at Lafayette and Payson Streets. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 105:

ANTONIO L. HAYES
Legislative District 40
Baltimore City

Health and Government Operations Committee

Annapolis Office
The Maryland House of Delegates
6 Bladen Street, Room 315
Annapolis, Maryland 21401
410-841-3545 · 301-858-3545
800-492-7122 *Ext.* 3545
Fax 410-841-3279 · 301-858-3279
Antonio.Hayes@house.state.md.us

THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

February 26, 2016

B&P Tunnel Project
81 West Mosher Street
Baltimore, MD 21217
Attn: Odessa Phillip, PE

Re: Opposition for B&P Tunnel Project Construction

Dear Ms. Phillips:

I am writing this letter to oppose the construction of the B&P Tunnel Project as currently proposed.

Recently my office was contacted by Russ Moss and the Residents Against the Tunnels (RATT) group to offer my opposition to the B&P Tunnel Project construction. They have brought to my attention the danger and disturbance this construction will bring to otherwise peaceful neighborhoods.

The proposal to construct four new train tunnels would pass under the Reservoir Hill Community as well as several neighborhoods in West Baltimore. These neighborhoods are very densely populated and house approximately 5600 residents. The residents are deeply concerned about the noise and vibration that will result from the continuous underground train traffic beneath their homes as well as the impact that it will have on the foundation and structure of their houses. There is also a great concern for possible damage to historic homes and buildings that may occur during tunnel construction.

1

I ask that you take the recommendations of the RATT into consideration.

Respectfully,

Antonio L. Hayes
Delegate
40th Legislative District

Cc: Russ Moss, Residents Against the Tunnels

RESPONSES

Response to Comment 1:
The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA's *Transit Noise and Vibration Impact Assessment*, and construction vibration levels were also evaluated using both FTA guidelines and standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. These could include tunnel boring machines (TBM), earth-moving equipment and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips). TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the

COMMENTS	RESPONSES
	surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold. All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI**. The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

COMMENTS | **RESPONSES**

INDEX

Hearing Officer's Hearing

February 1, 2016

SPEAKER:	Page
Mark Sissman	16
Kathryn Epple	20
Laura Amlie	23
Mark West	25
James Houston	29
Justin Kuk	31
Edward Cohen	34
Russ Moss	38
Jamar Day	41
Stuart Stainman	43
Don Akchin	45
Jacqueline Caldwell	48
Janet Blair	50

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS

RESPONSES

THE HEARING OFFICER: Let the record show that it is now 5:30 p.m. on Monday February 1st, 2016. Good evening, ladies and gentlemen. My name is Anthony Brown, I will serve as today's Hearing Officer. Also in the audience tonight is Michelle Fishburne from The Federal Railroad Administration. I would like to welcome you to this Public Hearing regarding the Draft Environmental Impact Statement and Section 4(f) Evaluation (DEIS) for the B&P Tunnel Project. Thank you for taking the time to attend.

I call to order this Public Hearing conducted by the Federal Railroad Administration (FRA) in coordination with the Federal Transit Administration (FTA) and in coordination with the Maryland Department of Transportation and the National Railroad Passenger Corporation (Amtrak) as provided for in accordance to Title 23, Section 771.111(h) of the Code of the Federal Regulations. The FRA will be holding two Public Hearings regarding the Draft Environmental Impact Statement for the B&P Tunnel Project. You are attending the first of two hearings tonight, February 1st, Monday, from 5:00 to 8:00 p.m. In addition to tonight's hearing, a second hearing is scheduled for this

COMMENTS | **RESPONSES**

Saturday, February 6th, from 10:00 a.m. until 1:00 p.m., at this same location, Frederick Douglas High School. The DEIS was released to the public on December 18th, 2015 and will be available for review and comment until 5:00 p.m. on February the 19th, 2016. The DEIS and supporting documents are available on the B&P Tunnel website located at www.bptunnel.com, as well as public libraries and other locations described later in this hearing.

The Baltimore and Potomac or B&P Tunnel is a two-track railroad tunnel underneath central Baltimore City. The tunnel opened in 1873 and is located between the West Baltimore MARC Station and Penn Station or the Pennsylvania Station along Amtrak's Northeast Corridor, which I will refer to throughout this period as the NEC. Again, along Amtrak's Northeast Corridor, referred to as NEC. This section of the NEC is used by Amtrak and Maryland's MARC Commuter Rail passenger trains, as well as Norfolk Southern Railway freight trains. The purpose of the Project is address the structural and operational deficiencies of the existing B&P Tunnel and to accommodate future high-performance intercity passenger rail service goals for

COMMENTS

RESPONSES

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.

The purpose of the project is derived from the following needs:

The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the tunnel currently remains safe for rail transportation, it requires substantial maintenance and repairs and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands due to the combination of its vertical and horizontal track alignment, example, its grades and its curves. The low-speed tunnel

COMMENTS | **RESPONSES**

creates a bottleneck at a critical point in the Northeast Corridor, affecting operations of the most heavily traveled rail line in the United States.

The existing B&P Tunnel does not provide enough capacity to support existing and projected demands for regional and computer passenger service along the Northeast Corridor.

Additionally, the existing B&P Tunnel is not suited for modern high speed usage due to the current horizontal and vertical track alignments, which limit passenger train speeds through the tunnel to 30 miles per hour.

The existing B&P Tunnel is a valuable resource. The disposition of the existing tunnel needs to be considered in the project.

The DEIS, the Draft Environmental Impact Statement, analyzes impacts of the project on the natural and human environment. The DEIS provides an evaluation of the alternatives that are still under consideration and assesses environmental impacts for these alternatives. I would emphasize for those who are unaware that the DEIS and

COMMENTS | **RESPONSES**

supporting technical documents, as well as project displays are available in a display area. If you travel to the lobby's registration table, they can direct you to that area where you can see those displays. There are four alternatives evaluated in the DEIS: Alternative 1, the No-Build Alternative; and three Build Alternatives, called Alternative 3A, Alternative 3B, and Alternative 3C. These alternatives were retained through a comprehensive screening process which identified those alternatives that best address the project needs in consideration of environmental impacts. I will mention those alternatives again: Alternative 1, the No-Build Alternative; the Build Alternatives are Alternative 3A, 3B, and 3C. I mention again, complete information regarding all of these alternatives is available in the display area located in the cafeteria portion of the building, and they are available for your review tonight.

The purpose of these hearings is to allow the public an opportunity to provide testimony on the DEIS. Comments received at the Public Hearing will be considered in FRA's identification of a Preferred Alternative.

COMMENTS | **RESPONSES**

Following the Public Hearing and comment period for the DEIS, FRA, the Federal Railroad Administration, in cooperation with FTA, the Federal Transit Administration, and in coordination with the Maryland Department of Transportation and Amtrak will identify a Preferred Alternative for the project. FRA, the Federal Railroad Administration may identify the Preferred Alternative as Alternative 1, Alternative 3A, Alternative 3B, or Alternative 3C. In consideration of public and agency comments received regarding the alternatives, as well as the environmental impacts of the alternatives, the FRA may refine one or more alternatives prior identifying its preference. FRA's goal is to identify the best alternative in light of the alternative's benefits and ability to meet project needs, while taking into account potential impacts to the environment and public input. FRA, the Federal Railroad Administration will then prepare a Final Environmental Impact Statement referred to as an FEIS, to address comments received on the DEIS and document the basis for the identification of the preferred alternative. Following the FEIS, FRA will issue a Record of Decision,

COMMENTS | **RESPONSES**

(ROD), which will formally select the alternative that could be advanced to design and construction.

The FRA is committed to insuring that no person is excluded from participation in, or denied the benefit of its transit services on the basis of race, color, or national origin as protected by Title VI of the Civil Rights Act of 1964. I mention again that in the audience with us tonight is Miss Michelle Fishburne, representing the Federal Railroad Administration, and I believe she is joining me on the stage now. You may address any questions to the Project Team who are represented in the display area. Again, I emphasize, we are hearing testimony only in this room, not responding to specific questions; however, again, in the display area is a full staff of project team members who can answer questions, provide details on the specific alternatives, and better possibly position you for your testimony tonight. You may address any question, again, to the Project Team members. We have also provided maps so you may visualize the proposed alternatives.

I will now ask that the American Sign Language (ASL) and Spanish Language translators to stand. These

COMMENTS | **RESPONSES**

translators are available for anyone that needs them. Please speak to the American Sign Language (ASL), or the Spanish Language translator, or any member of the hearing staff if you require translation services today or simply move forward to my left, your right, so they will be made aware of the fact that you need their services.

(Whereupon, there was an announcement by the Spanish Language translator.)

THE HEARING OFFICER: Thank you. Ladies and gentlemen, there is a handout outlining the procedures for conducting this hearing. This format will be followed to permit everyone an opportunity to be heard. These procedures were outlined and made available at the sign-in table; however, I will also share these procedures now:

1. Elected and public officials will be heard first and will receive five minutes to speak.

2. Persons desiring to testify tonight should register at the entrance to the hearing room and will be called in order of registration.

3. Any individual may appear and speak for him or herself, or if duly authorized, for any local civic group,

COMMENTS | **RESPONSES**

organization, club, or association subject to the rules provided herein. Speakers should give their name and address, and if representing a group, this information should also be given.

4. Speakers are requested to limit their statements to three minutes to be courteous to all of those who wish to speak. Again, elected officials will be allowed five minutes. Additional prepared statements or literature pertaining to the B&P Tunnel Project may be submitted at this hearing or by 5:00 p.m. February 19th, 2016 to the B&P Tunnel Project, DEIS Comment, 81 West Mosher Street, Baltimore Maryland 21217. Again, it's by 5:00 p.m., February 19th, 2016, and, again, that mailing address, B&P Tunnel Project DEIS Comment, 81 West Mosher Street, Baltimore, Maryland, 21217. These statements will be made part of the official hearing record. That address is available on printed literature at the registration table. Also available there is a pre-postage paid comment form that you can complete, and, again, mail by February 19th to the project office. I would emphasize we were delayed due to the weather, that that notice does say February 5th as the

COMMENTS | **RESPONSES**

deadline. That has been corrected and spoken into our testimony tonight. The date is February 19th, 2016. All comments are due by February 19th, 2016.

5. For this hearing, all statements oral or written, should be directed to myself, the Hearing Officer, and must be related to the subject matter of this hearing. All testimony may also be submitted privately to a court stenographer. That court stenographer -- and you can be directed from our sign-in staff in the lobby to that court stenographer for private testimony -- is located in Room 108, which is directly off the hallway outside of our hearing room. Again, that location is available for those who desire to provide oral testimony at a private location, Room 108, and our staff can provide specific direction.

6. Each person speaking before the audience must do so at a floor microphone, one located here in the front of the room; another located to your left, my right, again, in the front of the room. Our court stenographer who is making transcriptions of the hearing is recording all proceedings for tonight. If required, I, the Hearing Officer will announce any additional specific rules

COMMENTS | **RESPONSES**

governing this hearing.

Persons who registered to speak, as mentioned earlier, will be called in the order of registration. If there is anyone present who would like to speak, but is not registered, you may register up until 7:55 p.m. today at the registration table at the entrance to the room. Again, I will emphasize that we do have American Sign Language interpreters as well as Spanish interpreters available for anyone who might need those services. I will call registered speakers to the microphone, as well as the person who will follow them. Please be aware and ready when you are called on to speak. With your cooperation, everyone will be heard tonight.

There are six ways to provide comments on this project, and to become a part of the official hearing record:

1. You can leave your written comments in the designated comment drop boxes which are available here tonight. Boxes are available at the sign-in table here and, also, at the sign-in tables or comment tables located in the display area;

COMMENTS | **RESPONSES**

2. You can give oral testimony in this hearing room;

3. You can give testimony oral in a separate room. A private stenographer is available and, again, direction is available at our sign-in table;

4. Your written correspondence can be sent to the B&P Tunnel Project DEIS Comment, 81 West Mosher Street, Baltimore, Maryland 21207 on or before the close of business on February 19th, 2016. I emphasize again that address is included in the literature you received when you signed in for tonight's hearing;

5. You can send an email with your comment to info@bptunnel.com. Again, it's info@bptunnel.com, with DEIS Comment as the subject line;

6. And, finally, you can complete an on-line comment form conveniently located at the project website www.bptunnel.com. As detailed literature received tonight, we do ask that you include DEIS Comment in the text of your email.

Please note: If you decide to you give your testimony in the main hearing room (option #2), you will not

COMMENTS | **RESPONSES**

be able to give your silent testimony and vice-versa.

Again, all correspondence concerning the official hearing testimony must be received by 5:00 p.m. on February 19th, 2016 to be made part of the official hearing record. In the event you have additional comments or prefer to offer your comments in writing, please feel free to do so. Again, if you have additional comments even beyond your testimony tonight, please feel free to submit those comments in writing. For the record, so it can be a part of our hearing record tonight, announcement of these hearings has been made in the following publications:

The Afro-American

The Baltimore Sun

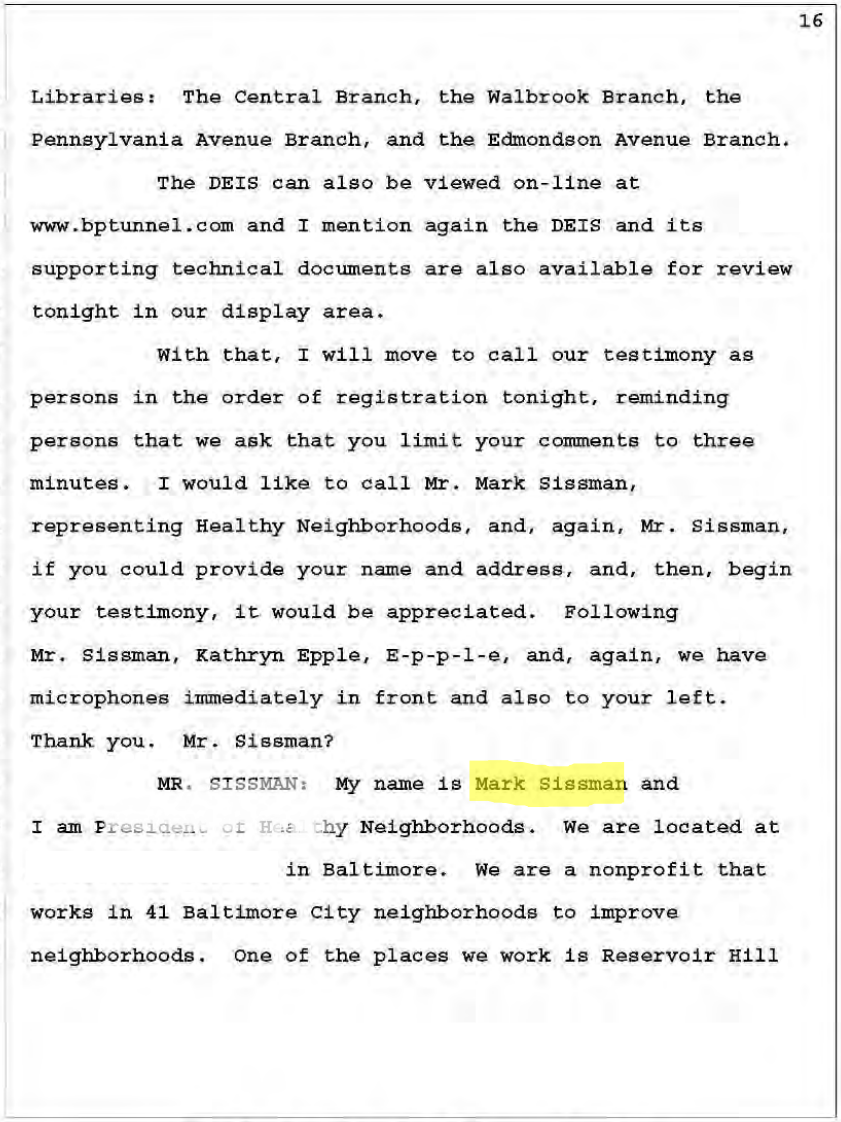
The City Paper

The Grace & Glory Magazine

The DEIS remains available for public review at the Baltimore City Department of Transportation Transit Bureau, the Maryland Department of Transportation, the Maryland Transit Administration, Bon Secours Community Works, the John Eager Howard Recreation Center, the Bentalou Recreation Center, as well as the following Enoch Pratt Free

COMMENTS | **RESPONSES**

DEIS Comment 106:



16

Libraries: The Central Branch, the Walbrook Branch, the Pennsylvania Avenue Branch, and the Edmondson Avenue Branch.

The DEIS can also be viewed on-line at www.bptunnel.com and I mention again the DEIS and its supporting technical documents are also available for review tonight in our display area.

With that, I will move to call our testimony as persons in the order of registration tonight, reminding persons that we ask that you limit your comments to three minutes. I would like to call Mr. Mark Sissman, representing Healthy Neighborhoods, and, again, Mr. Sissman, if you could provide your name and address, and, then, begin your testimony, it would be appreciated. Following Mr. Sissman, Kathryn Epple, E-p-p-l-e, and, again, we have microphones immediately in front and also to your left. Thank you. Mr. Sissman?

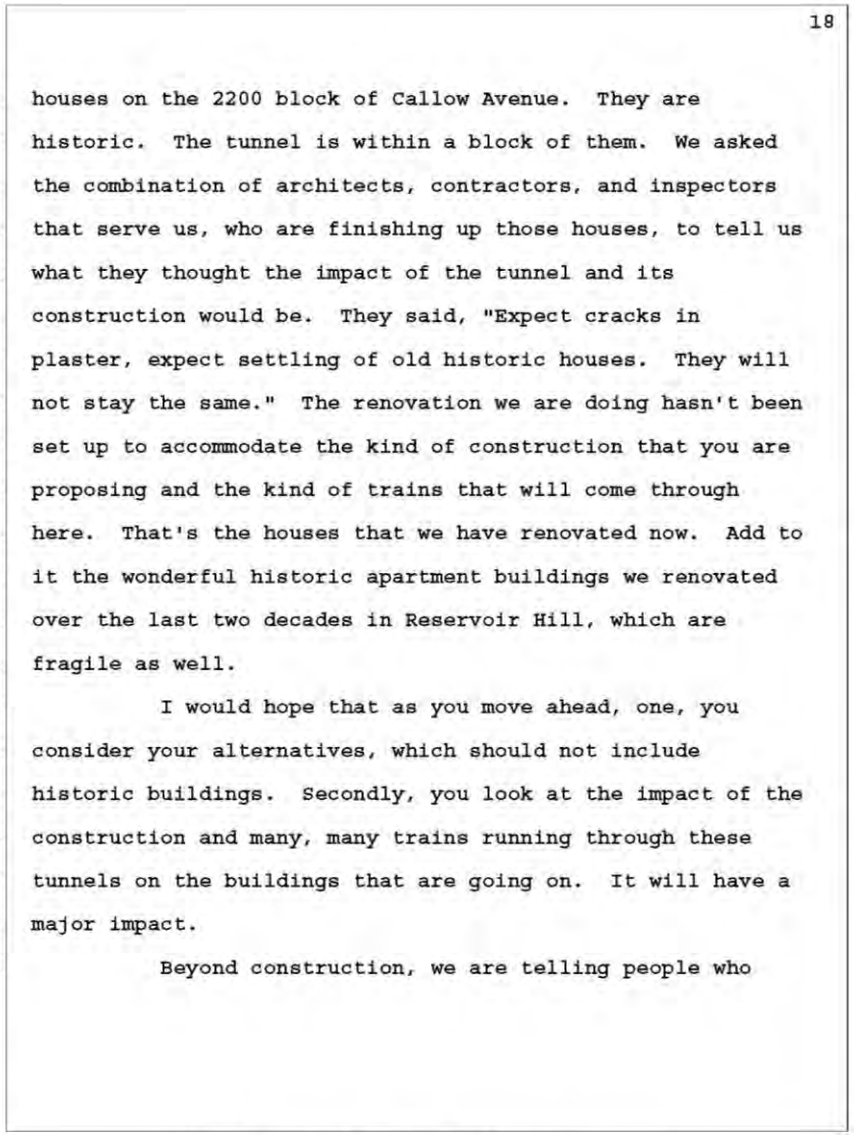
MR. SISSMAN: My name is Mark Sissman and I am President of Healthy Neighborhoods. We are located at in Baltimore. We are a nonprofit that works in 41 Baltimore City neighborhoods to improve neighborhoods. One of the places we work is Reservoir Hill

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS | **RESPONSES**

and our organization has really grave concerns about the location and rebuilding of this tunnel in Reservoir Hill. It is rather remarkable the many choices that you have made and neighborhoods through which this tunnel could go and you picked Reservoir Hill. It's a community that has made remarkable strides to become a destination neighborhood for those looking for housing in Baltimore. It is truly a mixed income. About a third of the housing is low income. It has been that way for many years. It is not gentrifiable because it has got long term use restrictions required by either the federal, state, or city government. The remaining is occupied historic buildings. We have had a major increase in the number of buildings that have been renovated. Our organization is a partnership of banks, and governments, and foundations. We have invested more than $23 million dollars in Reservoir Hill in the last five wears to spur revitalization, particularly owner-occupied housing. Unfortunately for us, it's mostly right above the root of the tunnel you are talking about. We believe it is going to have a major impact on the housing there. As recently as this morning, we are spending money rebuilding eight vacant

COMMENTS



18

houses on the 2200 block of Callow Avenue. They are historic. The tunnel is within a block of them. We asked the combination of architects, contractors, and inspectors that serve us, who are finishing up those houses, to tell us what they thought the impact of the tunnel and its construction would be. They said, "Expect cracks in plaster, expect settling of old historic houses. They will not stay the same." The renovation we are doing hasn't been set up to accommodate the kind of construction that you are proposing and the kind of trains that will come through here. That's the houses that we have renovated now. Add to it the wonderful historic apartment buildings we renovated over the last two decades in Reservoir Hill, which are fragile as well.

1

I would hope that as you move ahead, one, you consider your alternatives, which should not include historic buildings. Secondly, you look at the impact of the construction and many, many trains running through these tunnels on the buildings that are going on. It will have a major impact.

2

Beyond construction, we are telling people who

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA's *Transit Noise and Vibration Impact Assessment*, and construction vibration levels were also evaluated using both FTA guidelines and standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

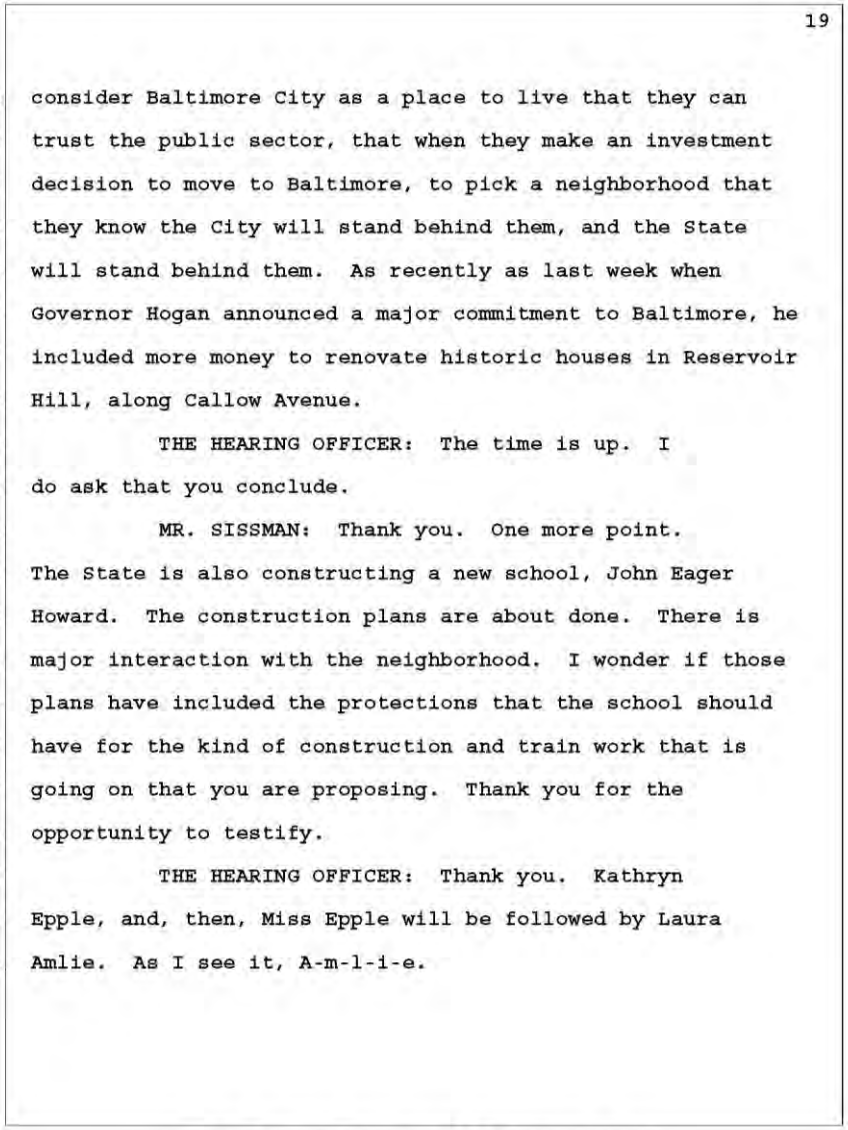
Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI**.

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses,

COMMENTS



19

consider Baltimore City as a place to live that they can trust the public sector, that when they make an investment decision to move to Baltimore, to pick a neighborhood that they know the City will stand behind them, and the State will stand behind them. As recently as last week when Governor Hogan announced a major commitment to Baltimore, he included more money to renovate historic houses in Reservoir Hill, along Callow Avenue.

THE HEARING OFFICER: The time is up. I do ask that you conclude.

MR. SISSMAN: Thank you. One more point. The State is also constructing a new school, John Eager Howard. The construction plans are about done. There is major interaction with the neighborhood. I wonder if those plans have included the protections that the school should have for the kind of construction and train work that is going on that you are proposing. Thank you for the opportunity to testify.

THE HEARING OFFICER: Thank you. Kathryn Epple, and, then, Miss Epple will be followed by Laura Amlie. As I see it, A-m-l-i-e.

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

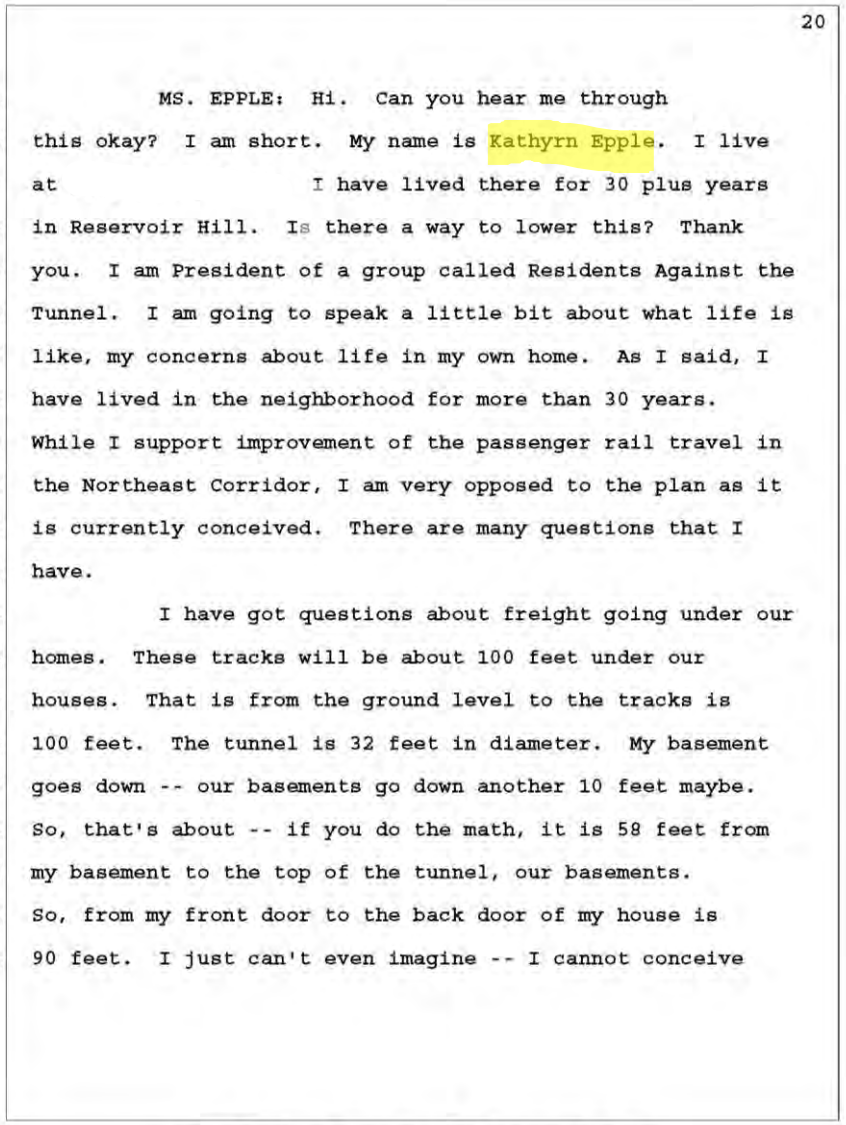
Response to Comment 2:
A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 3:
Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

COMMENTS

DEIS Comment 107:



20

MS. EPPLE: Hi. Can you hear me through this okay? I am short. My name is Kathyrn Epple. I live at I have lived there for 30 plus years in Reservoir Hill. Is there a way to lower this? Thank you. I am President of a group called Residents Against the Tunnel. I am going to speak a little bit about what life is like, my concerns about life in my own home. As I said, I have lived in the neighborhood for more than 30 years. While I support improvement of the passenger rail travel in the Northeast Corridor, I am very opposed to the plan as it is currently conceived. There are many questions that I have.

I have got questions about freight going under our homes. These tracks will be about 100 feet under our houses. That is from the ground level to the tracks is 100 feet. The tunnel is 32 feet in diameter. My basement goes down -- our basements go down another 10 feet maybe. So, that's about -- if you do the math, it is 58 feet from my basement to the top of the tunnel, our basements. So, from my front door to the back door of my house is 90 feet. I just can't even imagine -- I cannot conceive

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

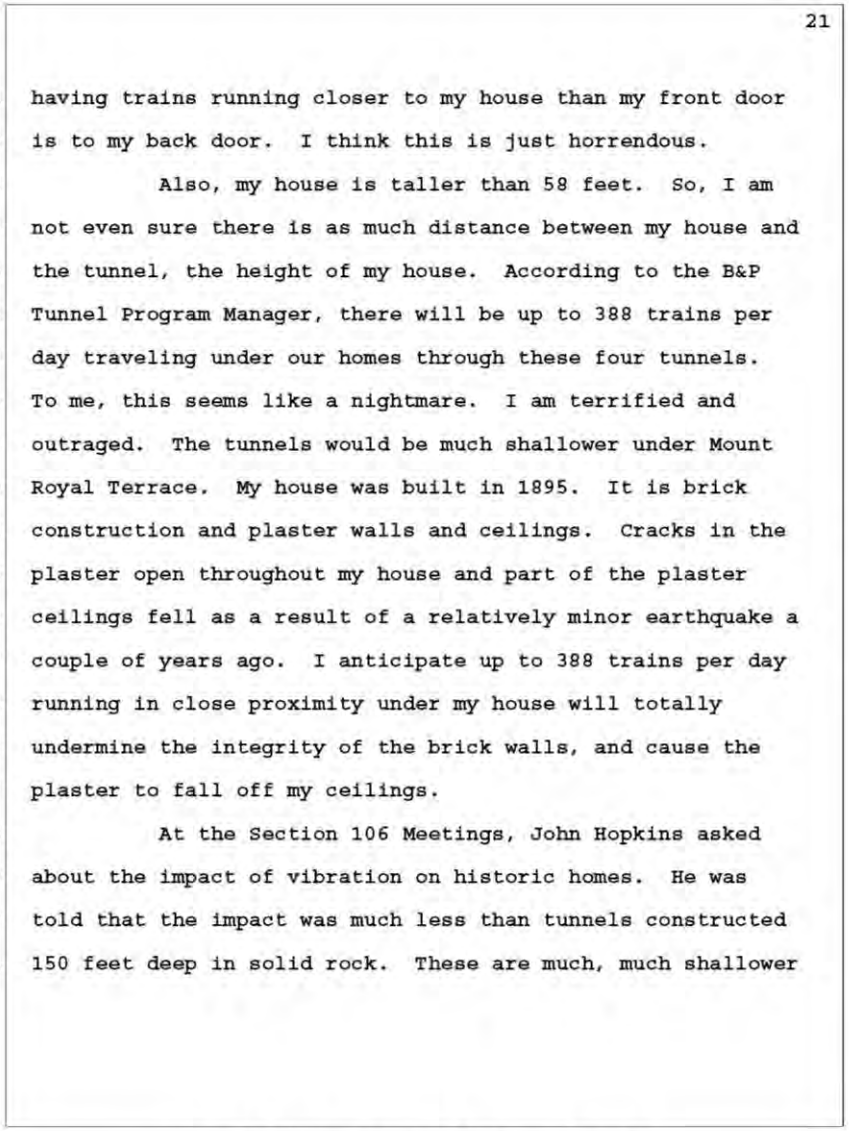
1

RESPONSES

Response to Comment 1:
The build alternatives will have an average depth of 115 feet.

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces on rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

COMMENTS



21

having trains running closer to my house than my front door is to my back door. I think this is just horrendous.

Also, my house is taller than 58 feet. So, I am not even sure there is as much distance between my house and the tunnel, the height of my house. According to the B&P Tunnel Program Manager, there will be up to 388 trains per day traveling under our homes through these four tunnels. To me, this seems like a nightmare. I am terrified and outraged. The tunnels would be much shallower under Mount Royal Terrace. My house was built in 1895. It is brick construction and plaster walls and ceilings. Cracks in the plaster open throughout my house and part of the plaster ceilings fell as a result of a relatively minor earthquake a couple of years ago. I anticipate up to 388 trains per day running in close proximity under my house will totally undermine the integrity of the brick walls, and cause the plaster to fall off my ceilings.

2

At the Section 106 Meetings, John Hopkins asked about the impact of vibration on historic homes. He was told that the impact was much less than tunnels constructed 150 feet deep in solid rock. These are much, much shallower

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

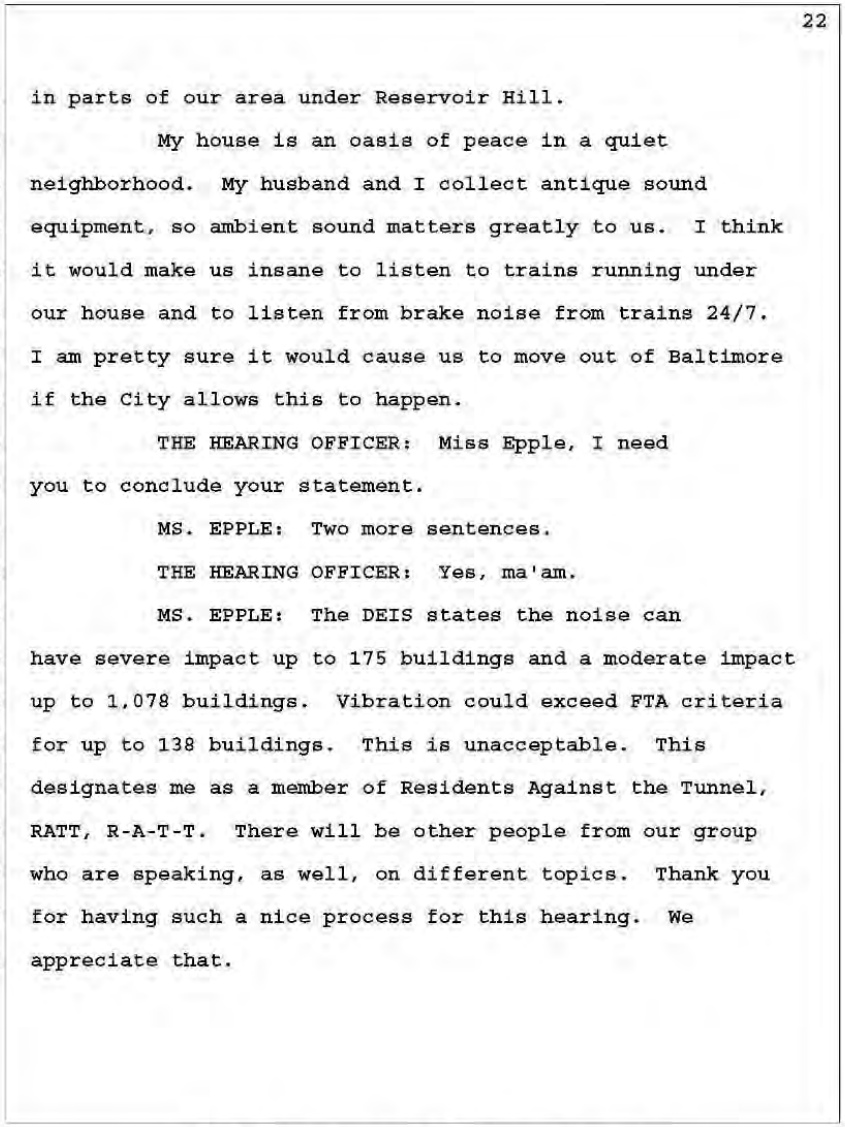
Response to Comment 3:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and

COMMENTS



22

in parts of our area under Reservoir Hill.

My house is an oasis of peace in a quiet neighborhood. My husband and I collect antique sound equipment, so ambient sound matters greatly to us. I think it would make us insane to listen to trains running under our house and to listen from brake noise from trains 24/7. I am pretty sure it would cause us to move out of Baltimore if the City allows this to happen.

THE HEARING OFFICER: Miss Epple, I need you to conclude your statement.

MS. EPPLE: Two more sentences.

THE HEARING OFFICER: Yes, ma'am.

MS. EPPLE: The DEIS states the noise can have severe impact up to 175 buildings and a moderate impact up to 1,078 buildings. Vibration could exceed FTA criteria for up to 138 buildings. This is unacceptable. This designates me as a member of Residents Against the Tunnel, RATT, R-A-T-T. There will be other people from our group who are speaking, as well, on different topics. Thank you for having such a nice process for this hearing. We appreciate that.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

RESPONSES

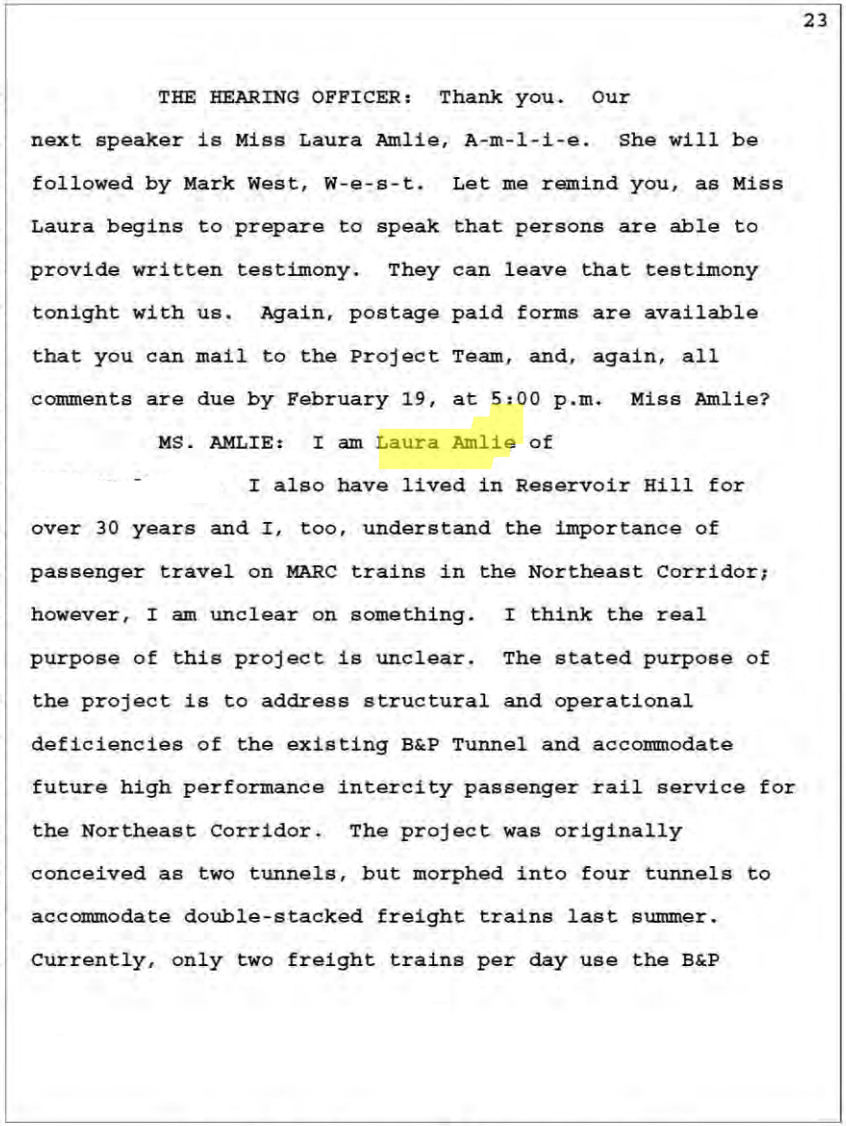
air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 4:
The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include Vehicle Skirts, Undercar Absorption, Spring Frogs, Acquisition of a Buffer Zone, among others, which are documented in this FEIS.

COMMENTS

DEIS Comment 108:



23

THE HEARING OFFICER: Thank you. Our next speaker is Miss Laura Amlie, A-m-l-i-e. She will be followed by Mark West, W-e-s-t. Let me remind you, as Miss Laura begins to prepare to speak that persons are able to provide written testimony. They can leave that testimony tonight with us. Again, postage paid forms are available that you can mail to the Project Team, and, again, all comments are due by February 19, at 5:00 p.m. Miss Amlie?

MS. AMLIE: I am Laura Amlie of I also have lived in Reservoir Hill for over 30 years and I, too, understand the importance of passenger travel on MARC trains in the Northeast Corridor; however, I am unclear on something. I think the real purpose of this project is unclear. The stated purpose of the project is to address structural and operational deficiencies of the existing B&P Tunnel and accommodate future high performance intercity passenger rail service for the Northeast Corridor. The project was originally conceived as two tunnels, but morphed into four tunnels to accommodate double-stacked freight trains last summer. Currently, only two freight trains per day use the B&P

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
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, which include:

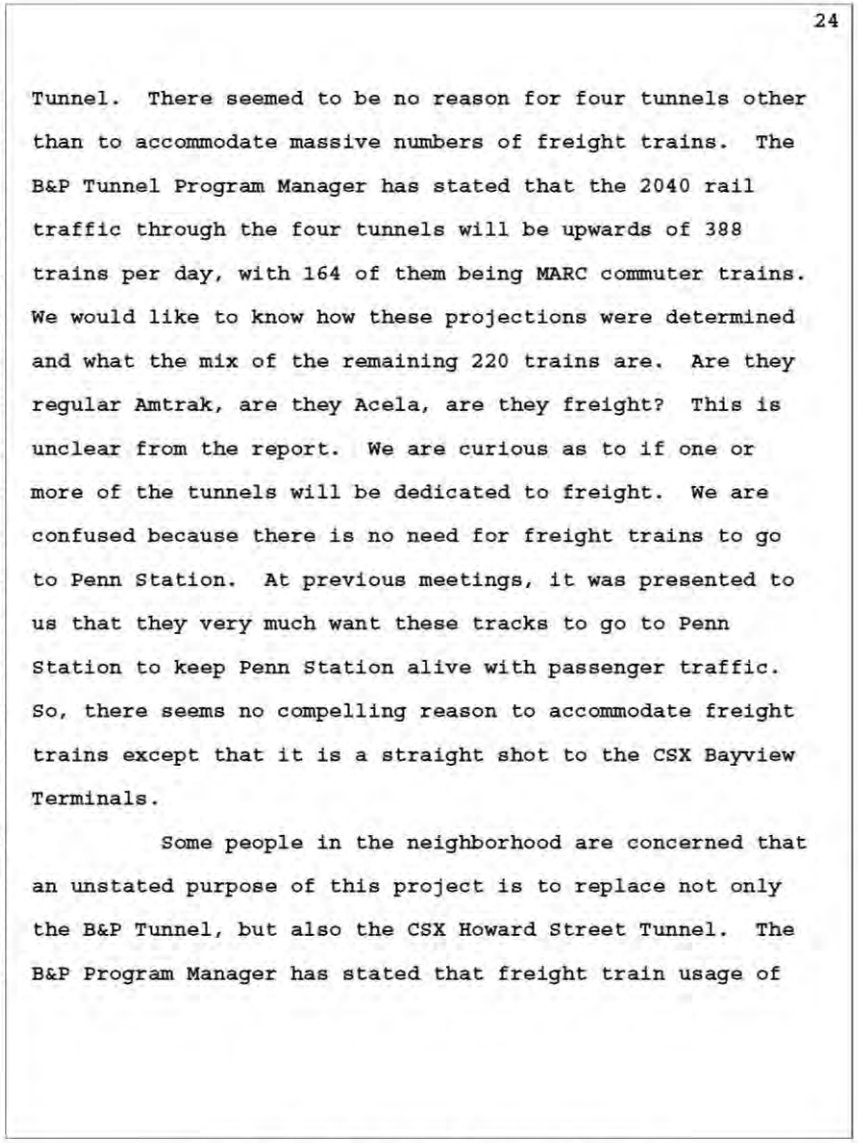
- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and
- Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 2:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

COMMENTS



24

Tunnel. There seemed to be no reason for four tunnels other than to accommodate massive numbers of freight trains. The B&P Tunnel Program Manager has stated that the 2040 rail traffic through the four tunnels will be upwards of 388 trains per day, with 164 of them being MARC commuter trains. We would like to know how these projections were determined and what the mix of the remaining 220 trains are. Are they regular Amtrak, are they Acela, are they freight? This is unclear from the report. We are curious as to if one or more of the tunnels will be dedicated to freight. We are confused because there is no need for freight trains to go to Penn Station. At previous meetings, it was presented to us that they very much want these tracks to go to Penn Station to keep Penn Station alive with passenger traffic. So, there seems no compelling reason to accommodate freight trains except that it is a straight shot to the CSX Bayview Terminals.

Some people in the neighborhood are concerned that an unstated purpose of this project is to replace not only the B&P Tunnel, but also the CSX Howard Street Tunnel. The B&P Program Manager has stated that freight train usage of

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

3

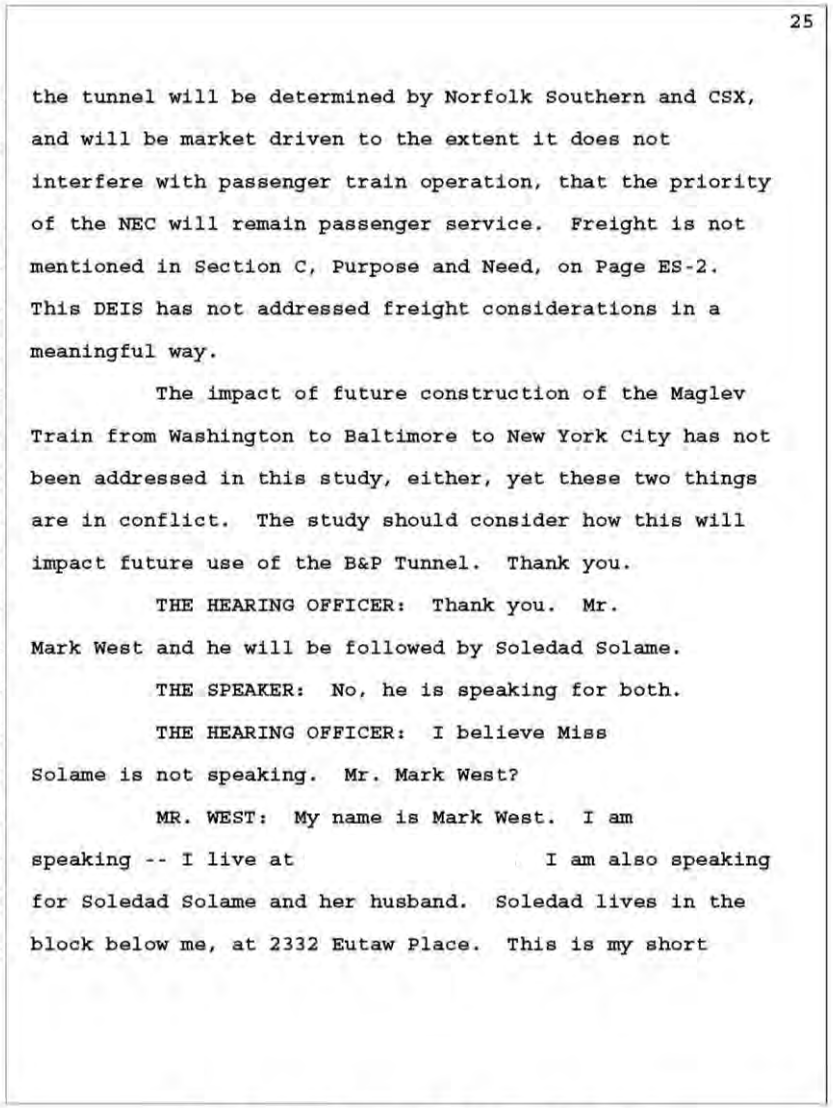
RESPONSES

Response to Comment 3:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. As stated, Norfolk Southern (NS) currently operates two trains through the existing B&P Tunnel daily for freight purposes.

As described in **Chapter VI** (Air Quality) of this FEIS, tunnel operating characteristics in the Build Year 2040 would total 388 daily bi-directional frequencies. 164 of them would be MARC commuter trains, 82 of them would be Acela Intercity Express, 48 would be NE Regional, 92 would be Metropolitan and 2 would be Freight. Please refer to **Chapter VI** for additional information.

COMMENTS



25

the tunnel will be determined by Norfolk Southern and CSX, and will be market driven to the extent it does not interfere with passenger train operation, that the priority of the NEC will remain passenger service. Freight is not mentioned in Section C, Purpose and Need, on Page ES-2. This DEIS has not addressed freight considerations in a meaningful way.

The impact of future construction of the Maglev Train from Washington to Baltimore to New York City has not been addressed in this study, either, yet these two things are in conflict. The study should consider how this will impact future use of the B&P Tunnel. Thank you.

THE HEARING OFFICER: Thank you. Mr. Mark West and he will be followed by Soledad Solame.

THE SPEAKER: No, he is speaking for both.

THE HEARING OFFICER: I believe Miss Solame is not speaking. Mr. Mark West?

MR. WEST: My name is Mark West. I am speaking -- I live at I am also speaking for Soledad Solame and her husband. Soledad lives in the block below me, at 2332 Eutaw Place. This is my short

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

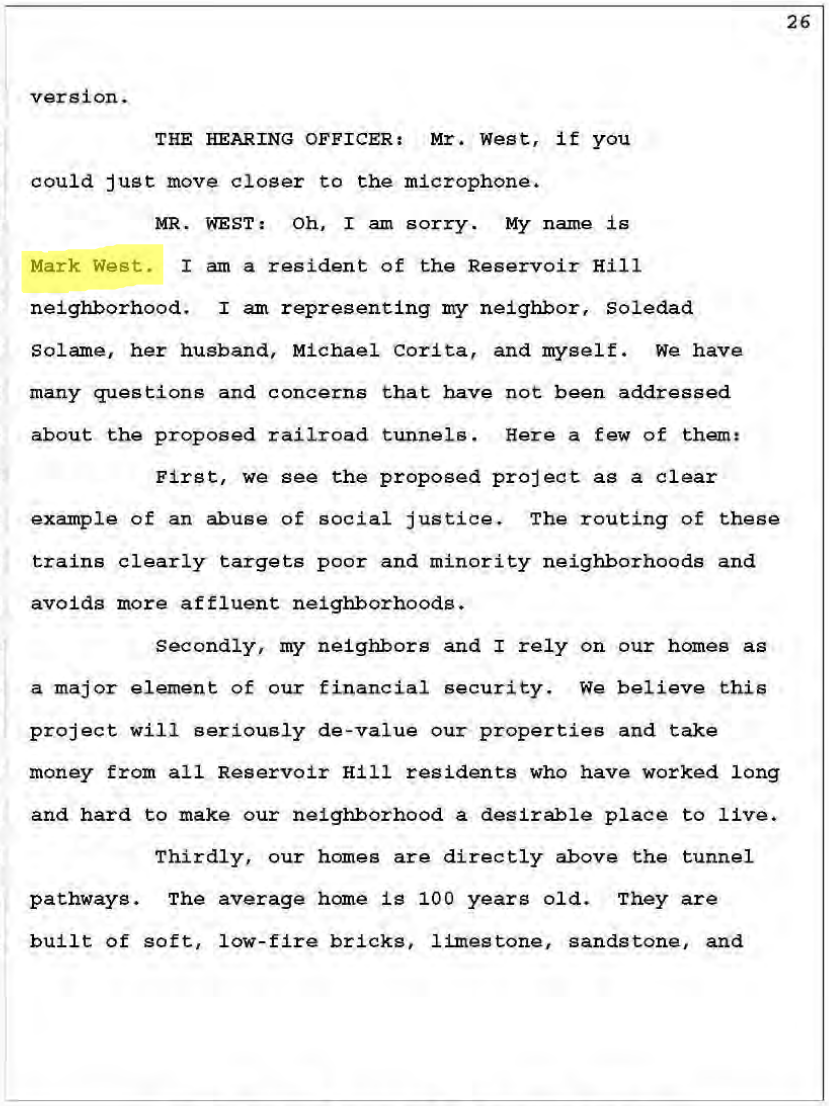
4

RESPONSES

Response to Comment 4:
Future concept development of the Maglev train is beyond the purview of the Project. However, the Maryland portion of the NEC serves a large population whose travel needs would not be met with the Maglev train. Amtrak and MARC trains make more local stops between Washington, DC and Baltimore than is being proposed for Maglev.

COMMENTS

DEIS Comment 109:



26

version.

THE HEARING OFFICER: Mr. West, if you could just move closer to the microphone.

MR. WEST: Oh, I am sorry. My name is Mark West. I am a resident of the Reservoir Hill neighborhood. I am representing my neighbor, Soledad Solame, her husband, Michael Corita, and myself. We have many questions and concerns that have not been addressed about the proposed railroad tunnels. Here a few of them:

First, we see the proposed project as a clear example of an abuse of social justice. The routing of these trains clearly targets poor and minority neighborhoods and avoids more affluent neighborhoods.

Secondly, my neighbors and I rely on our homes as a major element of our financial security. We believe this project will seriously de-value our properties and take money from all Reservoir Hill residents who have worked long and hard to make our neighborhood a desirable place to live.

Thirdly, our homes are directly above the tunnel pathways. The average home is 100 years old. They are built of soft, low-fire bricks, limestone, sandstone, and

1

2

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
A thorough analysis of alternatives was conducted prior to the select of Alternative 3B as the Preferred Alternative. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

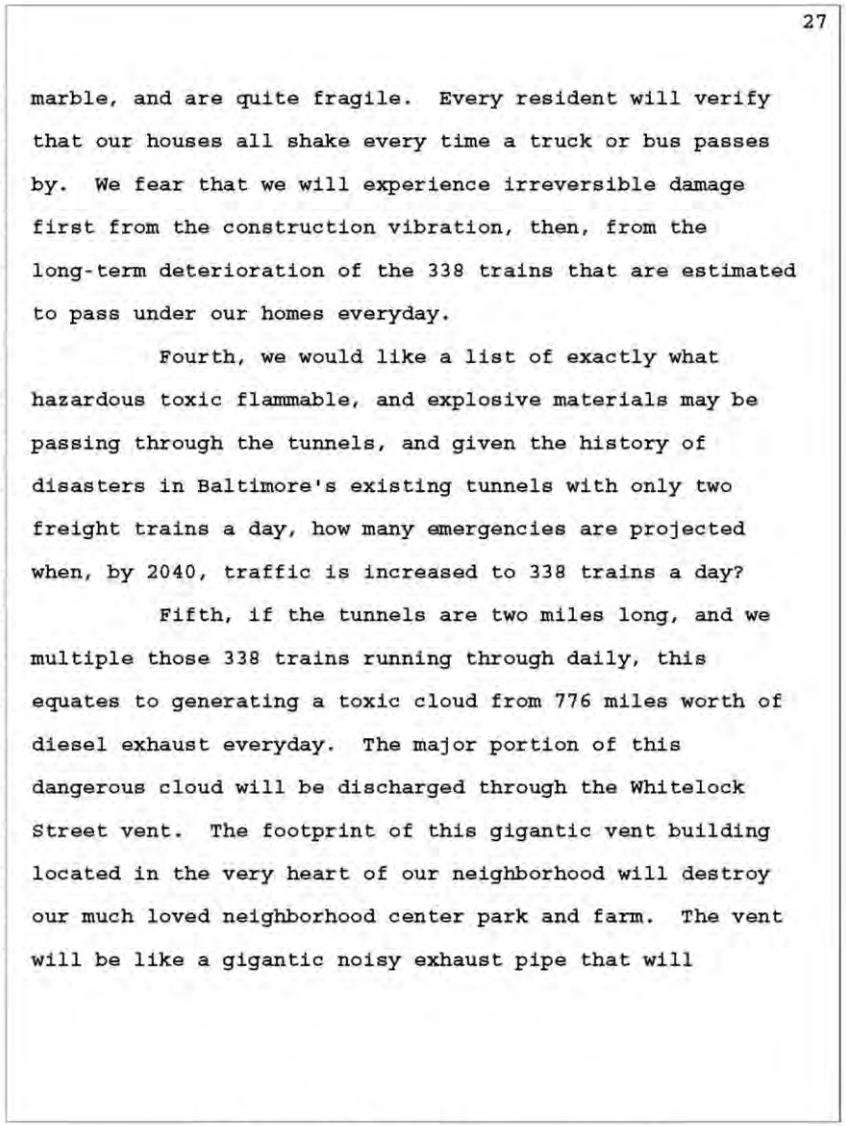
Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15 and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative, and **Chapter IV** provides further justification for the selection of Alternative 3B as the Preferred Alternative.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 2:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 3:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property

COMMENTS



27

marble, and are quite fragile. Every resident will verify that our houses all shake every time a truck or bus passes by. We fear that we will experience irreversible damage first from the construction vibration, then, from the long-term deterioration of the 338 trains that are estimated to pass under our homes everyday.

Fourth, we would like a list of exactly what hazardous toxic flammable, and explosive materials may be passing through the tunnels, and given the history of disasters in Baltimore's existing tunnels with only two freight trains a day, how many emergencies are projected when, by 2040, traffic is increased to 338 trains a day?

Fifth, if the tunnels are two miles long, and we multiple those 338 trains running through daily, this equates to generating a toxic cloud from 776 miles worth of diesel exhaust everyday. The major portion of this dangerous cloud will be discharged through the Whitelock Street vent. The footprint of this gigantic vent building located in the very heart of our neighborhood will destroy our much loved neighborhood center park and farm. The vent will be like a gigantic noisy exhaust pipe that will

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

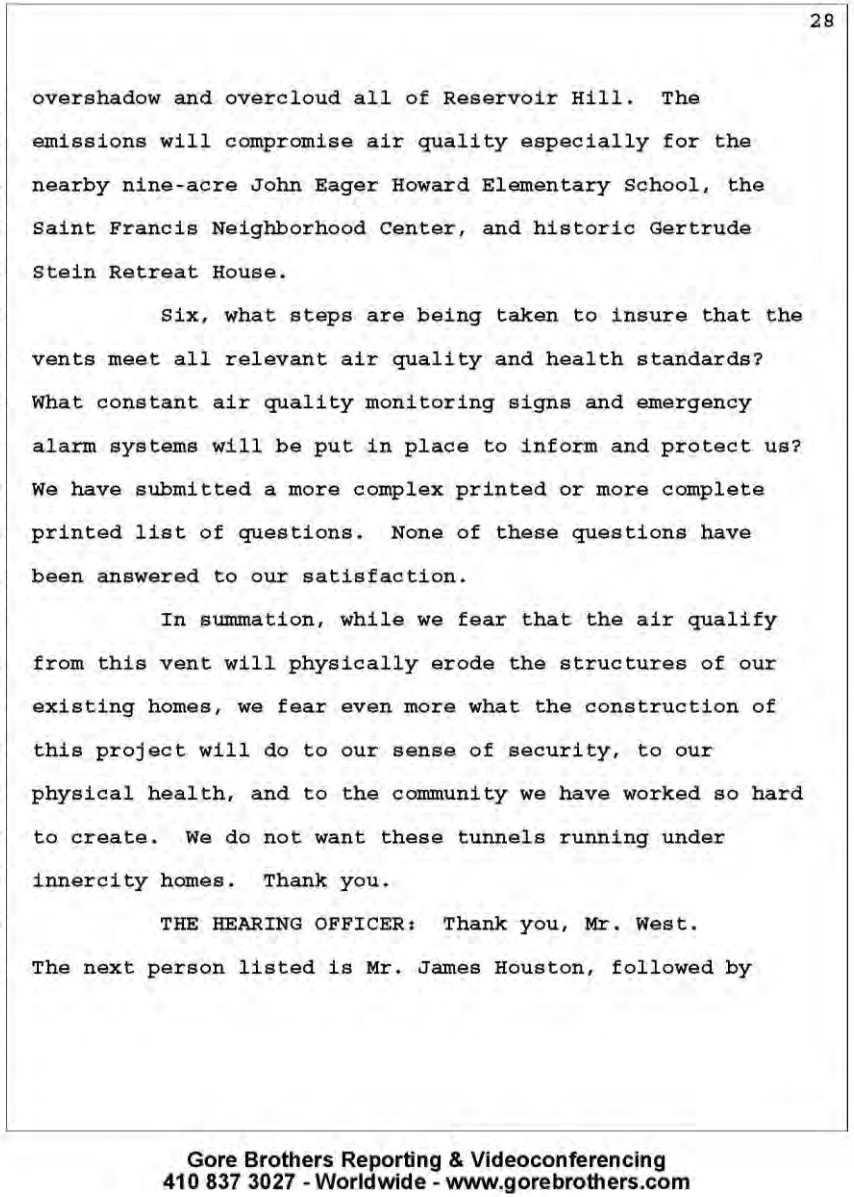
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

COMMENTS



28

overshadow and overcloud all of Reservoir Hill. The emissions will compromise air quality especially for the nearby nine-acre John Eager Howard Elementary School, the Saint Francis Neighborhood Center, and historic Gertrude Stein Retreat House.

Six, what steps are being taken to insure that the vents meet all relevant air quality and health standards? What constant air quality monitoring signs and emergency alarm systems will be put in place to inform and protect us? We have submitted a more complex printed or more complete printed list of questions. None of these questions have been answered to our satisfaction.

In summation, while we fear that the air qualify from this vent will physically erode the structures of our existing homes, we fear even more what the construction of this project will do to our sense of security, to our physical health, and to the community we have worked so hard to create. We do not want these tunnels running under innercity homes. Thank you.

THE HEARING OFFICER: Thank you, Mr. West. The next person listed is Mr. James Houston, followed by

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI**

Response to Comment 4:
For the past several years, only one local freight train (Norfolk Southern) has been operating through the B&P Tunnel daily, serving customers south of the B&P Tunnel between Baltimore and Washington, DC. Currently, cargo 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.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 5:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project

COMMENTS

RESPONSES

Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Analysis of ventilation facility emissions included an air dispersion modeling analysis, which followed the latest US Environmental Protection Agency modeling guidelines for predicting air quality effects for regulated pollutants. The results of the analysis were compared to the stringent 1-hour NO_2 National Ambient Air Quality Standards (NAAQS) of 100 parts per billion (ppb) as opposed to the annual standard of 53 ppb. Emission studies have demonstrated that if NO_2 concentrations are maintained within acceptable levels, then other pollutant concentrations associated with diesel exhaust emissions will also be within acceptable limits. The maximum predicted 1-hour NO_2 concentration from the three ventilation facilities as well as north and south portals was 12.8 ppb. When added to the NO_2 background concentration of 51 ppb, the total predicted 1-hour concentration amounted to 63.8 ppb, which is below the NAAQS of 100 ppb. The maximum predicted 1-hour NO_2 concentration of the Intermediate Ventilation Facility is 2.9 ppb and when combined with NO_2 background concentration of 51 ppb the total NO_2 concentration would be 53.9 ppb, below the NAAQS threshold limits of 100 ppb.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock

COMMENTS

RESPONSES

Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water. Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

Response to Comment 6:
The Project meets air quality standards; therefore, public alerts regarding emissions will not be required. An air quality alarm would not be appropriate given that the Project meets federal standards. However, in the event of an emergency, local first responders would assist in evacuation.

To prevent accidents and fires, FRA requires a range of measures that minimize the risk to the public, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA).

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents,

COMMENTS

RESPONSES

as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the Tunnel would be projected up and away from the community.

The three ventilation facilities would be subject to the operational noise level standards included in the Noise Regulation of the Health Code of Baltimore City § 9-206 Noise Regulation, 2015. This regulation provides the noise limits for manufacturing, commercial, and residential zones in Baltimore City– depending on the source of noise and the types of adjacent land uses. For noise generated within residential zones, there is a limit of 55 dBA at any point on the property line of the use.

Noise levels in the immediate vicinity of the ventilation facility buildings would be caused by the continual operation of the ventilation fans within each facility. The horizontal fans would operate periodically and would generate sound that would propagate through the louvers at the top of the ventilation facility buildings. Fans would operate periodically when NO_2 levels in the tunnel exceed a set threshold or in emergencies when smoke is present in the tunnel. NO_2 levels are likely to be highest when the level of diesel locomotive operations is highest, or when congestion causes trains to operate slowly or to idle in the tunnel. However, there is not enough information currently available to determine how many hours per day, on average, the fans would run and whether or not they would run during the night.

The design standard for the ventilation facilties would limit the outdoor noise level, when the fans are in operation, to L_{max} 50 dBA at the facility property lines. 50 dBA is approximately the noise produced by an indoor air conditioner at a distance of three feet.

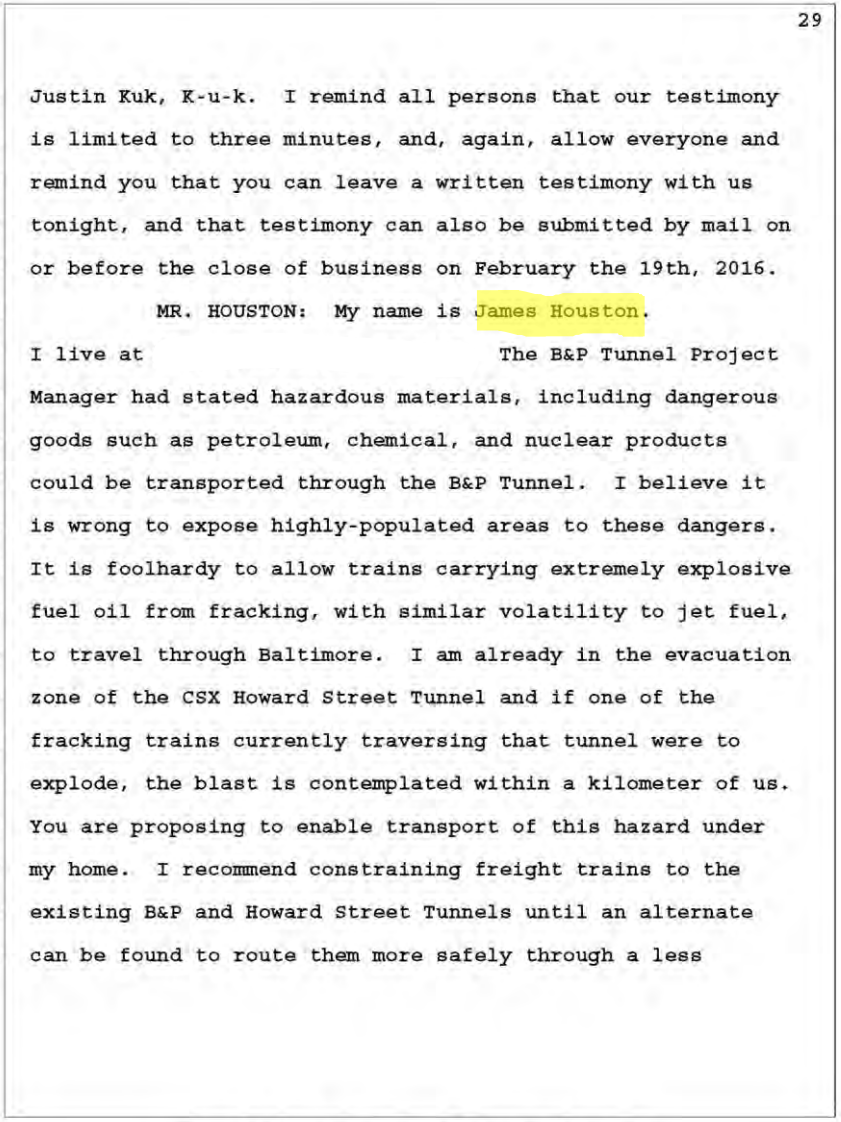
To achieve the required reduction in noise level, cylindrical or rectangular sound attenuators would be mounted directly to each fan or to the ductwork within the system. In addition, the building itself would partially shield noise from the interior of the ventilation facility, which would further reduce noise levels outside of the building. The Preliminary Engineering Team has stated that the ventilation facilities, with attenuators installed, will emit noise at 45 dBA. This would meet the design standard of L_{max} 50 dBA at the facility property lines (i.e., the noise level generated would be less than the design standard).

Please refer to responses to **DEIS Comment #85** for responses to the RATT questions.

Response to Comment 7:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 110:



29

Justin Kuk, K-u-k. I remind all persons that our testimony is limited to three minutes, and, again, allow everyone and remind you that you can leave a written testimony with us tonight, and that testimony can also be submitted by mail on or before the close of business on February the 19th, 2016.

MR. HOUSTON: My name is James Houston. I live at The B&P Tunnel Project Manager had stated hazardous materials, including dangerous goods such as petroleum, chemical, and nuclear products could be transported through the B&P Tunnel. I believe it is wrong to expose highly-populated areas to these dangers. It is foolhardy to allow trains carrying extremely explosive fuel oil from fracking, with similar volatility to jet fuel, to travel through Baltimore. I am already in the evacuation zone of the CSX Howard Street Tunnel and if one of the fracking trains currently traversing that tunnel were to explode, the blast is contemplated within a kilometer of us. You are proposing to enable transport of this hazard under my home. I recommend constraining freight trains to the existing B&P and Howard Street Tunnels until an alternate can be found to route them more safely through a less

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

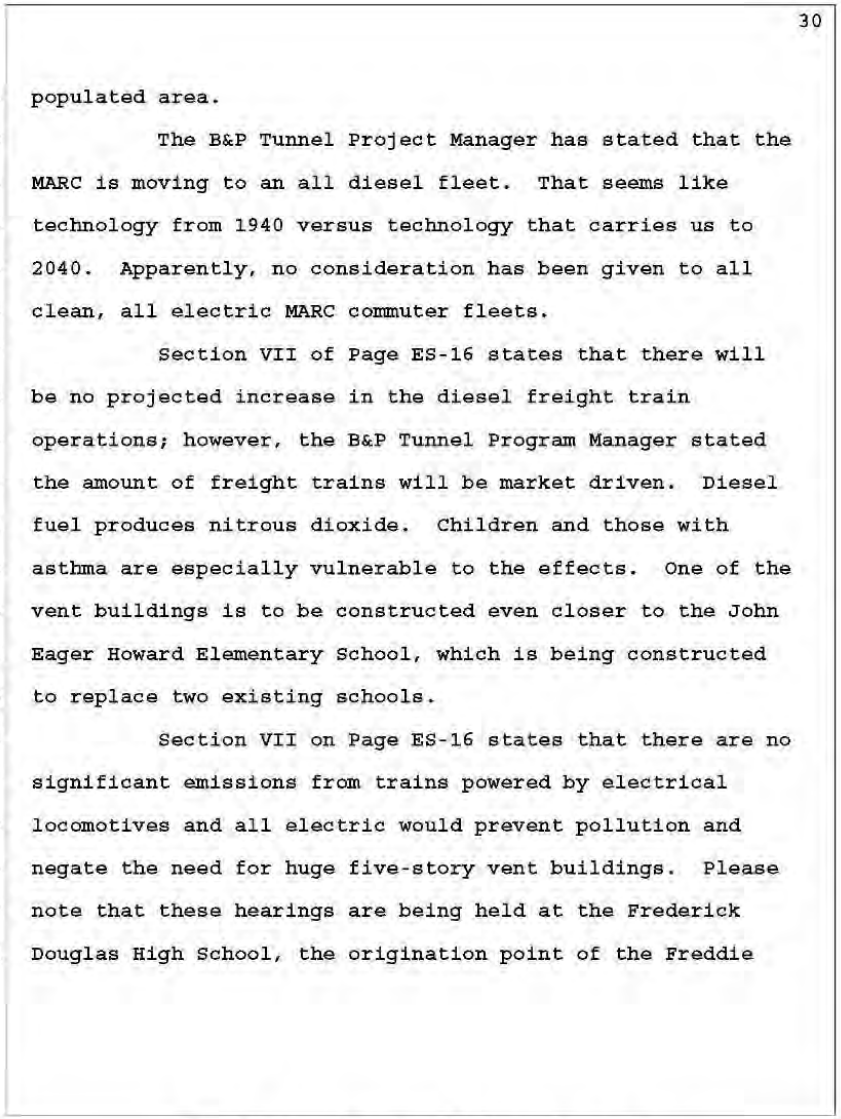
FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 2:
This recommendation is a policy consideration and does not address the purpose or need of the Project. 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, which include:

- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and
- Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

COMMENTS



30

populated area.

The B&P Tunnel Project Manager has stated that the MARC is moving to an all diesel fleet. That seems like technology from 1940 versus technology that carries us to 2040. Apparently, no consideration has been given to all clean, all electric MARC commuter fleets.

Section VII of Page ES-16 states that there will be no projected increase in the diesel freight train operations; however, the B&P Tunnel Program Manager stated the amount of freight trains will be market driven. Diesel fuel produces nitrous dioxide. Children and those with asthma are especially vulnerable to the effects. One of the vent buildings is to be constructed even closer to the John Eager Howard Elementary School, which is being constructed to replace two existing schools.

Section VII on Page ES-16 states that there are no significant emissions from trains powered by electrical locomotives and all electric would prevent pollution and negate the need for huge five-story vent buildings. Please note that these hearings are being held at the Frederick Douglas High School, the origination point of the Freddie

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

In addition, the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

As stated above, NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service.

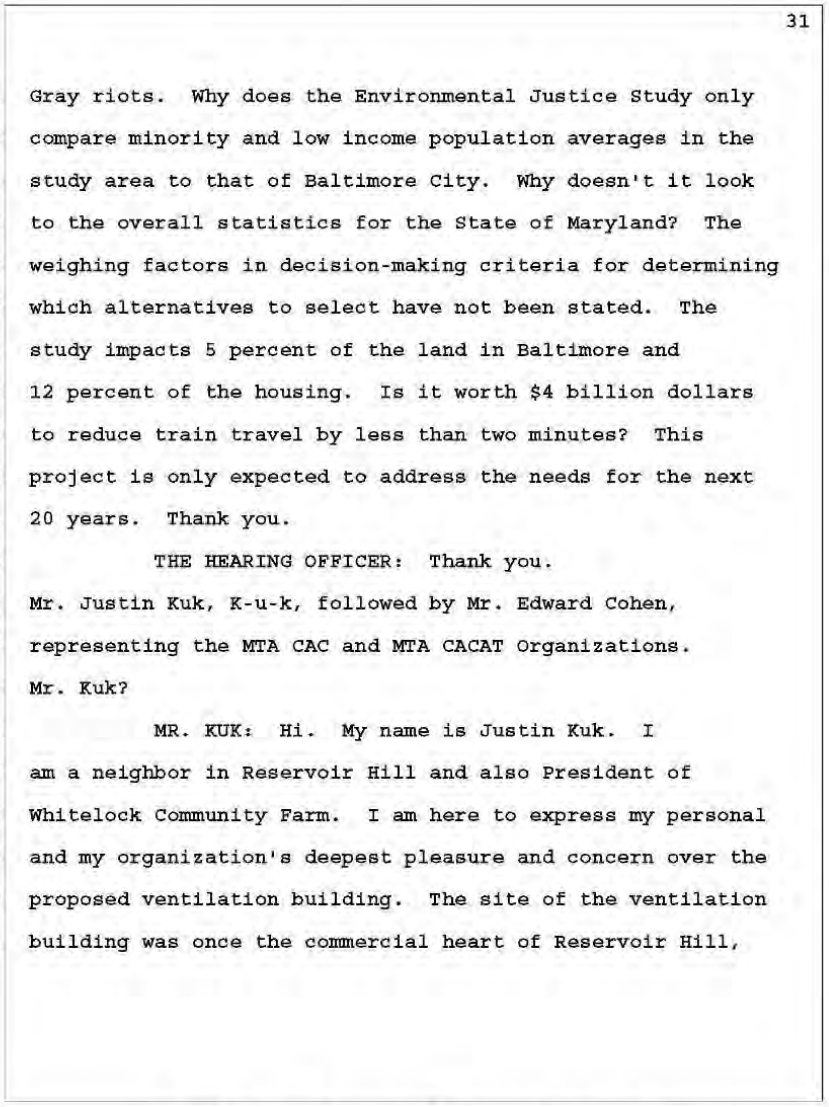
Response to Comment 3:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

Response to Comment 4:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed

COMMENTS



31

Gray riots. Why does the Environmental Justice Study only compare minority and low income population averages in the study area to that of Baltimore City. Why doesn't it look to the overall statistics for the State of Maryland? The
6 weighing factors in decision-making criteria for determining which alternatives to select have not been stated. The study impacts 5 percent of the land in Baltimore and 12 percent of the housing. Is it worth $4 billion dollars to reduce train travel by less than two minutes? This project is only expected to address the needs for the next 20 years. Thank you.

THE HEARING OFFICER: Thank you. Mr. Justin Kuk, K-u-k, followed by Mr. Edward Cohen, representing the MTA CAC and MTA CACAT Organizations. Mr. Kuk?

MR. KUK: Hi. My name is Justin Kuk. I am a neighbor in Reservoir Hill and also President of Whitelock Community Farm. I am here to express my personal and my organization's deepest pleasure and concern over the proposed ventilation building. The site of the ventilation building was once the commercial heart of Reservoir Hill,

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

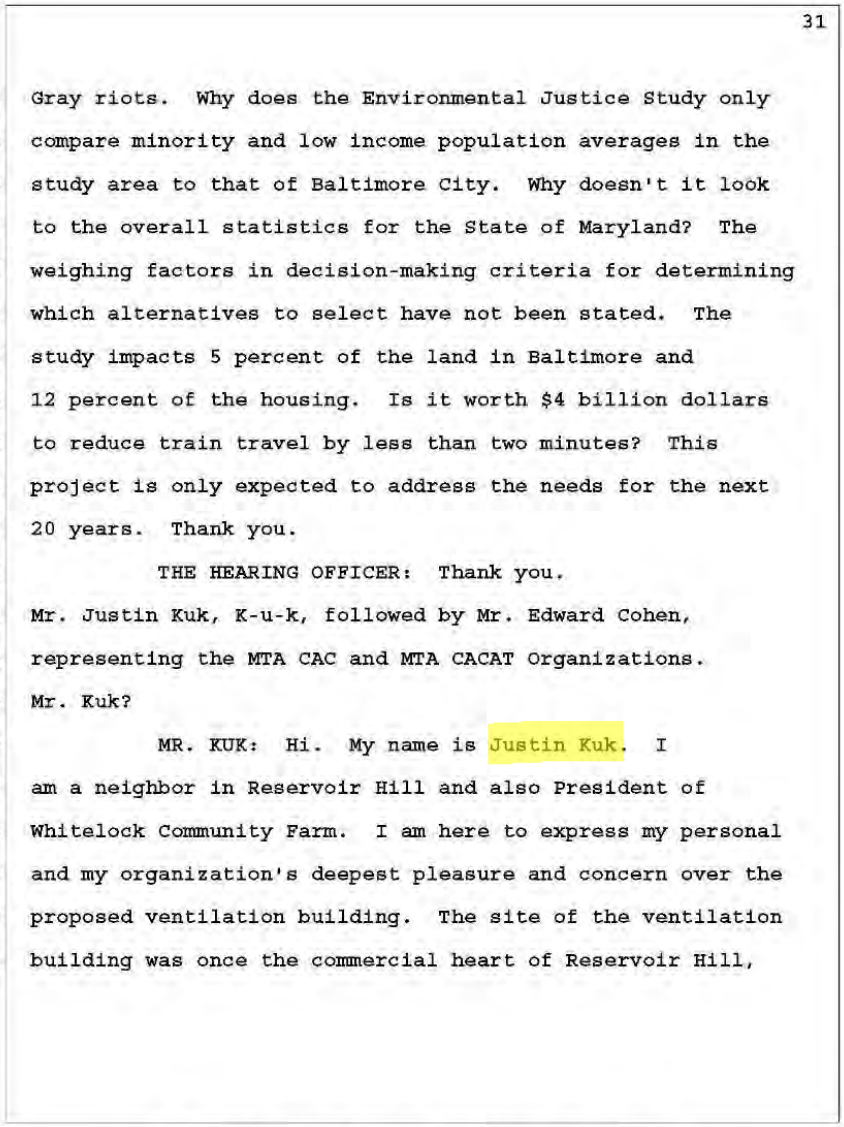
Response to Comment 5:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 6:
An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Please see **Chapter III** of the FEIS, which details the basis of elimination or retention for each alternative.

COMMENTS	RESPONSES
	While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason the Project was initiated. Please refer to Response to Comment 2 for more information.

COMMENTS

DEIS Comment 111:



31

Gray riots. Why does the Environmental Justice Study only compare minority and low income population averages in the study area to that of Baltimore City. Why doesn't it look to the overall statistics for the State of Maryland? The weighing factors in decision-making criteria for determining which alternatives to select have not been stated. The study impacts 5 percent of the land in Baltimore and 12 percent of the housing. Is it worth $4 billion dollars to reduce train travel by less than two minutes? This project is only expected to address the needs for the next 20 years. Thank you.

THE HEARING OFFICER: Thank you.

Mr. Justin Kuk, K-u-k, followed by Mr. Edward Cohen, representing the MTA CAC and MTA CACAT Organizations. Mr. Kuk?

MR. KUK: Hi. My name is Justin Kuk. I am a neighbor in Reservoir Hill and also President of Whitelock Community Farm. I am here to express my personal and my organization's deepest pleasure and concern over the proposed ventilation building. The site of the ventilation building was once the commercial heart of Reservoir Hill,

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS | **RESPONSES**

but in the '70's and '80's, it declined into a notorious open air drug market. As a response, in 1994, the City razed the buildings, but promised to rebuild commercial in Reservoir Hill. These promises went uneventful for 15 years.

In 2010, a group of ten neighbors, including myself, met together, and we had a passion for greening our neighborhood, but also meeting the health needs of our neighborhood. Reservoir Hill is one of the worst neighborhoods as far as diabetes and heart disease. It has the third worst rate of diabetes and the sixth highest rate of heart disease compared to other neighborhoods in Baltimore based on the 2011 Baltimore City Health Department Report. So, through the work of our committee volunteers, through our farm management, and through our Board, we built a thriving farm on the north side and the south side of Whitelock Street where the current ventilation building will be built. In just the past year, we have accomplished the following: We have grown almost 4,000 pounds of produce to sell to our neighbors. We fed 25 families through our Community Support and Agriculture Program, we diverted

COMMENTS

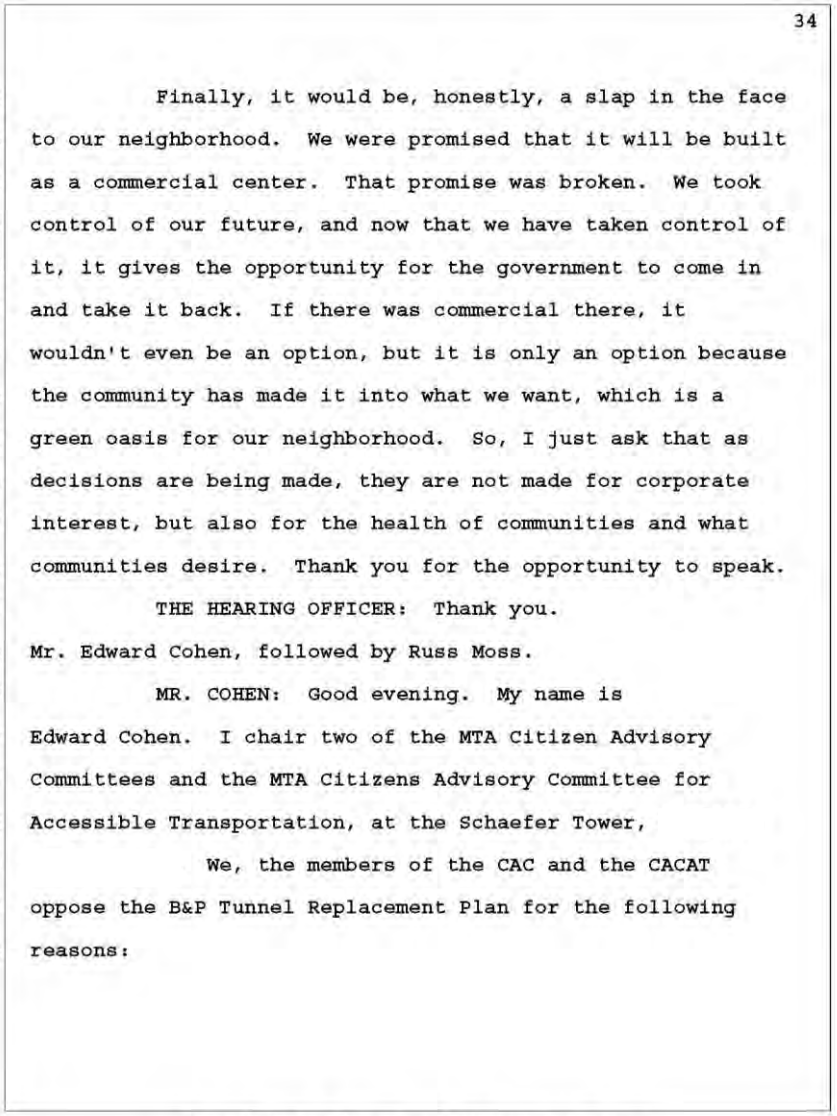
RESPONSES

thousands of gallons of food from the dump to our neighborhood composting program, we have increased sales to low income residents by 57 percent. We partner with the local elementary school and the middle school to teach them healthy eating habits and how to garden. We have managed 28 apprentices from local colleges. We have employed four high school students in our in our summer internship program. We have hosted five community potlucks and we have hosted workshops on canning, fermentation, and other things. That is just in the past year.

Also, the farm serves as one of the truly -- one of the only places where neighbors from diverse racial and economic backgrounds can come together and it serves as a place where we can come across the many bridges that keep us apart.

If the ventilation building is to be built at its current proposed location, it will destroy not only the work that we have achieved, it will also destroy the future that we are trying to build for kids in our neighborhood by teaching them about healthy eating and trying to reverse the health outcomes that we currently have.

COMMENTS



34

Finally, it would be, honestly, a slap in the face to our neighborhood. We were promised that it will be built as a commercial center. That promise was broken. We took control of our future, and now that we have taken control of it, it gives the opportunity for the government to come in and take it back. If there was commercial there, it wouldn't even be an option, but it is only an option because the community has made it into what we want, which is a green oasis for our neighborhood. So, I just ask that as decisions are being made, they are not made for corporate interest, but also for the health of communities and what communities desire. Thank you for the opportunity to speak.

THE HEARING OFFICER: Thank you.

Mr. Edward Cohen, followed by Russ Moss.

MR. COHEN: Good evening. My name is Edward Cohen. I chair two of the MTA Citizen Advisory Committees and the MTA Citizens Advisory Committee for Accessible Transportation, at the Schaefer Tower,

We, the members of the CAC and the CACAT oppose the B&P Tunnel Replacement Plan for the following reasons:

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

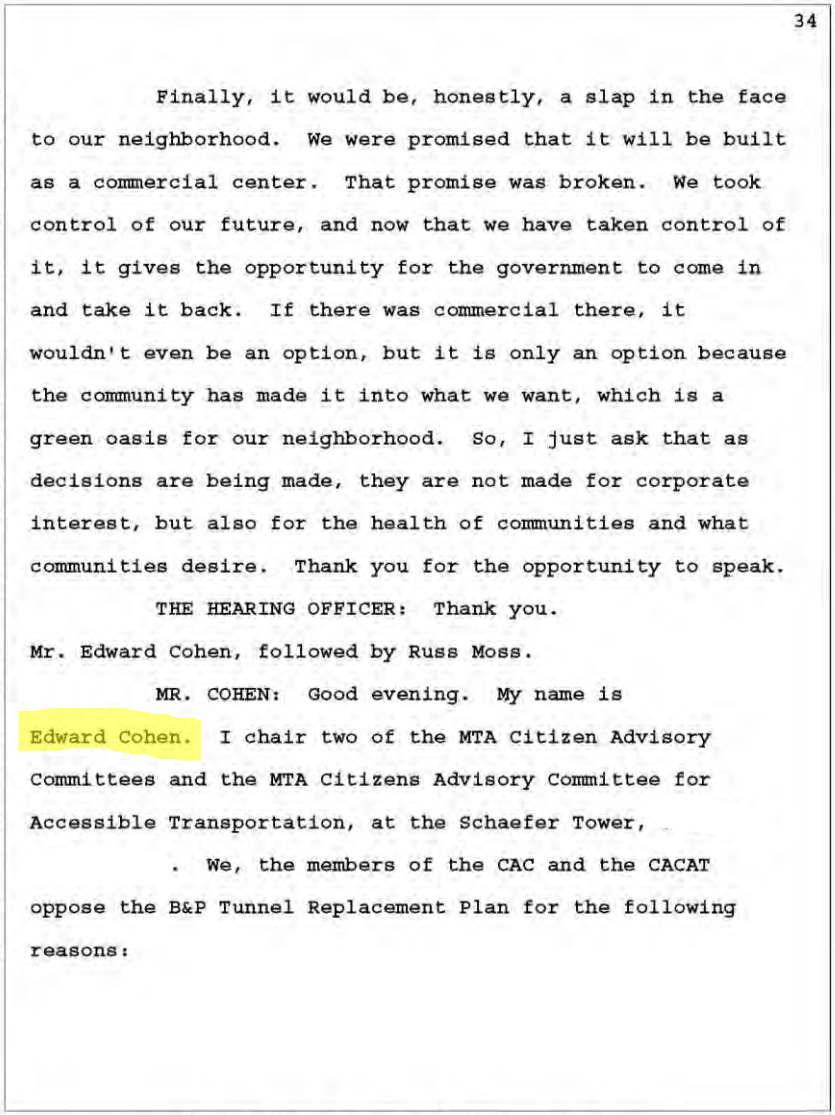
2

RESPONSES

Response to Comment 2:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact and health. No impacts to community health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the Health and Safety Plan will be implemented and regulatory authorities notified to appropriately address the hazardous material concerns.

COMMENTS

DEIS Comment 112:



34

Finally, it would be, honestly, a slap in the face to our neighborhood. We were promised that it will be built as a commercial center. That promise was broken. We took control of our future, and now that we have taken control of it, it gives the opportunity for the government to come in and take it back. If there was commercial there, it wouldn't even be an option, but it is only an option because the community has made it into what we want, which is a green oasis for our neighborhood. So, I just ask that as decisions are being made, they are not made for corporate interest, but also for the health of communities and what communities desire. Thank you for the opportunity to speak.

THE HEARING OFFICER: Thank you. Mr. Edward Cohen, followed by Russ Moss.

MR. COHEN: Good evening. My name is Edward Cohen. I chair two of the MTA Citizen Advisory Committees and the MTA Citizens Advisory Committee for Accessible Transportation, at the Schaefer Tower, . We, the members of the CAC and the CACAT oppose the B&P Tunnel Replacement Plan for the following reasons:

1

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The testimony provided addresses the possibility of restoring the Northern Central Railroad right-of-way; however, this is beyond the purview of the Project.

The report submitted along with the testimony, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The Tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding the purpose and need of the Project, please see **Chapter II** of this FEIS.

To review the September 2015 report in its entirety, please refer to **DEIS Comment #11**.

COMMENTS | **RESPONSES**

It will permanently eliminate any possibility of restoring the Northern Central Railroad right-of-way with a connection to the northeast part. For years, Pennsylvania has been calling for passenger service along the Northern Corridor to York, Pennsylvania. It is shortsighted to construct a rail project that forever prevents such service. If service on the Northern Central Railroad were to be reestablished, it would be easy to connect the line with the Howard Street Tunnel and to provide Amtrak passenger service between Miami and Toronto, with intermediate stops including Orlando, Jacksonville, Charleston, Fayetteville, Raleigh, Richmond, Washington, D.C., Harrisburg, and Buffalo. It's inappropriate for Amtrak to be supporting a project that prevents such expansion.

It will permanently eliminate any possibility of restoring rail service between the Northeast Corridor and the Hanover sub. The land required to restore the wye just west of Fulton Interlocking (and Avenue) is still available. Restoration of the wye would permit MARC service between Baltimore or Washington and Westminster, Hagerstown, Hanover, and Gettysburg. Amtrak could create a Northeast

COMMENTS | **RESPONSES**

Corridor Bypass through York, Lancaster, and Allentown to Morristown, Newark, and either Hoboken Terminal or Penn Station New York City. Restoration of this connection would also permit Amtrak service from Baltimore to numerous western cities, including Pittsburgh, Chicago, and Denver. It is unwise for Amtrak and MARC to be supporting a project that prevents such expansion.

It prevents the construction of a Sandtown/Winchester MARC station, which is part of the 2003 Baltimore Regional Rail Plan in state law.

It prevents construction of a connection between the MARC Penn Line service and the Baltimore Metro Subway Upton Station in a rebuilt B&P Tunnel system or Penn Line trains only. Years ago, there was a station at Pennsylvania Avenue in the tunnel.

It does not address Penn Station capacity constraints. Amtrak expects to double its Northeast Corridor service and MARC expects to triple its service. In the long term, Penn Station is likely to prove inadequate to support these demands.

It does not address Amtrak's need for a new

COMMENTS | **RESPONSES**

high-speed tunnel capable of supporting 220 mile-per-hour service. The high-speed tunnel must be built at some point anyway. To build a Great Circle Tunnel and spend money on the remnants of the B&P Tunnel would cost far more in the long term than to build a high-speed tunnel first and rebuild the B&P Tunnels for MARC use only afterwards. With this scale of expenditure, the 125-year depreciation period makes it practically impossible to justify the huge difference in cost of the Great Circle Tunnel versus the rebuild for MARC service only. The long depreciation period requires that we receive value for our public investment for the whole period. Resulting operational capabilities would be far greater as well. The decision to build this alternative was predicated upon a decision to continue Amtrak service through Penn Station.

THE HEARING OFFICER: Mr. Cohen, your time is up. I ask you that you might conclude your statement.

MR. COHEN: Okay. Let me just say that the committees put together a rail plan for Baltimore that was comprehensive, and it was integrated, and we have a copy

COMMENTS | **RESPONSES**

DEIS Comment 113:

of it here, and we are submitting this along with our reasons for not supporting this particular planning process, and it addresses virtually everything that I have heard so far tonight.

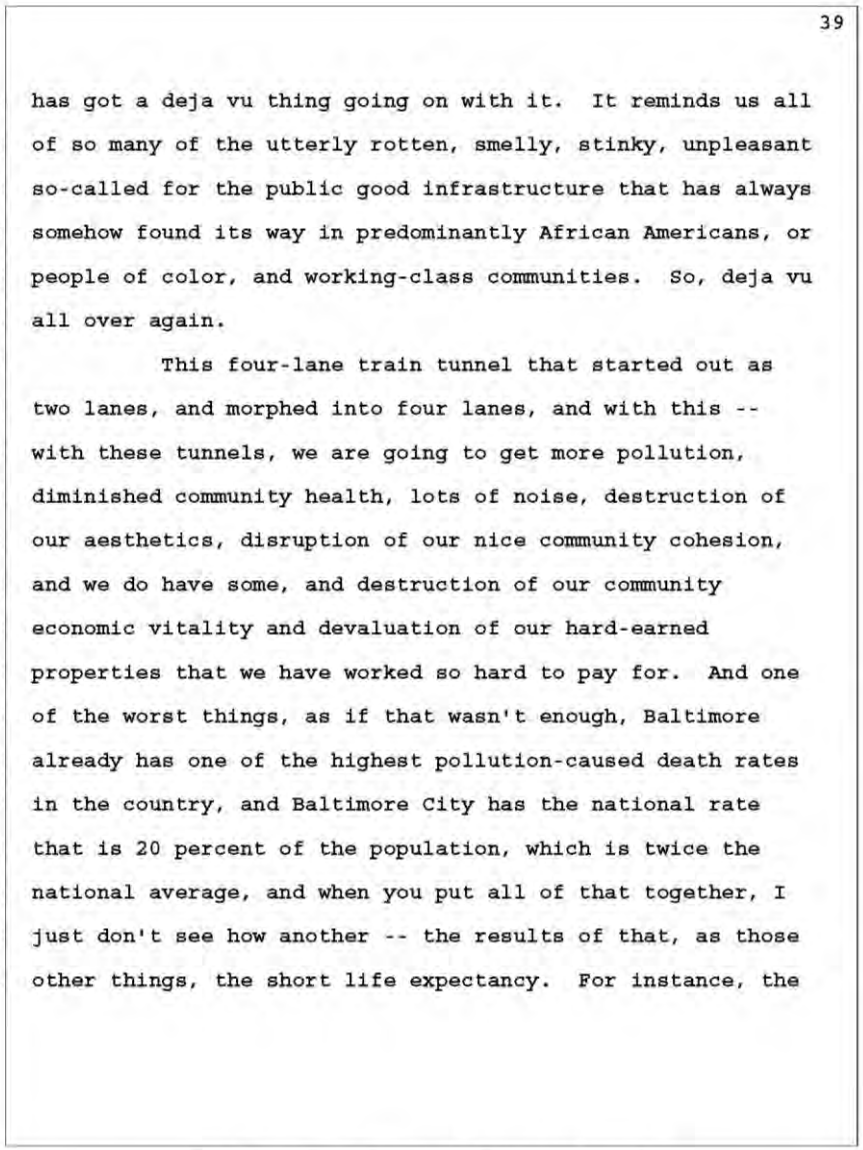
THE HEARING OFFICER: Thank you.

MR. COHEN: Thank you.

THE HEARING OFFICER: Mr. Russ Moss and Mr. Moss will be followed by Jamar Day. Let me mention written submissions should be left at our sign-in table or placed in one of the comment boxes located in both the registration area and the display area, located in the cafeteria, and I mention again, the project staff is available in the cafeteria area of the building tonight to answer questions, discuss, and make available the DEIS and its technical awards, and, again, answer specific questions regarding all alternatives. Mr. Moss, followed by Mr. Jamar Day.

MR. MOSS: Good evening. I guess I have got to say, first of all, it's almost -- well, it is an outrage to even be standing here of all nights to kick off Black American History Month, and this whole B&P Proposal

COMMENTS



39

has got a deja vu thing going on with it. It reminds us all of so many of the utterly rotten, smelly, stinky, unpleasant so-called for the public good infrastructure that has always somehow found its way in predominantly African Americans, or people of color, and working-class communities. So, deja vu all over again.

1 This four-lane train tunnel that started out as two lanes, and morphed into four lanes, and with this --

2 with these tunnels, we are going to get more pollution, diminished community health, lots of noise, destruction of our aesthetics, disruption of our nice community cohesion,

3 and we do have some, and destruction of our community economic vitality and devaluation of our hard-earned properties that we have worked so hard to pay for. And one of the worst things, as if that wasn't enough, Baltimore already has one of the highest pollution-caused death rates in the country, and Baltimore City has the national rate that is 20 percent of the population, which is twice the national average, and when you put all of that together, I just don't see how another -- the results of that, as those other things, the short life expectancy. For instance, the

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

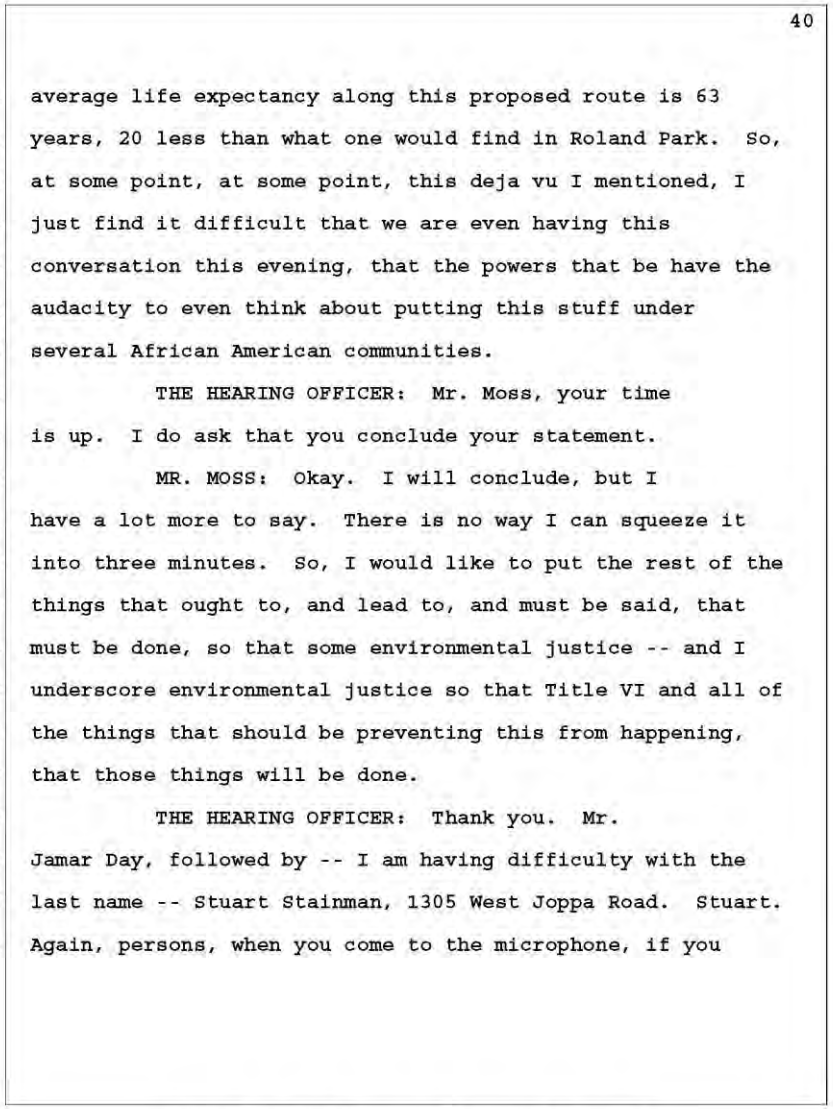
Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Response to Comment 2:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

COMMENTS



40

average life expectancy along this proposed route is 63 years, 20 less than what one would find in Roland Park. So, at some point, at some point, this deja vu I mentioned, I just find it difficult that we are even having this conversation this evening, that the powers that be have the audacity to even think about putting this stuff under several African American communities.

THE HEARING OFFICER: Mr. Moss, your time is up. I do ask that you conclude your statement.

MR. MOSS: Okay. I will conclude, but I have a lot more to say. There is no way I can squeeze it into three minutes. So, I would like to put the rest of the things that ought to, and lead to, and must be said, that must be done, so that some environmental justice -- and I underscore environmental justice so that Title VI and all of the things that should be preventing this from happening, that those things will be done.

THE HEARING OFFICER: Thank you. Mr. Jamar Day, followed by -- I am having difficulty with the last name -- Stuart Stainman, 1305 West Joppa Road. Stuart. Again, persons, when you come to the microphone, if you

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

RESPONSES

The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

Response to Comment 3:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 4:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the Executive Order on environmental justice is public outreach. The Project Team has conducted extensive engagement with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional

COMMENTS

RESPONSES

organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the Project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

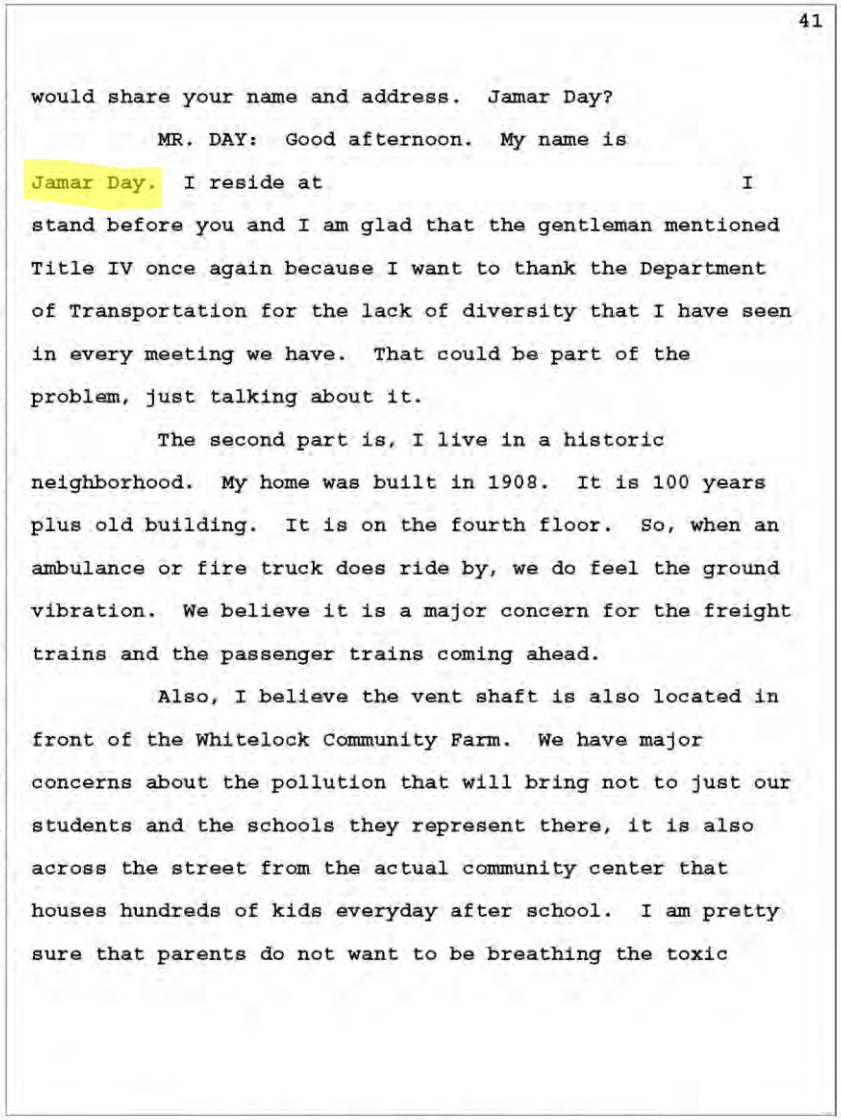
Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be

COMMENTS	RESPONSES
	underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

COMMENTS

DEIS Comment 114:



41

would share your name and address. Jamar Day?

MR. DAY: Good afternoon. My name is Jamar Day. I reside at I stand before you and I am glad that the gentleman mentioned Title IV once again because I want to thank the Department of Transportation for the lack of diversity that I have seen in every meeting we have. That could be part of the problem, just talking about it.

The second part is, I live in a historic neighborhood. My home was built in 1908. It is 100 years plus old building. It is on the fourth floor. So, when an ambulance or fire truck does ride by, we do feel the ground vibration. We believe it is a major concern for the freight trains and the passenger trains coming ahead.

Also, I believe the vent shaft is also located in front of the Whitelock Community Farm. We have major concerns about the pollution that will bring not to just our students and the schools they represent there, it is also across the street from the actual community center that houses hundreds of kids everyday after school. I am pretty sure that parents do not want to be breathing the toxic

1

2

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

COMMENTS

3

fumes everyday when they come to the community center or to the farm.

Two, I would also like to bring to your attention that there has never been one community benefit agreement by

4

the Maryland Department of Transportation, not even a sidewalk or a new park as a result of this project. I would also like to bring to your attention we do not want this in our community. I am a candidate for the 7th District and have been campaigning in the communities from the mouth of the tunnel to the end of the tunnel in Mount Royal, all of the way to the Baltimore County community, and every community meeting, they have not once heard about the meetings or known about them. You all said that you announced it publicly and did very good jobs. I do not

5

think you did. Most of our senior buildings do not know about the community meetings and I feel you have not done a great job letting the voices be heard what is actually going on. That's what I want to leave you all saying today. Thank you.

THE HEARING OFFICER: Thank you. Stuart, and, then, Stuart will be followed by Don Akchin.

RESPONSES

Response to Comment 2:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

COMMENTS

RESPONSES

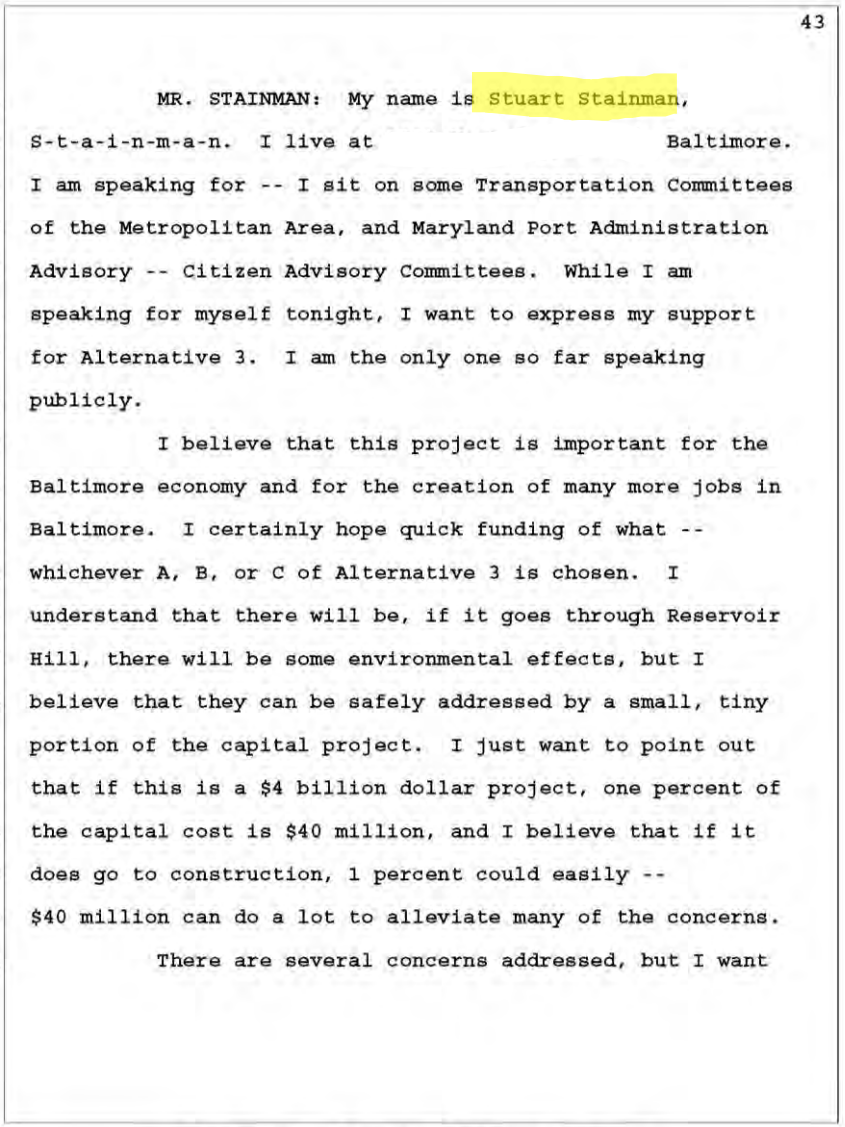
Response to Comment 4:
Since the publication of the DEIS, mitigation development has advanced and mitigation measures are included in this FEIS. Some examples include installation of public facilities, community centers, public services, small business assistance, and pedestrian and bicycle access improvements. Please refer to **Chapter VII** for more information. Final mitigation plans would be completed following the selection of the Preferred Alternative and final determination of impacts on the community.

Response to Comment 5:
The Project DEIS, including Appendices and supporting Technical Reports, was made available for comment from December 18th, 2015 to February 26, 2016. As described in **Chapter VIII** of this FEIS, the DEIS was distributed to several Federal, State, Regional, City, and County agencies, community organizations, stakeholders, and elected officials. The DEIS is also available on the Project website www.bptunnel.com. A hard copy of the DEIS document was also made available at ten locations, including the Baltimore City Department of Transportation, Transit Bureau, Bentalou Recreation Center, Bon Secours Community Works, four Enoch Pratt Library locations, John Eager Howard Recreation Center, Maryland Department of Transportation, and the Maryland Transit Administration.

The Project Team has engaged in extensive public outreach throughout the development of the project, including holding three public open houses and ten community meetings where the public was given the opportunity to learn about the project and engage in discussion with the Project Team. In addition to these meetings, the Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS. Additional details of this outreach are described in **Chapter VI** as well as **Chapter VIII.**

COMMENTS

DEIS Comment 115:



43

MR. STAINMAN: My name is Stuart Stainman, S-t-a-i-n-m-a-n. I live at Baltimore. I am speaking for -- I sit on some Transportation Committees of the Metropolitan Area, and Maryland Port Administration Advisory -- Citizen Advisory Committees. While I am speaking for myself tonight, I want to express my support for Alternative 3. I am the only one so far speaking publicly.

1

I believe that this project is important for the Baltimore economy and for the creation of many more jobs in Baltimore. I certainly hope quick funding of what -- whichever A, B, or C of Alternative 3 is chosen. I understand that there will be, if it goes through Reservoir Hill, there will be some environmental effects, but I believe that they can be safely addressed by a small, tiny portion of the capital project. I just want to point out that if this is a $4 billion dollar project, one percent of the capital cost is $40 million, and I believe that if it does go to construction, 1 percent could easily -- $40 million can do a lot to alleviate many of the concerns.

There are several concerns addressed, but I want

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

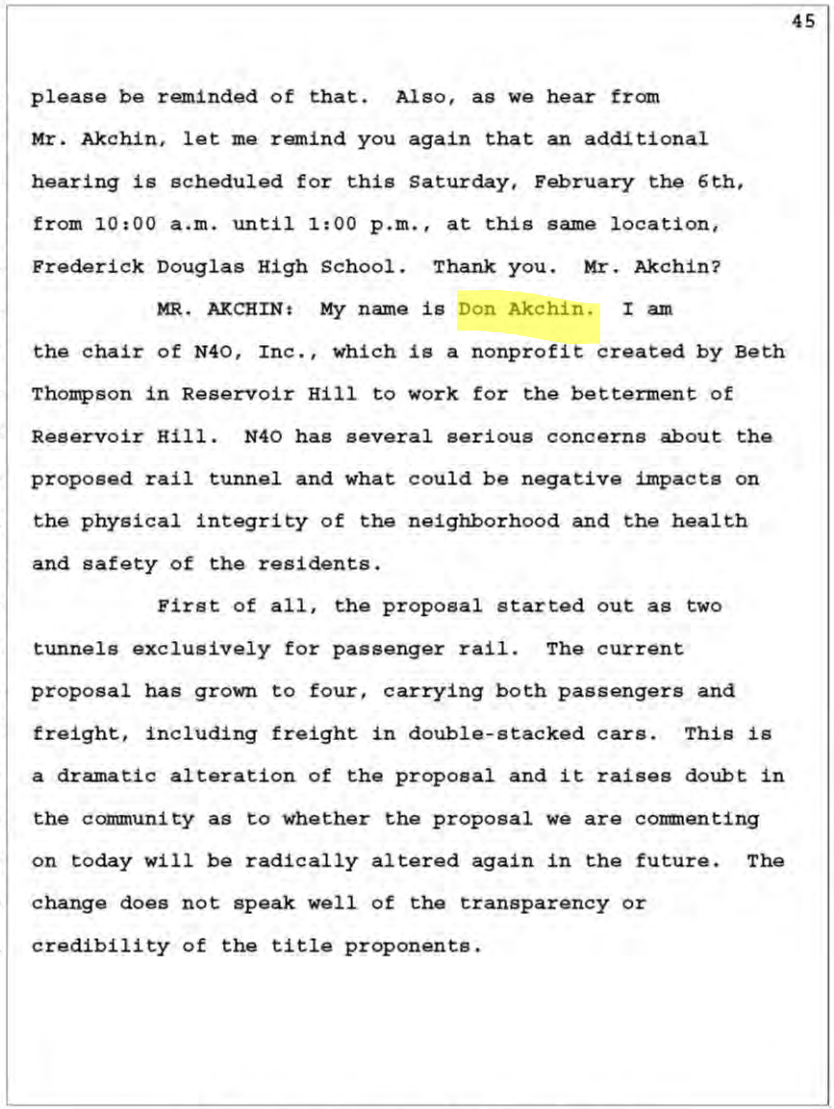
COMMENTS | **RESPONSES**

to point out that if these tunnels are not constructed, this will greatly weaken, if not destroy the economic advantage of the Port of Baltimore, which generates over 25,000 jobs. It will greatly weaken, if not destroy or eliminate the advantage of Baltimore's 50-foot draft channel. I also want to point out that ventilation structures can be designed to blend in with neighborhood buildings of similar size, and proportion, and concerns about freight oil tank cars -- trains passing through, by the time that this tunnel is constructed, that higher standard -- more safety requirements of oil tank cars required by the federal government will be in place. Thank you.

THE HEARING OFFICER: Thank you. Don Akchin. As Mr. Akchin comes forward, I want to remind everybody again that all written comments regarding the Draft Environmental Impact Statement are due on or before the close of business on February the 19th, 2016. Again, our comment form, which is postage paid, is available at the registration table. That form does indicate February 5th. Again, we were postponed due to the weather, so that comment period has been extended until February the 19th, 2016. So,

COMMENTS

DEIS Comment 116:



45

please be reminded of that. Also, as we hear from Mr. Akchin, let me remind you again that an additional hearing is scheduled for this Saturday, February the 6th, from 10:00 a.m. until 1:00 p.m., at this same location, Frederick Douglas High School. Thank you. Mr. Akchin?

MR. AKCHIN: My name is Don Akchin. I am the chair of N4O, Inc., which is a nonprofit created by Beth Thompson in Reservoir Hill to work for the betterment of Reservoir Hill. N4O has several serious concerns about the proposed rail tunnel and what could be negative impacts on the physical integrity of the neighborhood and the health and safety of the residents.

First of all, the proposal started out as two tunnels exclusively for passenger rail. The current proposal has grown to four, carrying both passengers and freight, including freight in double-stacked cars. This is a dramatic alteration of the proposal and it raises doubt in the community as to whether the proposal we are commenting on today will be radically altered again in the future. The change does not speak well of the transparency or credibility of the title proponents.

1

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

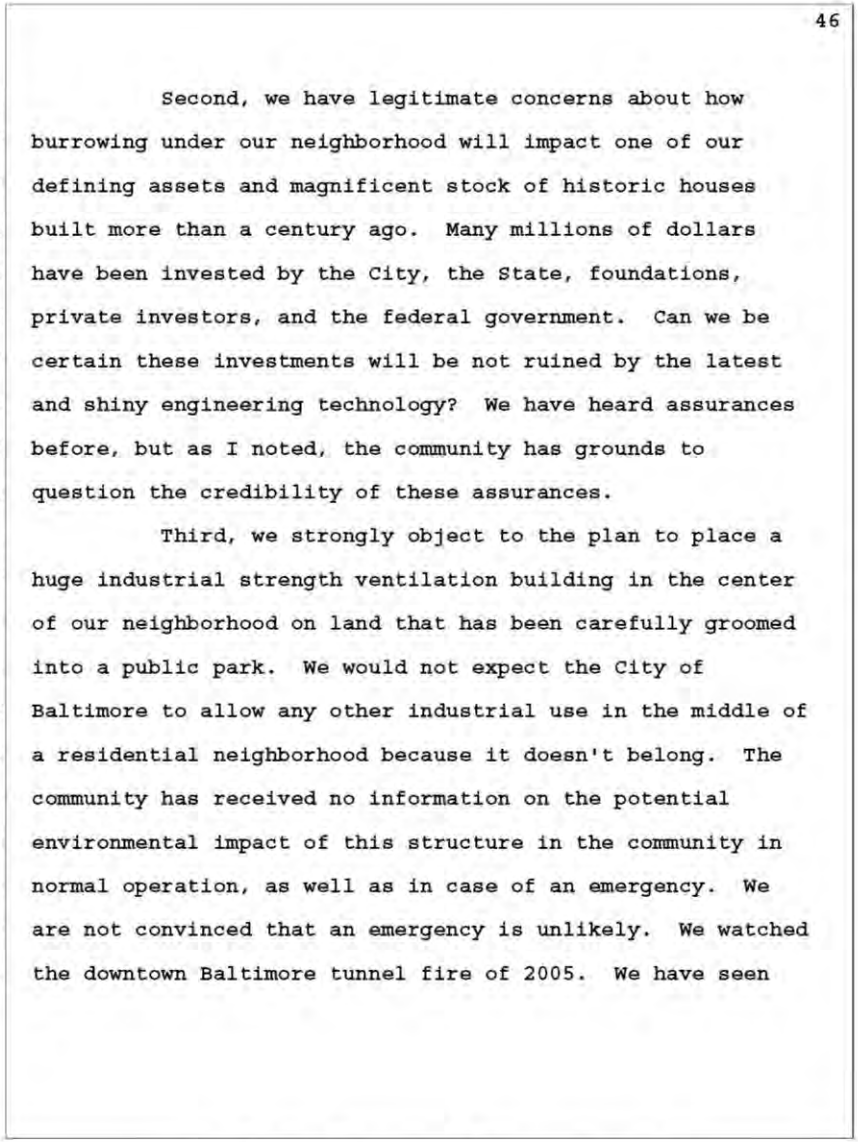
Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

COMMENTS



46

Second, we have legitimate concerns about how burrowing under our neighborhood will impact one of our defining assets and magnificent stock of historic houses built more than a century ago. Many millions of dollars have been invested by the City, the State, foundations, private investors, and the federal government. Can we be certain these investments will be not ruined by the latest and shiny engineering technology? We have heard assurances before, but as I noted, the community has grounds to question the credibility of these assurances.

Third, we strongly object to the plan to place a huge industrial strength ventilation building in the center of our neighborhood on land that has been carefully groomed into a public park. We would not expect the City of Baltimore to allow any other industrial use in the middle of a residential neighborhood because it doesn't belong. The community has received no information on the potential environmental impact of this structure in the community in normal operation, as well as in case of an emergency. We are not convinced that an emergency is unlikely. We watched the downtown Baltimore tunnel fire of 2005. We have seen

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 2:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

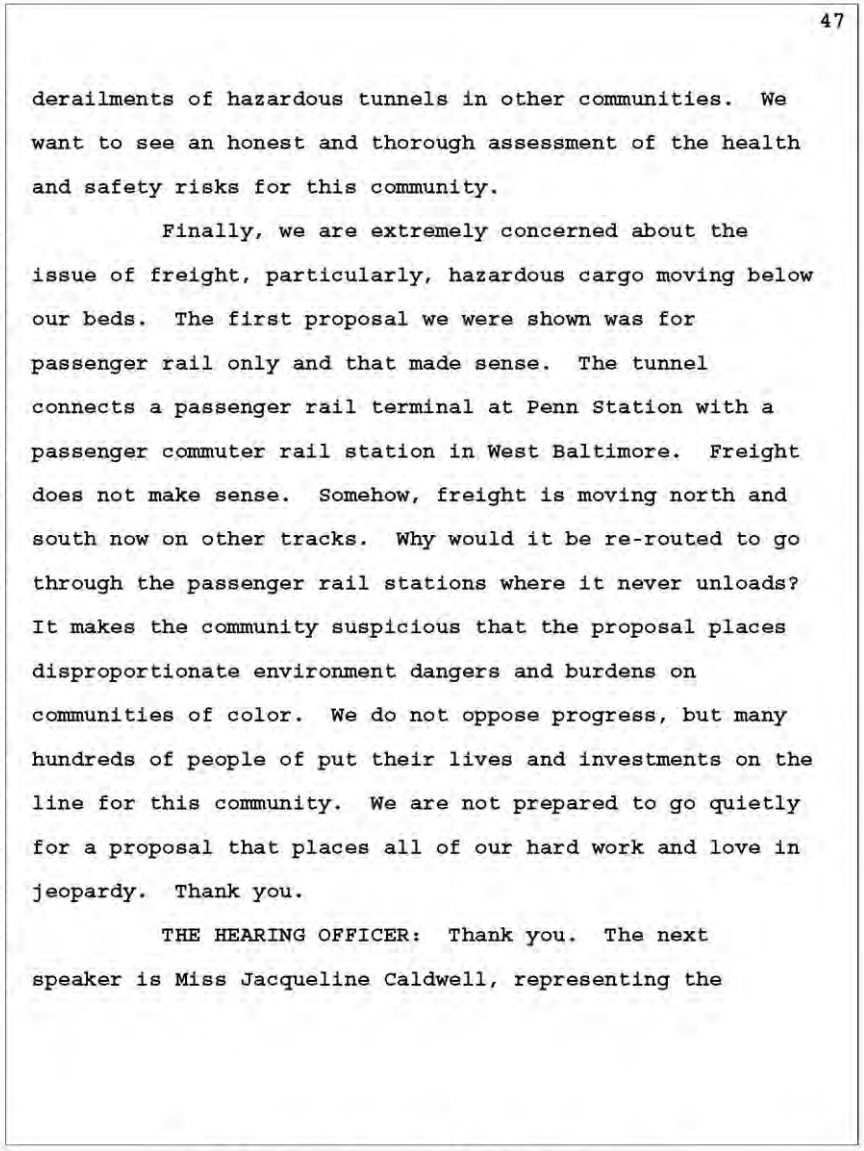
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

COMMENTS



47

derailments of hazardous tunnels in other communities. We want to see an honest and thorough assessment of the health and safety risks for this community.

Finally, we are extremely concerned about the issue of freight, particularly, hazardous cargo moving below our beds. The first proposal we were shown was for passenger rail only and that made sense. The tunnel connects a passenger rail terminal at Penn Station with a passenger commuter rail station in West Baltimore. Freight does not make sense. Somehow, freight is moving north and south now on other tracks. Why would it be re-routed to go through the passenger rail stations where it never unloads? It makes the community suspicious that the proposal places disproportionate environment dangers and burdens on communities of color. We do not oppose progress, but many hundreds of people of put their lives and investments on the line for this community. We are not prepared to go quietly for a proposal that places all of our hard work and love in jeopardy. Thank you.

THE HEARING OFFICER: Thank you. The next speaker is Miss Jacqueline Caldwell, representing the

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 5:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

COMMENTS

RESPONSES

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

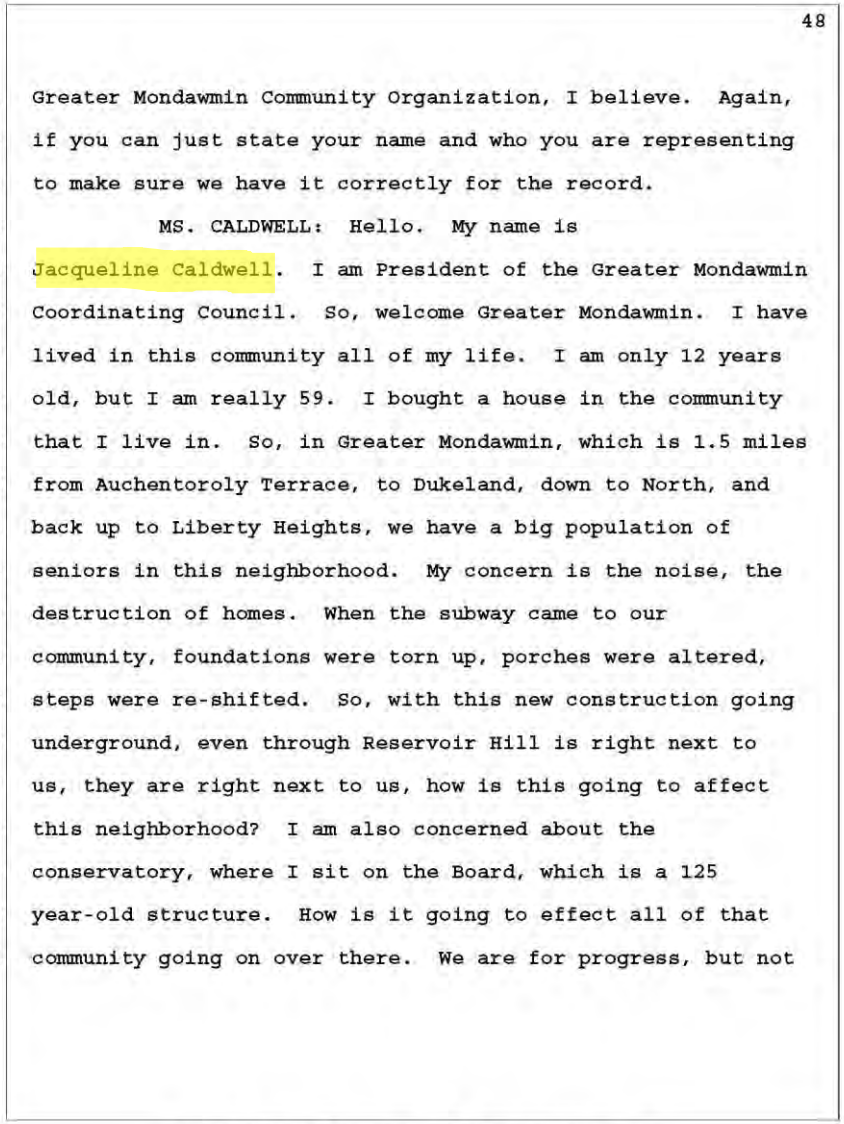
Response to Comment 6:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

COMMENTS

DEIS Comment 117:



48

Greater Mondawmin Community Organization, I believe. Again, if you can just state your name and who you are representing to make sure we have it correctly for the record.

MS. CALDWELL: Hello. My name is Jacqueline Caldwell. I am President of the Greater Mondawmin Coordinating Council. So, welcome Greater Mondawmin. I have lived in this community all of my life. I am only 12 years old, but I am really 59. I bought a house in the community that I live in. So, in Greater Mondawmin, which is 1.5 miles from Auchentoroly Terrace, to Dukeland, down to North, and back up to Liberty Heights, we have a big population of seniors in this neighborhood. My concern is the noise, the 1 destruction of homes. When the subway came to our community, foundations were torn up, porches were altered, steps were re-shifted. So, with this new construction going underground, even through Reservoir Hill is right next to 2 us, they are right next to us, how is this going to affect this neighborhood? I am also concerned about the conservatory, where I sit on the Board, which is a 125 year-old structure. How is it going to effect all of that community going on over there. We are for progress, but not

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The Project Team has performed an impact analysis for noise following the Federal Transit Administration's guidance manual. The number of potential moderate and severe impacts were estimated using noise contour maps and land use information. For the Preferred Alternative, 296 moderate and 141 severe residential noise impacts above the FTA Frequent Impact Criterion of 35 dBA are anticipated. Mitigation measures were investigated for addressing moderate and severe noise impacts from tunnel operations and include vehicle skirts, undercar absorption, spring frogs, and acquisition of a buffer zone, among others, which are documented in **Chapter VII** of this FEIS.

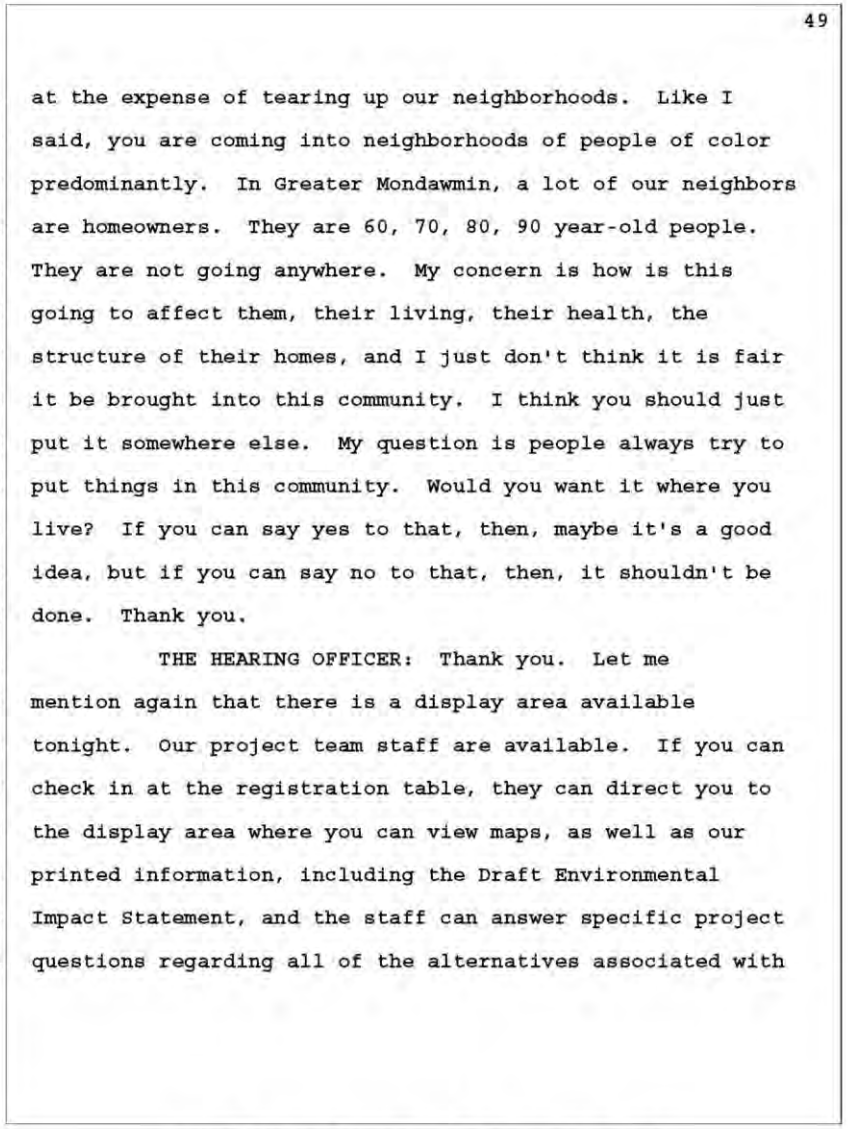
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves

COMMENTS



49

at the expense of tearing up our neighborhoods. Like I said, you are coming into neighborhoods of people of color predominantly. In Greater Mondawmin, a lot of our neighbors are homeowners. They are 60, 70, 80, 90 year-old people. They are not going anywhere. My concern is how is this going to affect them, their living, their health, the structure of their homes, and I just don't think it is fair it be brought into this community. I think you should just put it somewhere else. My question is people always try to put things in this community. Would you want it where you live? If you can say yes to that, then, maybe it's a good idea, but if you can say no to that, then, it shouldn't be done. Thank you.

THE HEARING OFFICER: Thank you. Let me mention again that there is a display area available tonight. Our project team staff are available. If you can check in at the registration table, they can direct you to the display area where you can view maps, as well as our printed information, including the Draft Environmental Impact Statement, and the staff can answer specific project questions regarding all of the alternatives associated with

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

3

RESPONSES

away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 2:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

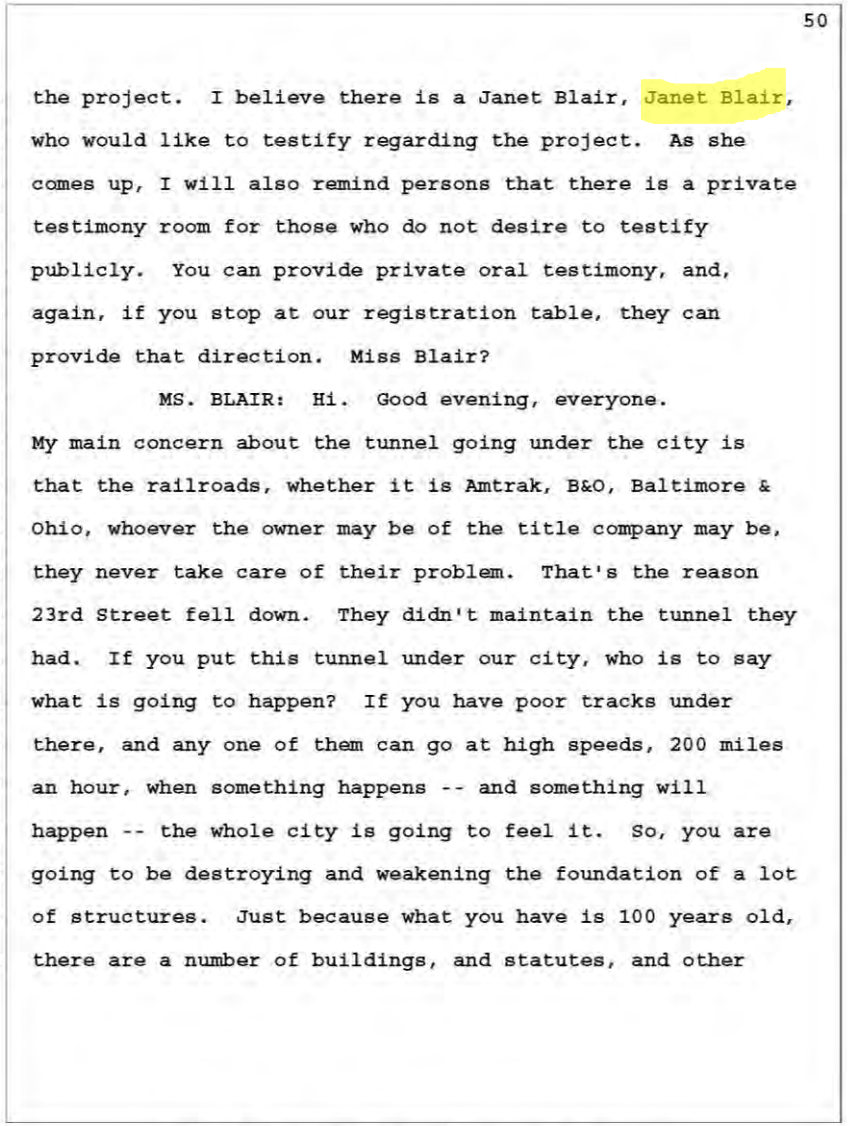
For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include

COMMENTS	RESPONSES
	historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.
	Response to Comment 3: The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS. The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII.** These efforts are ongoing and are documented in this FEIS. No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

COMMENTS

DEIS Comment 118:



50

the project. I believe there is a Janet Blair, Janet Blair, who would like to testify regarding the project. As she comes up, I will also remind persons that there is a private testimony room for those who do not desire to testify publicly. You can provide private oral testimony, and, again, if you stop at our registration table, they can provide that direction. Miss Blair?

MS. BLAIR: Hi. Good evening, everyone. My main concern about the tunnel going under the city is 1 that the railroads, whether it is Amtrak, B&O, Baltimore & Ohio, whoever the owner may be of the title company may be, they never take care of their problem. That's the reason 23rd Street fell down. They didn't maintain the tunnel they had. If you put this tunnel under our city, who is to say what is going to happen? 2 If you have poor tracks under there, and any one of them can go at high speeds, 200 miles an hour, when something happens -- and something will happen -- the whole city is going to feel it. So, you are going to be destroying and weakening the foundation of a lot of structures. 3 Just because what you have is 100 years old, there are a number of buildings, and statutes, and other

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
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, which include:

- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and
- Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

In addition, the existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 2:
The new tunnels would be designed to optimize safety and modern standards. Amtrak and Norfolk Southern (NS) are anticipated to use existing fleets and newly acquired equipment in the tunnel. This equipment must meet federal standards for safe operations. In addition, the tunnel will be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of trains within the tunnel.

Response to Comment 3:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

COMMENTS | **RESPONSES**

functions in the city older than that, but they are still standing, still operational, because people take care of them. The train system has a very, very poor record maintaining whatever they use. I say no. Thank you.

THE HEARING OFFICER: Thank you. At this time, we have no additional persons registered to testify. I emphasize our hearing for tonight goes until 8:00 p.m. and you can register until 7:55 p.m. to testify here in the hearing room. I remind persons here tonight if you can share that information with your neighbors and community that there is an additional hearing scheduled for this Saturday, February the 6th, from 10:00 a.m. until 1:00 p.m., at this same location, Frederick Douglas High School. Our display area remains open until 8:00 p.m. tonight. If you have specific project questions, I direct you there. Again, members of our project team, which include Baltimore City, the Maryland Department of Transportation, the Federal Railroad Administration, and Amtrak are available to answer specific questions or provide detailed descriptions of maps, as well as additional project displays. That area is out this door and to your right, as well as private testimony

COMMENTS | **RESPONSES**

for those who desire to provide oral testimony in a private setting. Again, we will be in this room until 8:00 o'clock for persons who desire to make public testimony. You are required to register for that public testimony in the lobby. Thank you.

THE SPEAKER: Question. Will that private testimony be available on a public record?

THE HEARING OFFICER: All testimony both oral, here in this hearing room, as well as testimony provided in the private room will be considered a part of the official record, as well as all written submissions, and I mention that again that all written submissions are due by the close of business on February 19th, and I direct you to the postage paid mailer which many of you should have received tonight. Additional copies are available which can be completed and mailed in, as well as I observed a number of persons with packages of written testimony that can be left at our registration table, and submitted as part of the official record tonight. Thank you. The hearing remains open until 8:00 p.m.

(Hearing concluded at 8:00 p.m.)

COMMENTS | **RESPONSES**

State of Maryland:
County of Baltimore, to wit:

I, Susan Kambouris, a Notary Public of the State of Maryland, County of Baltimore, do hereby certify that the within-named proceedings took place before me at the time and place herein set out.

I further certify that the proceedings were recorded stenographically by me and this transcript is a true record of the proceedings.

I further certify that I am not of counsel to any of the parties, nor in any way interested in the outcome of this action.

As witness my hand this 15th day of February, 2016.

Susan A. Kambouris

SUSAN A. KAMBOURIS
Notary Public

My Commission Expires:
May 17, 2017

COMMENTS

RESPONSES

INDEX

Hearing Officer's Hearing

February 6, 2016

SPEAKER:	PAGE
Delegate Barbara Robinson	16
Dr. Marvin Cheatham	18
Councilman Nick Mosby	21
Bill Lee	27
Lauren Haney Provost	30
Grace O'Kessa	33
Kylis Winborne	35
Russ Moss	36
Gary Messaman, Jr.	39
James Floyd	41
Stephen Arthur	44
Senator Catherine Pugh	48
Margaret Wilson	50
Khary Lemon	51
Shawn Tarrant	53

INDEX: (Continued on Next Page.)

COMMENTS | **RESPONSES**

INDEX (Continued)

Hearing Officer's Hearing

February 6, 2016

SPEAKER:	PAGE
Edward Cohen	55
Helen Williams	59
Heather Weir	60
Lisa Dove	63
Aaron Brosy	64
Randy Houck-Bay	66

COMMENTS | **RESPONSES**

PROCEEDINGS

- - - - - -

THE HEARING OFFICER: Good morning. Let the record show that it is now 10:45 a.m. on Saturday, February 6. Good morning, ladies and gentlemen. My name is Anthony Brown. I will serve as today's Hearing Officer. I am joined on stage by Ms. Michelle Fishburne from The Federal Railroad Administration. Also present at the hearing today in our display area is a number of staff persons representing Amtrak, the Maryland Department of Transportation, the Federal Railroad Association, and the City of Baltimore.

I would like to welcome you to this Public Hearing regarding the Draft Environmental Impact Statement and Section 4(f) Evaluation (DEIS) for the B&P Tunnel Project. Thank you for taking the time to attend today.

I call to order this Public Hearing which is being conducted by the Federal Railroad Administration (FRA) in cooperation with the Federal Transit Administration (FTA) and in coordination with

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS | **RESPONSES**

the Maryland Department of Transportation and the National Railroad Passenger Corporation (Amtrak) as provided in accordance to Title 23, Section 771.111(h) of the Code of Federal Regulations.

The FRA will be holding or has held a mock pubic hearing regarding this project. We are holding today's hearing, and then a final public hearing is set for Wednesday, February 17, from 5:00 p.m. to 8:00 p.m. at the Carver Vo-Tech High School, and that information is contained on a flyer at the registration table.

The FRA is holding these hearings to receive testimony regarding the Draft Environmental Impact Statement for the B&P Tunnel project. The DEIS was released to the public on December 18, 2015 and will be available for review and comment until 5:00 p.m. on February 26 of this year.

The DEIS and supporting documents are available on the B&P Tunnel website, www.bptunnel.com, as well as public libraries and other locations which will be described later this morning in my presentation. I will also mention that the DEIS and

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS | **RESPONSES**

its supporting documents are available for review today in our display area located in the cafeteria.

The B&P Tunnel is a two-track railroad tunnel underneath central Baltimore City. The tunnel opened in 1873 and is located between the West Baltimore MARC Station and Pennsylvania Station along Amtrak's Northeast Corridor (NEC). This section of the NEC is used by Amtrak and Maryland's MARC Commuter Rail passenger trains, as well as Norfolk Southern Railway freight trains.

The purpose of the Project is to address the structural and operational deficiencies of the existing B&P Tunnels 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

COMMENTS | **RESPONSES**

element of Baltimore's rail infrastructure.

The purpose is derived from the following needs:

1. The existing B&P Tunnel is more than 140 years old and it is approaching the end of its useful life with regard to its physical condition. While the tunnel currently remains safe for rail transportation, it requires substantial maintenance and repairs and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear.

The tunnel is also functionally obsolete and unable to meet current and future rail demands due to the combination of its vertical and horizontal track alignment, i.e. its grades and curves. The low-speed tunnel creates a bottleneck at a critical point in the NEC, affecting operations of the most heavily traveled rail line in the United States.

2. The existing B&P Tunnel does not provide enough capacity to support existing and projected demands for regional and commuter passenger

COMMENTS

RESPONSES

service along the NEC.

3. The existing B&P Tunnel is not suited for modern high-speed usage due to the current horizontal and vertical track alignments, which limit passenger train speeds to 30 miles per hour.

4. Then finally, the existing B&P Tunnel is a valuable resource. The disposition of the existing tunnel needs to be considered in this project.

The DEIS analyzes impact of the project on the natural and human environment. The DEIS provides an evaluation of the alternatives that are still under consideration and assesses environmental impacts for the alternatives.

There are four alternatives being evaluated in the DEIS: Alternative 1, the No-Build Alternative; and then there are three Build Alternatives, called Alternative 3A, Alternative 3B, and Alternative 3C. These alternatives were retained through a comprehensive screening process that identified those alternatives that best address the project needs in consideration of the environmental impacts.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS

RESPONSES

(ROD), which will formally select the alternative that could be advanced to design and construction.

The FRA is committed to insuring that no person is excluded from participation in, or denied the benefit of its transit services on the basis of race, color, or national origin as protected by Title VI of the Civil Rights Act of 1964. I mention again that in the audience with us tonight is Miss Michelle Fishburne, representing the Federal Railroad Administration, and I believe she is joining me on the stage now. You may address any questions to the Project Team who are represented in the display area. Again, I emphasize, we are hearing testimony only in this room, not responding to specific questions; however, again, in the display area is a full staff of project team members who can answer questions, provide details on the specific alternatives, and better possibly position you for your testimony tonight. You may address any question, again, to the Project Team members. We have also provided maps so you may visualize the proposed alternatives.

I will now ask that the American Sign Language (ASL) and Spanish Language translators to stand. These

COMMENTS **RESPONSES**

comments received on the DEIS and document the basis for the identification of the Preferred Alternative. Following the FEIS, FRA will issue a Record of Decision (ROD) which will formally select the alternative that could be advanced to design and construction.

The FRA is committed to ensuring that no person is excluded from participation in, or denied the benefits of its transit services on the basis of race, color, or national origin, as protected by Title VI of the Civil Rights Act of 1964. You may address any questions to the Project Team, whose representatives are in the cafeteria area, the display area, in the rear to your right.

We have also provided maps so you can visualize the proposed alternative. With us today, we do have persons who can interpret American Sign Language (ASL) and a Spanish translator is also available. If you need the translation for Sign Language, we ask that you position yourself to my left, your right, and make yourself known to our Sign Language interpreter.

COMMENTS | **RESPONSES**

Regarding Spanish Language translation, I would ask that person to address the audience now.

(Whereupon, there was an announcement by the Spanish Language translator.)

THE HEARING OFFICER: Thank you. Ladies and gentlemen, there is a handout which you received which outlines all of the procedures for today's hearing. I will go through those quickly so that they are read into the official record for this hearing.

1. Elected and public officials will be heard first and will receive five minutes to testify.

2. Persons desiring to testify should register at the entrance to the hearing room and will be called in order of registration.

3. Any individual may appear and speak for him or herself, or if duly authorized, for any local civic group, organization, club, or association, subject to the rules provided herein. Speakers should give their name and address. And if they're representing a group, this information should also be given.

COMMENTS

RESPONSES

4. Speakers are requested to limit their speaking to three minutes to be courteous to all of those who may wish to speak. Additional prepared statements or literature pertaining to the B&P Tunnel Project may be submitted at this hearing or submitted by 5:00 p.m., February 26, 2016, to the B&P Tunnel Project DEIS Comment, mailing address 81 West Mosher Street, Baltimore, Maryland 21217.

These statements, both oral and written, will be made a part of the official hearing record. And the address that I referenced is detailed in the handouts this morning.

AUDIENCE MEMBER: There is no West Mosher Street, it's just Mosher Street.

THE HEARING OFFICER: Thank you.

5. For this hearing, all statements, oral or written, should be directed to the Hearing Officer and must be related to the subject matter of this hearing. Oral testimony may also be submitted privately to a court stenographer.

Please speak to hearing staff at the

COMMENTS | **RESPONSES**

registration table if you would like to submit private oral testimony at this hearing. When you speak, we ask that you use the floor microphone, and when you come up, the court stenographer will be making transcription of all of the proceedings, and when you come to that microphone, please state your name and address. In relation to the comment that came from the audience, that exact address is detailed on the printed trail and should be there.

Persons who register to speak will be called in order of registration. If you have not registered to speak, you may do so up until 12:55 p.m. Today our hearing ends at 1:00 o'clock. With your cooperation, everyone will be heard.

A couple of final notes. There are six ways to provide comments on this project and to become a part of the official hearing record:

1. You can leave your comments on the designated drop boxes today. They are located at the registration table in the display area.

2. You may give oral testimony.

COMMENTS | **RESPONSES**

3. You can give testimony in a separate room, private testimony.

4. Written correspondence, once again, to the B&P Tunnel Project address which is detailed in your literature.

5. You can send an e-mail to info@bptunnel.com with "DEIS COMMENT" as the subject line.

6. Or on the website, www.bptunnel.com, you can submit an online comment form.

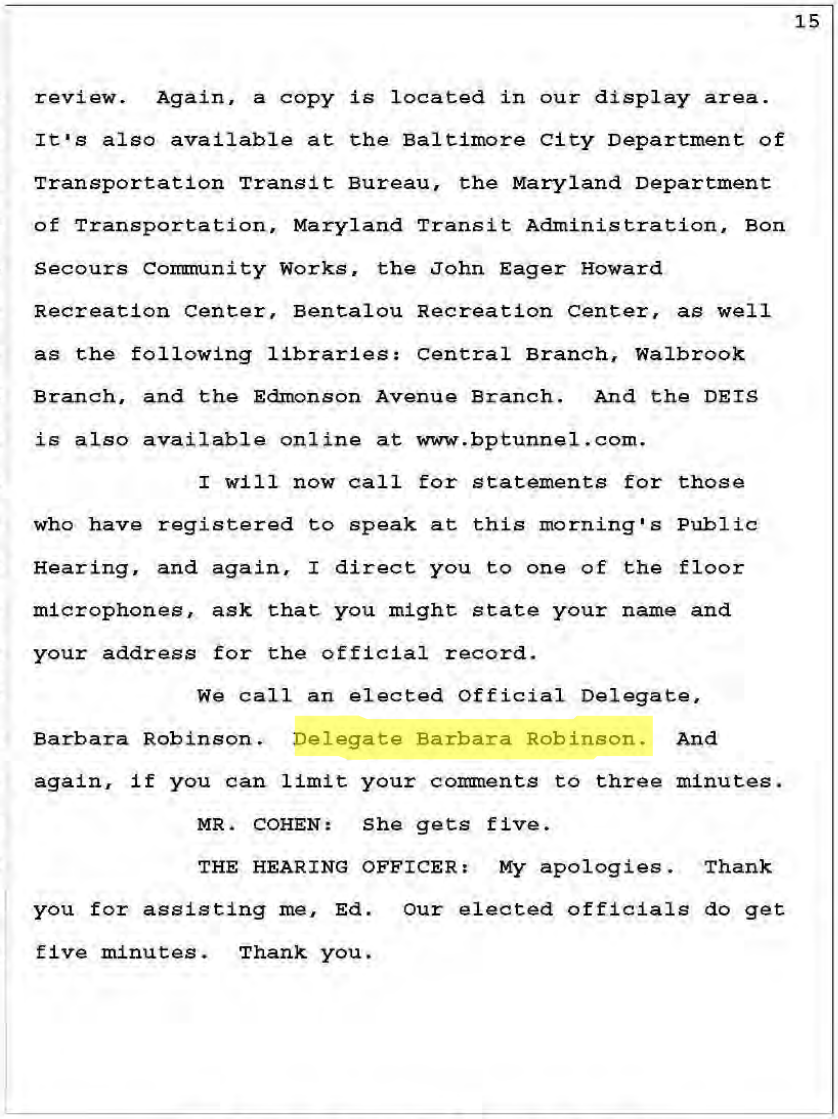
For today's hearing, you must choose one option or the other. You either give oral or private testimony. Again, our deadline for all comments is 5:00 p.m. on February 26. And for the record, announcement of these hearings has been made in the following publications:

- The Afro-American
- Baltimore Sun
- City Paper
- The Grace & Glory Magazine.

The DEIS will remain available for public

COMMENTS | **RESPONSES**

DEIS Comment 119:



15

review. Again, a copy is located in our display area. It's also available at the Baltimore City Department of Transportation Transit Bureau, the Maryland Department of Transportation, Maryland Transit Administration, Bon Secours Community Works, the John Eager Howard Recreation Center, Bentalou Recreation Center, as well as the following libraries: Central Branch, Walbrook Branch, and the Edmonson Avenue Branch. And the DEIS is also available online at www.bptunnel.com.

I will now call for statements for those who have registered to speak at this morning's Public Hearing, and again, I direct you to one of the floor microphones, ask that you might state your name and your address for the official record.

We call an elected Official Delegate, Barbara Robinson. Delegate Barbara Robinson. And again, if you can limit your comments to three minutes.

MR. COHEN: She gets five.

THE HEARING OFFICER: My apologies. Thank you for assisting me, Ed. Our elected officials do get five minutes. Thank you.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

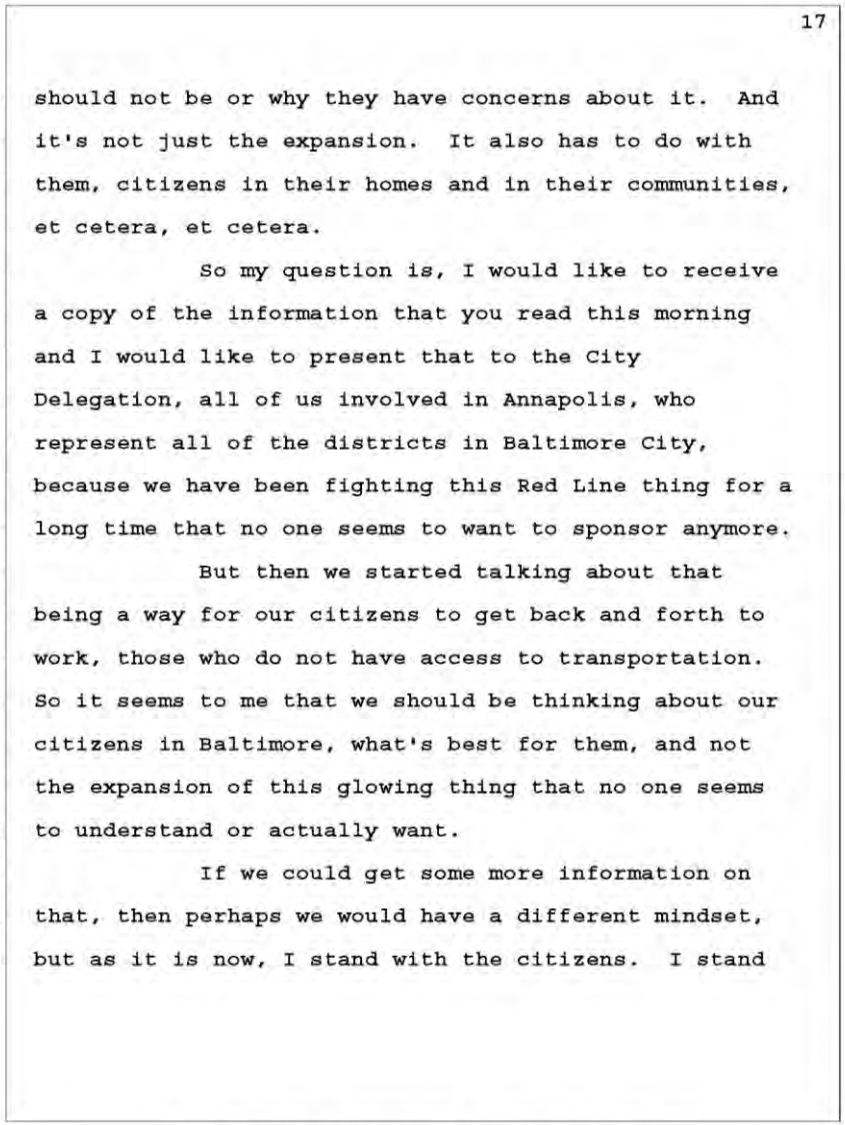
COMMENTS | **RESPONSES**

DELEGATE ROBINSON: Thank you so much. And good morning to everybody. And I must say that this is the first time that I've attended this meeting concerning the tunnel. And what actually prompted me to come here this morning, I sit on the Appropriations Committee in Annapolis. And sitting in there, we were listening to the budget for the tunnel, the budget for the transportation, et cetera.

And I received an e-mail, Residents Against the Tunnel. And I started reading it, and it actually caught my attention so I passed it on to one of the budget handlers. And I said, "Look into this, if you will, and get back to me what this is all about."

I also -- I live in Reservoir Hill, and I also represent the 40th Legislative District, which is this district. And when I listened to and read some of material, I admit I just received this morning, and it talks about the tunnels. And it talks about all of those glowing effects of how the transportation would be improved. But then I looked at this very detailed report from some of the citizens that talk about why it

COMMENTS



17

should not be or why they have concerns about it. And it's not just the expansion. It also has to do with them, citizens in their homes and in their communities, et cetera, et cetera.

So my question is, I would like to receive a copy of the information that you read this morning and I would like to present that to the City Delegation, all of us involved in Annapolis, who represent all of the districts in Baltimore City, because we have been fighting this Red Line thing for a long time that no one seems to want to sponsor anymore.

But then we started talking about that being a way for our citizens to get back and forth to work, those who do not have access to transportation. So it seems to me that we should be thinking about our citizens in Baltimore, what's best for them, and not the expansion of this glowing thing that no one seems to understand or actually want.

If we could get some more information on that, then perhaps we would have a different mindset, but as it is now, I stand with the citizens. I stand

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

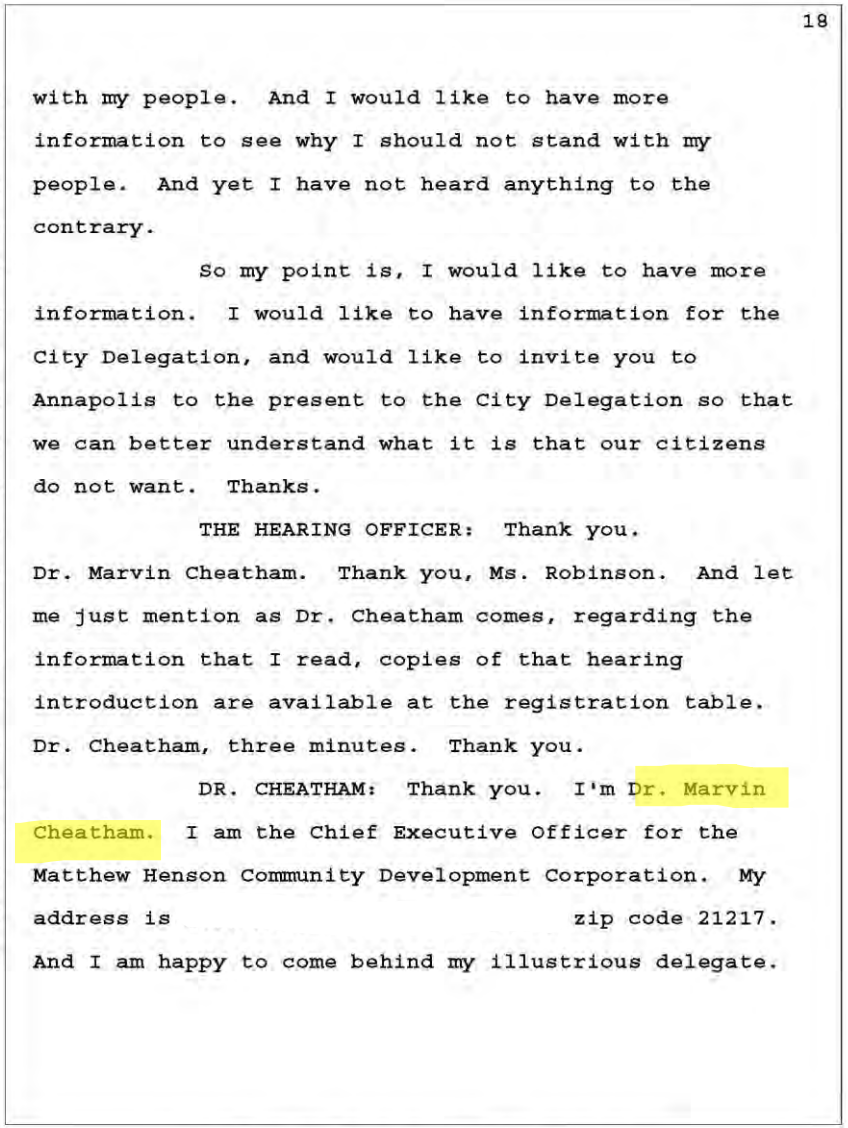
1

RESPONSES

Response to Comment 1:
The Project Team has engaged in extensive public outreach throughout the development of the Project, including holding three public open houses and ten community meetings where the public was given the opportunity to learn about project development and engage in discussion with the Project Team. In addition to these meetings, the Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS. Details of outreach are described in **Chapter VI** as well as **Chapter VIII**.

COMMENTS | **RESPONSES**

DEIS Comment 120:



18

with my people. And I would like to have more information to see why I should not stand with my people. And yet I have not heard anything to the contrary.

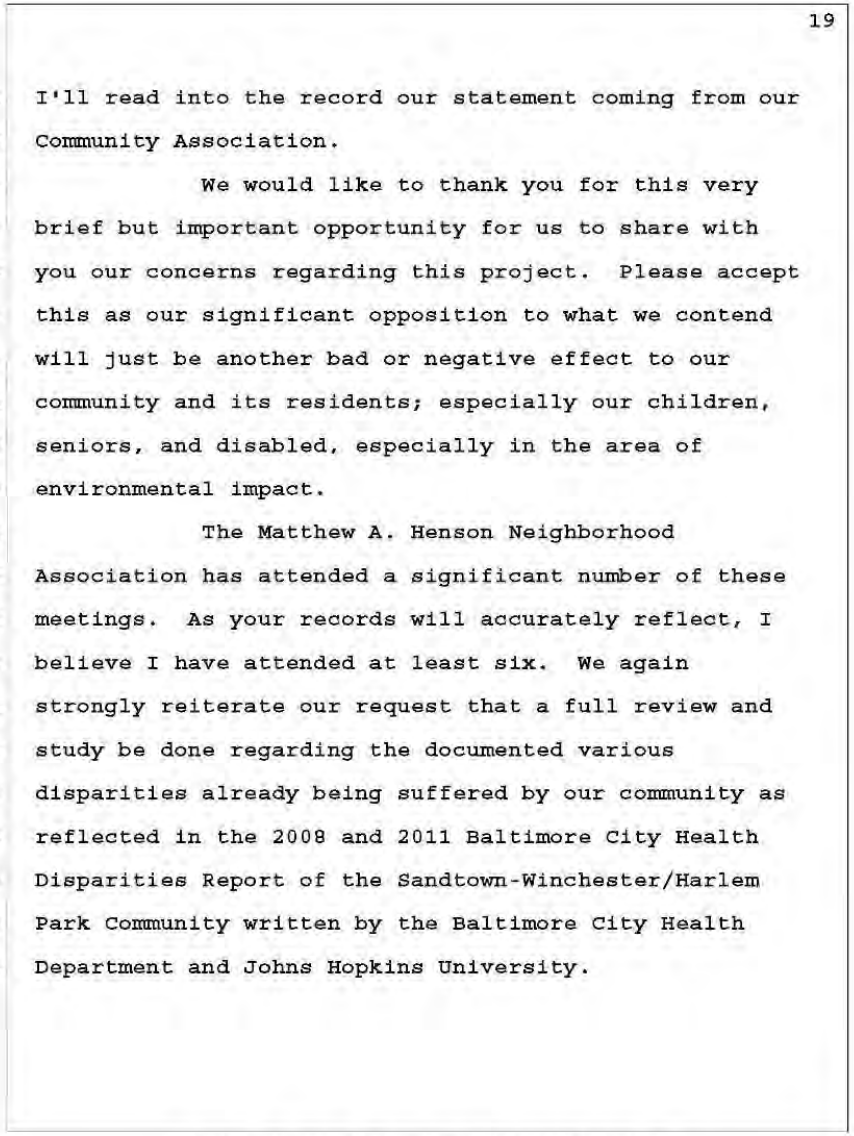
So my point is, I would like to have more information. I would like to have information for the City Delegation, and would like to invite you to Annapolis to the present to the City Delegation so that we can better understand what it is that our citizens do not want. Thanks.

THE HEARING OFFICER: Thank you. Dr. Marvin Cheatham. Thank you, Ms. Robinson. And let me just mention as Dr. Cheatham comes, regarding the information that I read, copies of that hearing introduction are available at the registration table. Dr. Cheatham, three minutes. Thank you.

DR. CHEATHAM: Thank you. I'm Dr. Marvin Cheatham. I am the Chief Executive Officer for the Matthew Henson Community Development Corporation. My address is zip code 21217. And I am happy to come behind my illustrious delegate.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



19

I'll read into the record our statement coming from our Community Association.

We would like to thank you for this very brief but important opportunity for us to share with you our concerns regarding this project. Please accept this as our significant opposition to what we contend will just be another bad or negative effect to our community and its residents; especially our children, seniors, and disabled, especially in the area of environmental impact.

The Matthew A. Henson Neighborhood Association has attended a significant number of these meetings. As your records will accurately reflect, I believe I have attended at least six. We again strongly reiterate our request that a full review and study be done regarding the documented various

1 disparities already being suffered by our community as reflected in the 2008 and 2011 Baltimore City Health Disparities Report of the Sandtown-Winchester/Harlem Park Community written by the Baltimore City Health Department and Johns Hopkins University.

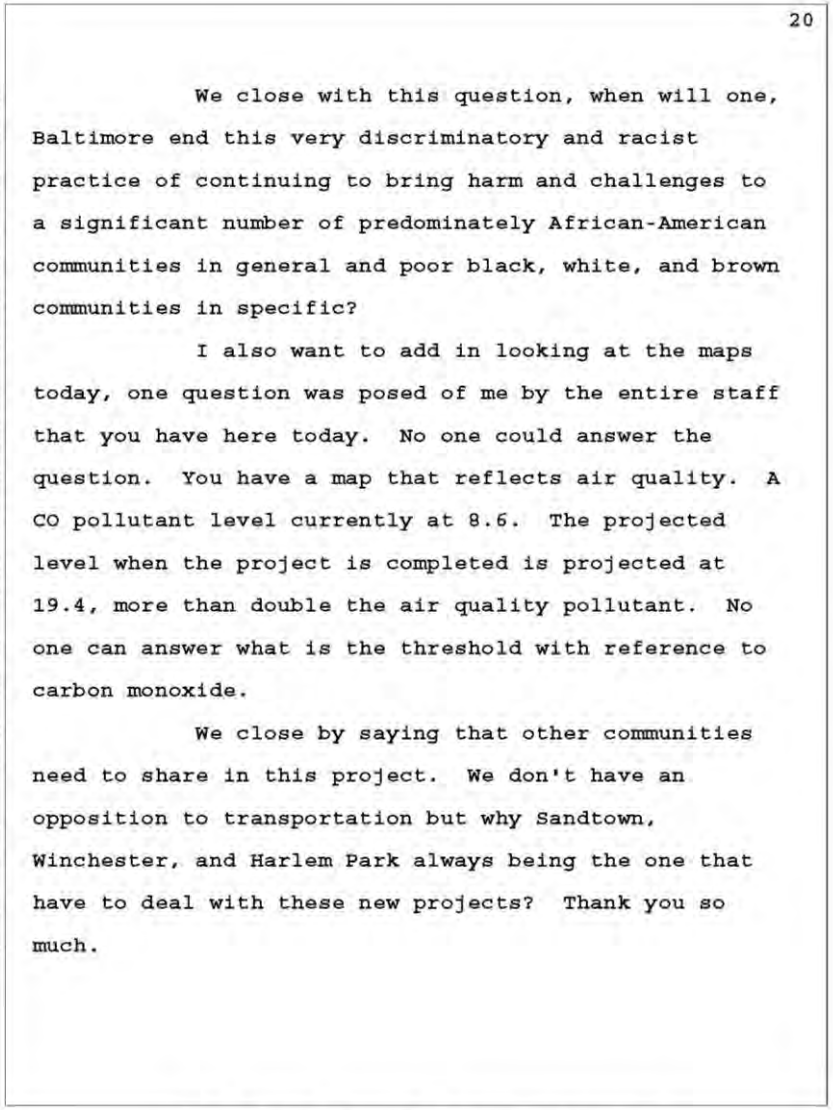
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
Regarding the Baltimore City Health Disparities Report written by the Baltimore City Health Department and Johns Hopkins University, Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS.

The Preferred Alternative would pose no health or safety risks that would disproportionately affect children. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water. Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

COMMENTS



20

We close with this question, when will one, Baltimore end this very discriminatory and racist practice of continuing to bring harm and challenges to a significant number of predominately African-American communities in general and poor black, white, and brown communities in specific?

I also want to add in looking at the maps today, one question was posed of me by the entire staff that you have here today. No one could answer the question. You have a map that reflects air quality. A CO pollutant level currently at 8.6. The projected level when the project is completed is projected at 19.4, more than double the air quality pollutant. No one can answer what is the threshold with reference to carbon monoxide.

We close by saying that other communities need to share in this project. We don't have an opposition to transportation but why Sandtown, Winchester, and Harlem Park always being the one that have to deal with these new projects? Thank you so much.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 2:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the Executive Order on environmental justice is public outreach. The Project Team has conducted extensive engagement with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the Project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

COMMENTS

RESPONSES

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 3:
Regarding the CO threshold, EPA sets *de minimis* thresholds for every 'criteria' pollutant. However, those thresholds are only applicable in areas that are in non-attainment or maintenance status for a particular pollutant. Baltimore City is in attainment for CO, so the threshold does not apply. As a result, the threshold for CO did not appear on the board at the meeting.

COMMENTS

RESPONSES

DEIS Comment 121:

THE HEARING OFFICER: Councilperson Nick Mosby. And we remind everyone again, our statements are three minutes. Our elected officials get five minutes. Mr. Mosby.

COUNCILMAN MOSBY: First and foremost, thank you for allowing me the opportunity to come and speak to you today. I am the City Councilman in the 7th District that is impacted by this design. But more importantly as a resident, growing up here in the City of Baltimore, my family having deep roots in the West Baltimore in the Franklin Square community, I know firsthand the adverse effects that transportation projects have caused on the West Baltimore residents.

When you talk about the highway to nowhere, and of course none of us here today have direct involvement in that project, but I think it's important to interject the history of where we are currently today in West Baltimore. When we talk about the highway to nowhere that ripped out thousands upon thousands of homes, and really developed the demarcation to destroy the housing stock in West

COMMENTS

RESPONSES

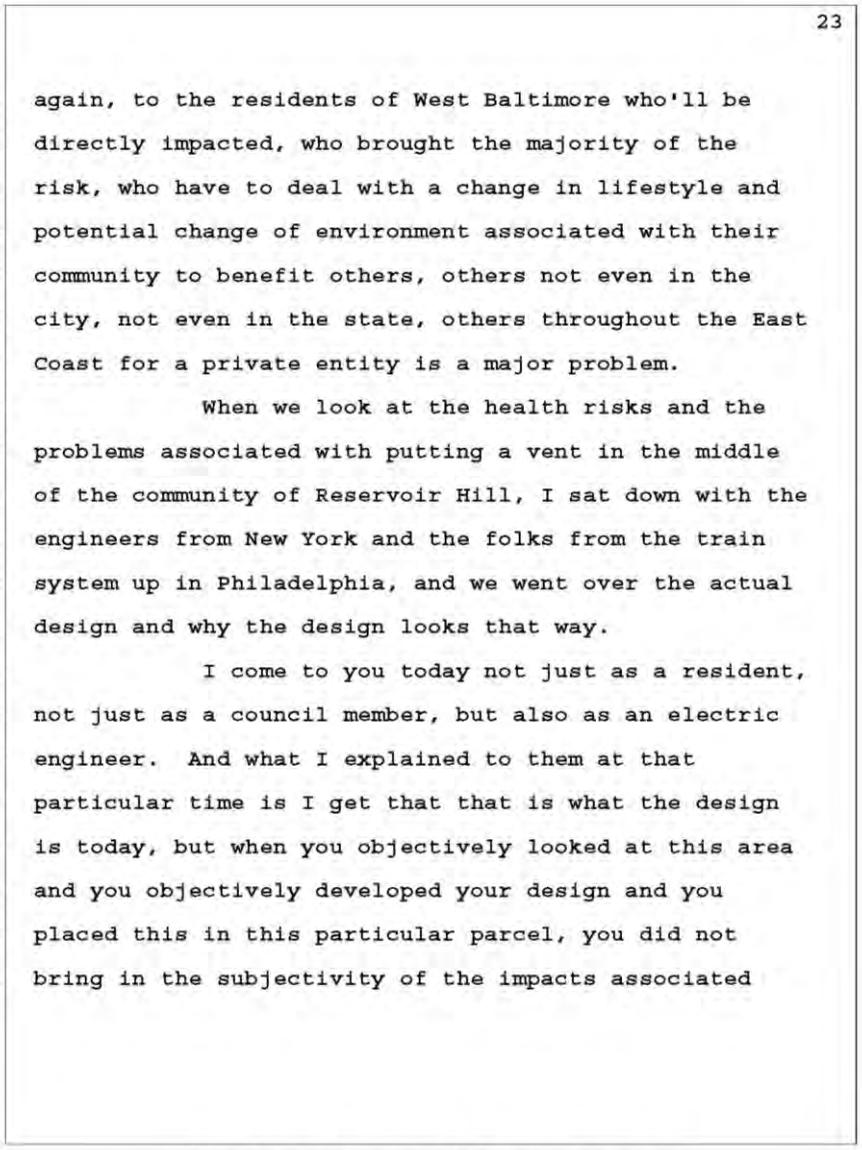
Baltimore, predominately African-American community, for a highway that really has not resulted in any significant growth, economic growth, or any community growth in that area, that's a major challenge.

We talk about 83, how it ripped up part of my community in Reservoir Hill, that's something that we can't erase. However, it impacts the community today by again, creating the huge demarcation between the neighboring communities and neighboring assets. Then lastly, when you talk about the Red Line, and again, none of us today have anything to do with specifically the elimination of the Red Line, but we know the Achilles heel of the City of Baltimore is transportation.

And the Red Line may not have been a perfect system. However, we know that transportation disproportionately impacts the poor and residents of West Baltimore getting access to jobs in Baltimore County, on the east side. By taking the Red Line away, that basically eliminated that possibility.

Now that we come with this B&P Tunnel,

COMMENTS



23

again, to the residents of West Baltimore who'll be directly impacted, who brought the majority of the risk, who have to deal with a change in lifestyle and potential change of environment associated with their community to benefit others, others not even in the city, not even in the state, others throughout the East Coast for a private entity is a major problem.

When we look at the health risks and the problems associated with putting a vent in the middle of the community of Reservoir Hill, I sat down with the engineers from New York and the folks from the train system up in Philadelphia, and we went over the actual design and why the design looks that way.

I come to you today not just as a resident, not just as a council member, but also as an electric engineer. And what I explained to them at that particular time is I get that that is what the design is today, but when you objectively looked at this area and you objectively developed your design and you placed this in this particular parcel, you did not bring in the subjectivity of the impacts associated

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

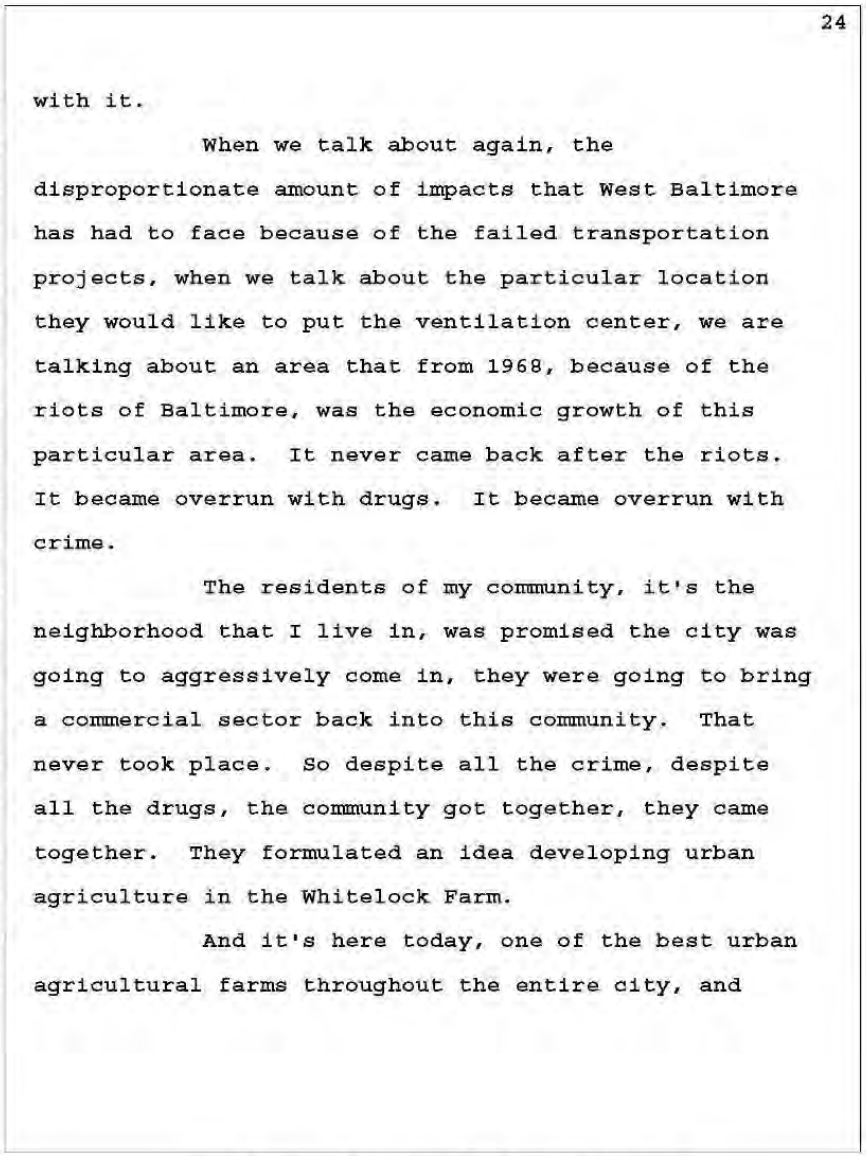
Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Response to Comment 2:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



24

with it.

When we talk about again, the disproportionate amount of impacts that West Baltimore has had to face because of the failed transportation projects, when we talk about the particular location they would like to put the ventilation center, we are talking about an area that from 1968, because of the riots of Baltimore, was the economic growth of this particular area. It never came back after the riots. It became overrun with drugs. It became overrun with crime.

The residents of my community, it's the neighborhood that I live in, was promised the city was going to aggressively come in, they were going to bring a commercial sector back into this community. That never took place. So despite all the crime, despite all the drugs, the community got together, they came together. They formulated an idea developing urban agriculture in the Whitelock Farm.

And it's here today, one of the best urban agricultural farms throughout the entire city, and

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

3

RESPONSES

Response to Comment 3:
The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

COMMENTS | **RESPONSES**

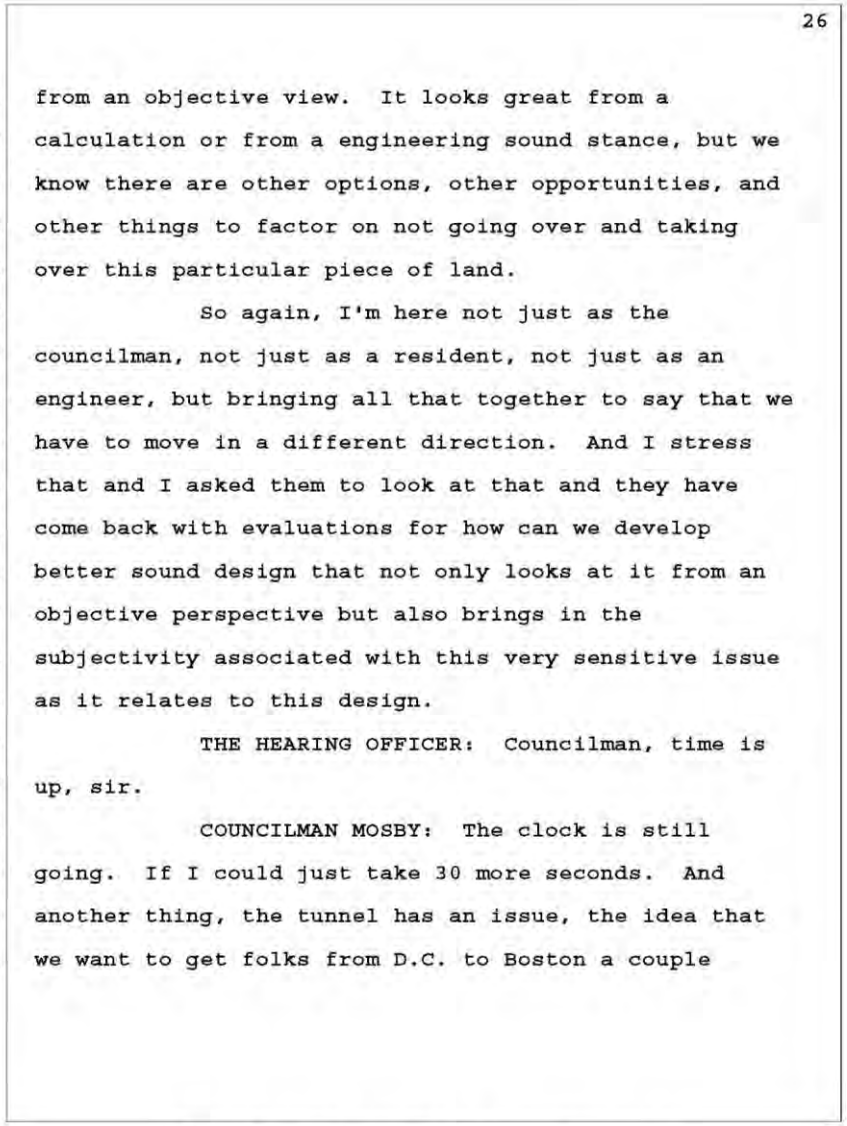
which is really used as a model throughout the city of Baltimore. It is nothing that the City of Baltimore did. It was nothing that the state did. It was nothing that the federal government did. It just took hardworking community members coming together to fight for their community.

The fact that we talk now about taking lots away and make it into a ventilation system where it's literally directly across the street from a large apartment building, where it's literally directly across an alley with houses, directly across from this urban agriculture, directly across from a basketball court, directly across from a community center, it is not the place for this ventilation unit.

(Applause.)

And folks can sit in New York, folks can sit in Philadelphia, folks can sit in Washington, D.C. to make decisions about our community. But as a councilman, I am here to tell you it's not going to happen because we have been adversely impacted by these failed decisions over and over again. It looks great

COMMENTS



26

from an objective view. It looks great from a calculation or from a engineering sound stance, but we know there are other options, other opportunities, and other things to factor on not going over and taking over this particular piece of land.

4

So again, I'm here not just as the councilman, not just as a resident, not just as an engineer, but bringing all that together to say that we have to move in a different direction. And I stress that and I asked them to look at that and they have come back with evaluations for how can we develop better sound design that not only looks at it from an objective perspective but also brings in the subjectivity associated with this very sensitive issue as it relates to this design.

THE HEARING OFFICER: Councilman, time is up, sir.

COUNCILMAN MOSBY: The clock is still going. If I could just take 30 more seconds. And another thing, the tunnel has an issue, the idea that we want to get folks from D.C. to Boston a couple

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

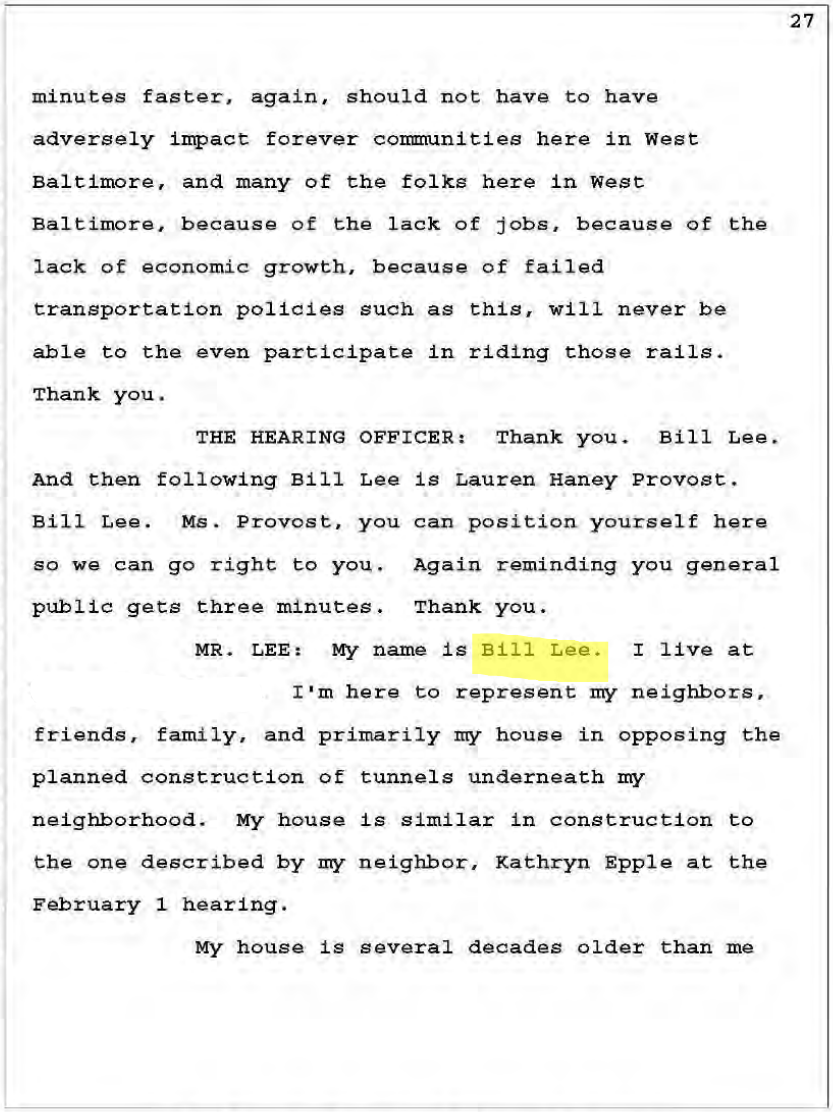
RESPONSES

Response to Comment 4:
Since publication of the DEIS, Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

RESPONSES

DEIS Comment 122:



27

minutes faster, again, should not have to have adversely impact forever communities here in West Baltimore, and many of the folks here in West Baltimore, because of the lack of jobs, because of the lack of economic growth, because of failed transportation policies such as this, will never be able to the even participate in riding those rails. Thank you.

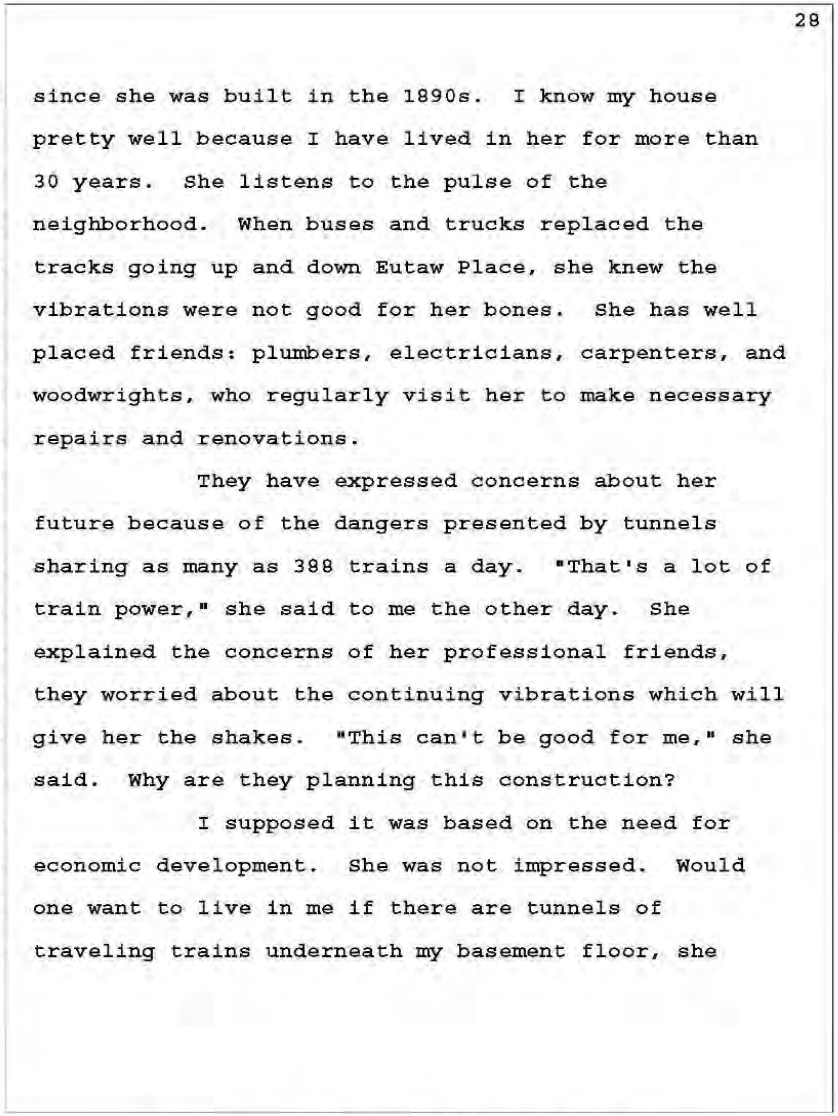
THE HEARING OFFICER: Thank you. Bill Lee. And then following Bill Lee is Lauren Haney Provost. Bill Lee. Ms. Provost, you can position yourself here so we can go right to you. Again reminding you general public gets three minutes. Thank you.

MR. LEE: My name is Bill Lee. I live at I'm here to represent my neighbors, friends, family, and primarily my house in opposing the planned construction of tunnels underneath my neighborhood. My house is similar in construction to the one described by my neighbor, Kathryn Epple at the February 1 hearing.

My house is several decades older than me

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



28

since she was built in the 1890s. I know my house pretty well because I have lived in her for more than 30 years. She listens to the pulse of the neighborhood. When buses and trucks replaced the tracks going up and down Eutaw Place, she knew the vibrations were not good for her bones. She has well placed friends: plumbers, electricians, carpenters, and woodwrights, who regularly visit her to make necessary repairs and renovations.

They have expressed concerns about her future because of the dangers presented by tunnels sharing as many as 388 trains a day. "That's a lot of train power," she said to me the other day. She explained the concerns of her professional friends, they worried about the continuing vibrations which will give her the shakes. "This can't be good for me," she said. Why are they planning this construction?

I supposed it was based on the need for economic development. She was not impressed. Would one want to live in me if there are tunnels of traveling trains underneath my basement floor, she

1

2

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

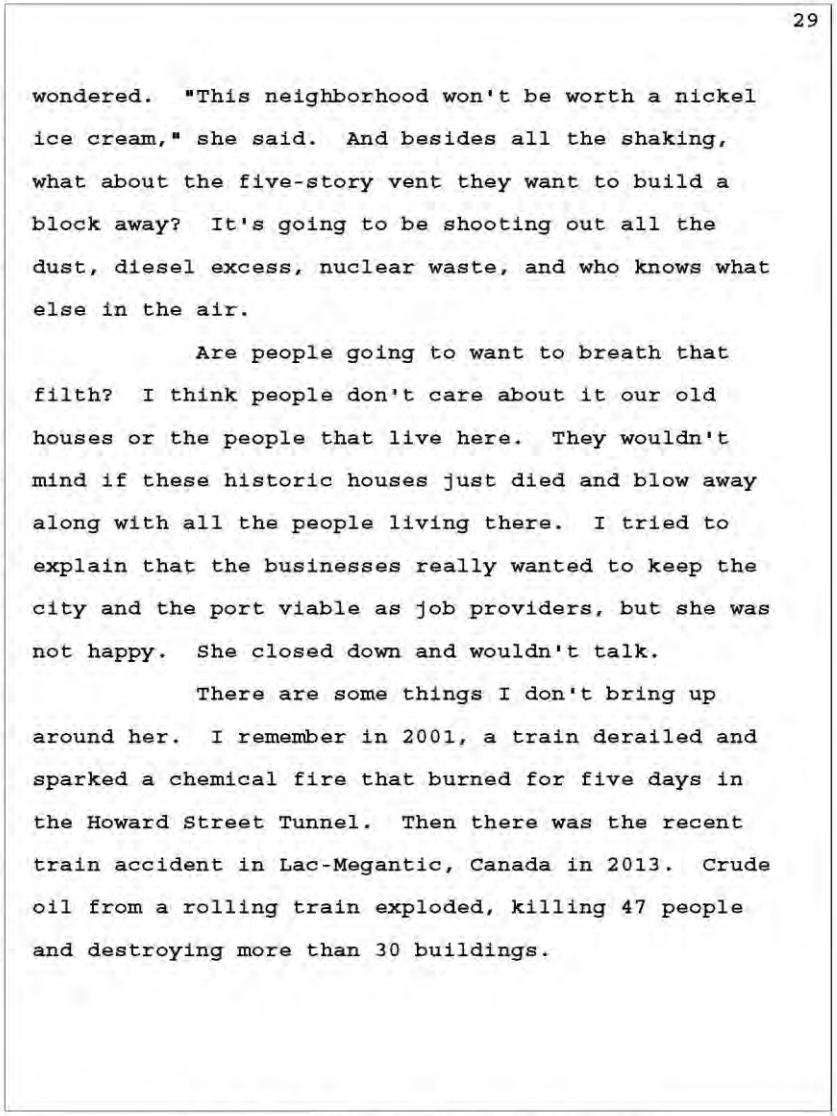
Response to Comment 2:
The Purpose of the Project is to address the structural and operational deficiencies of the existing B&P Tunnel and to accommodate future high-performance intercity passenger rail service goals for the NEC, including:

- 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.

The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

Response to Comment 3:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS



29

wondered. "This neighborhood won't be worth a nickel ice cream," she said. And besides all the shaking, what about the five-story vent they want to build a block away? It's going to be shooting out all the dust, diesel excess, nuclear waste, and who knows what else in the air.

Are people going to want to breath that filth? I think people don't care about it our old houses or the people that live here. They wouldn't mind if these historic houses just died and blow away along with all the people living there. I tried to explain that the businesses really wanted to keep the city and the port viable as job providers, but she was not happy. She closed down and wouldn't talk.

There are some things I don't bring up around her. I remember in 2001, a train derailed and sparked a chemical fire that burned for five days in the Howard Street Tunnel. Then there was the recent train accident in Lac-Megantic, Canada in 2013. Crude oil from a rolling train exploded, killing 47 people and destroying more than 30 buildings.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

5

6

RESPONSES

Response to Comment 4:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 5:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

COMMENTS

RESPONSES

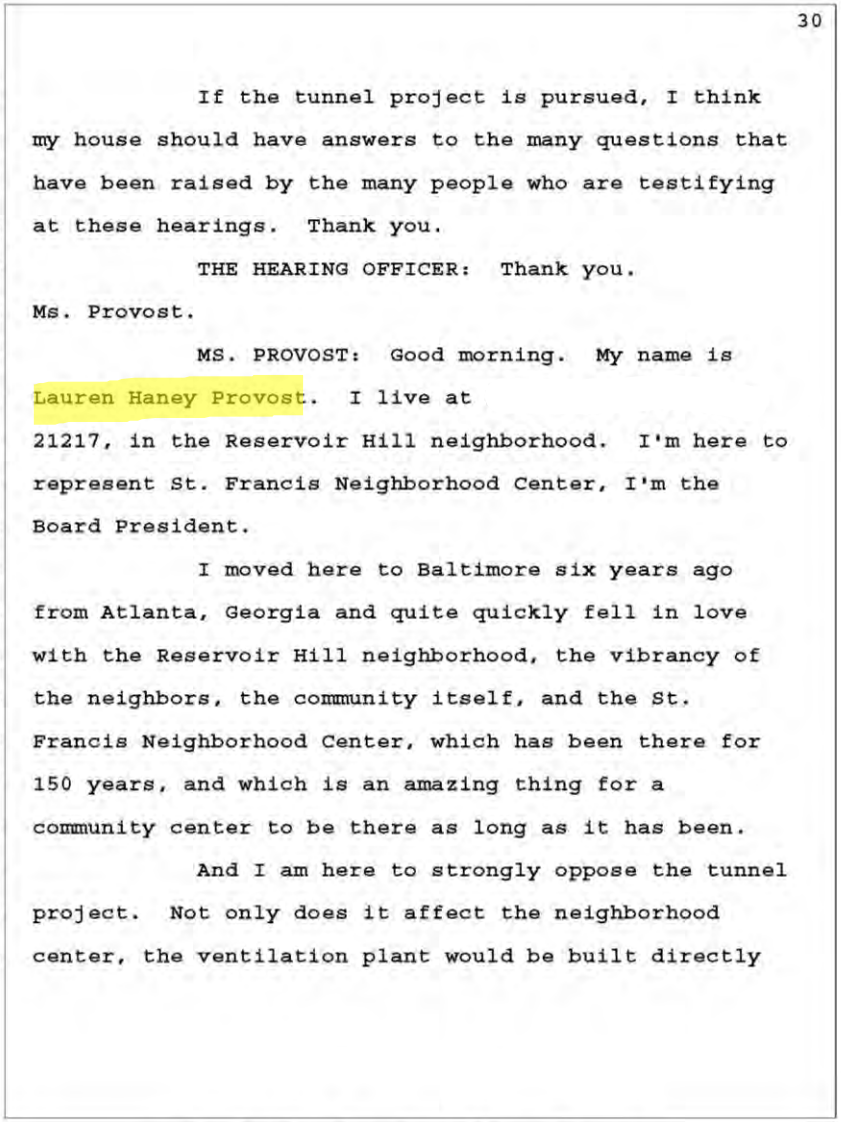
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative.

Response to Comment 6:
The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than a fire or other emergency event on an above-ground track running through the neighborhood. The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

COMMENTS

RESPONSES

DEIS Comment 123:



30

If the tunnel project is pursued, I think my house should have answers to the many questions that have been raised by the many people who are testifying at these hearings. Thank you.

THE HEARING OFFICER: Thank you. Ms. Provost.

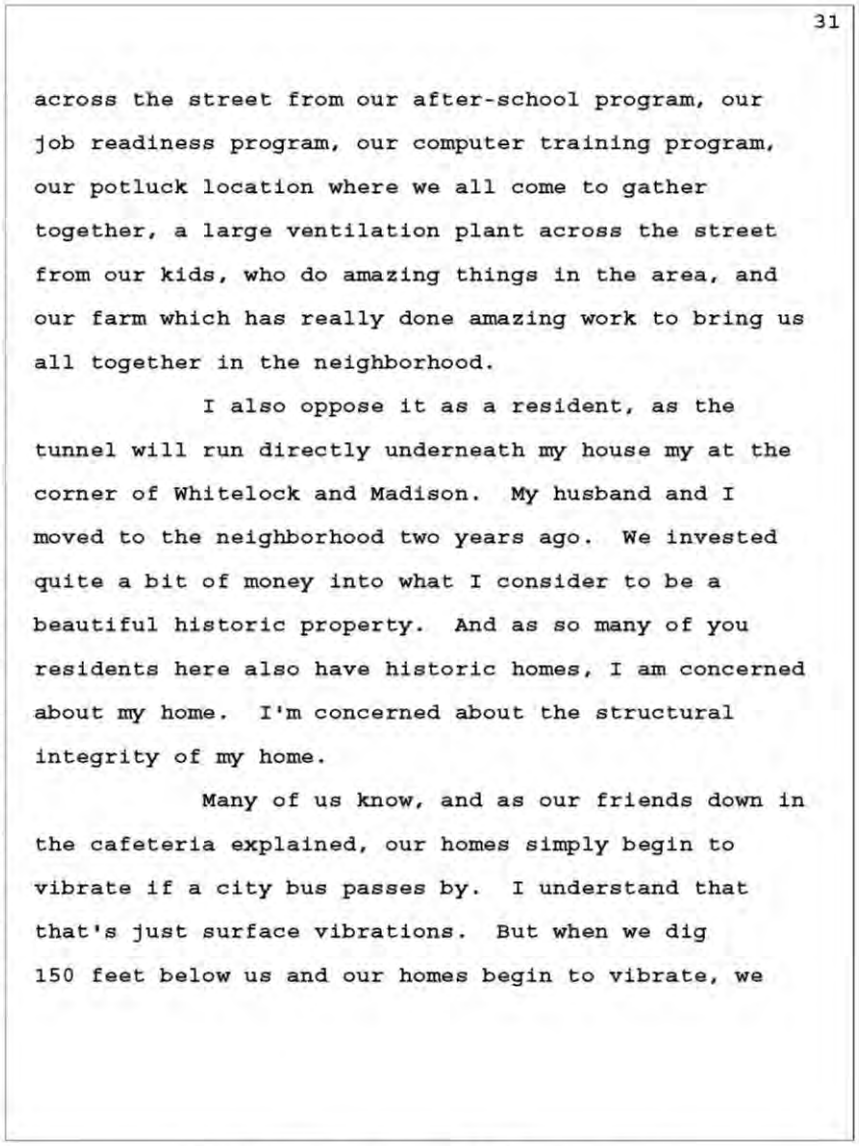
MS. PROVOST: Good morning. My name is Lauren Haney Provost. I live at 21217, in the Reservoir Hill neighborhood. I'm here to represent St. Francis Neighborhood Center, I'm the Board President.

I moved here to Baltimore six years ago from Atlanta, Georgia and quite quickly fell in love with the Reservoir Hill neighborhood, the vibrancy of the neighbors, the community itself, and the St. Francis Neighborhood Center, which has been there for 150 years, and which is an amazing thing for a community center to be there as long as it has been.

And I am here to strongly oppose the tunnel project. Not only does it affect the neighborhood center, the ventilation plant would be built directly

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



31

across the street from our after-school program, our job readiness program, our computer training program, our potluck location where we all come to gather together, a large ventilation plant across the street from our kids, who do amazing things in the area, and our farm which has really done amazing work to bring us all together in the neighborhood. 1

I also oppose it as a resident, as the tunnel will run directly underneath my house my at the corner of Whitelock and Madison. My husband and I moved to the neighborhood two years ago. We invested quite a bit of money into what I consider to be a beautiful historic property. And as so many of you residents here also have historic homes, I am concerned about my home. I'm concerned about the structural integrity of my home. 2

Many of us know, and as our friends down in the cafeteria explained, our homes simply begin to vibrate if a city bus passes by. I understand that that's just surface vibrations. But when we dig 150 feet below us and our homes begin to vibrate, we 3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

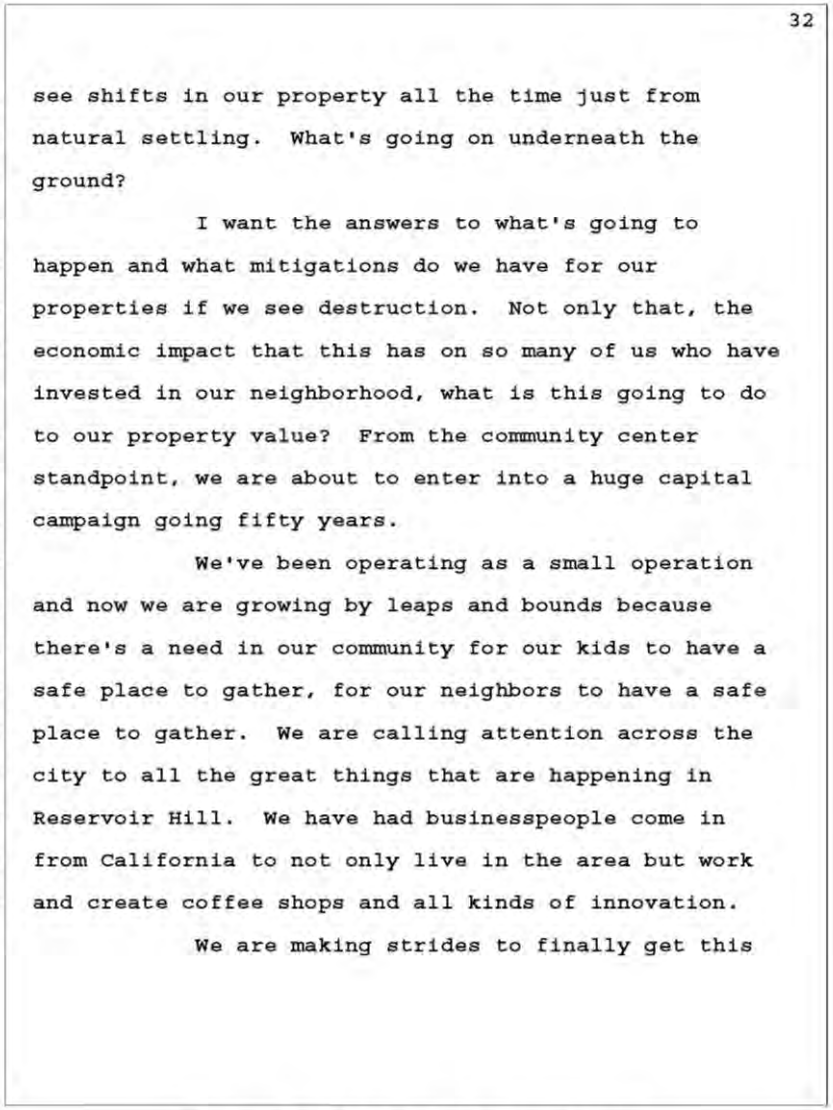
Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 3:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty

COMMENTS



32

see shifts in our property all the time just from natural settling. What's going on underneath the ground?

I want the answers to what's going to happen and what mitigations do we have for our properties if we see destruction. Not only that, the economic impact that this has on so many of us who have invested in our neighborhood, what is this going to do to our property value? From the community center standpoint, we are about to enter into a huge capital campaign going fifty years.

We've been operating as a small operation and now we are growing by leaps and bounds because there's a need in our community for our kids to have a safe place to gather, for our neighbors to have a safe place to gather. We are calling attention across the city to all the great things that are happening in Reservoir Hill. We have had businesspeople come in from California to not only live in the area but work and create coffee shops and all kinds of innovation.

We are making strides to finally get this

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

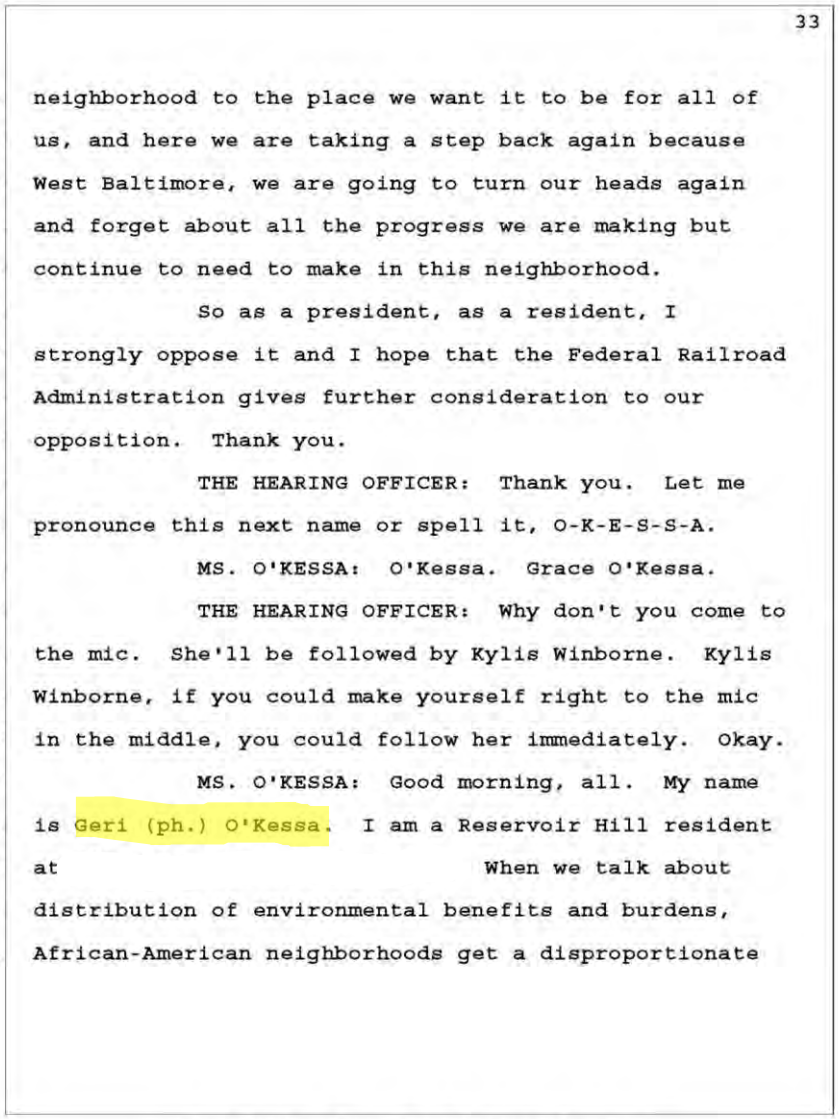
Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Response to Comment 4:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

DEIS Comment 124:



33

neighborhood to the place we want it to be for all of us, and here we are taking a step back again because West Baltimore, we are going to turn our heads again and forget about all the progress we are making but continue to need to make in this neighborhood.

So as a president, as a resident, I strongly oppose it and I hope that the Federal Railroad Administration gives further consideration to our opposition. Thank you.

THE HEARING OFFICER: Thank you. Let me pronounce this next name or spell it, O-K-E-S-S-A.

MS. O'KESSA: O'Kessa. Grace O'Kessa.

THE HEARING OFFICER: Why don't you come to the mic. She'll be followed by Kylis Winborne. Kylis Winborne, if you could make yourself right to the mic in the middle, you could follow her immediately. Okay.

MS. O'KESSA: Good morning, all. My name is Geri (ph.) O'Kessa. I am a Reservoir Hill resident at When we talk about distribution of environmental benefits and burdens, African-American neighborhoods get a disproportionate

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

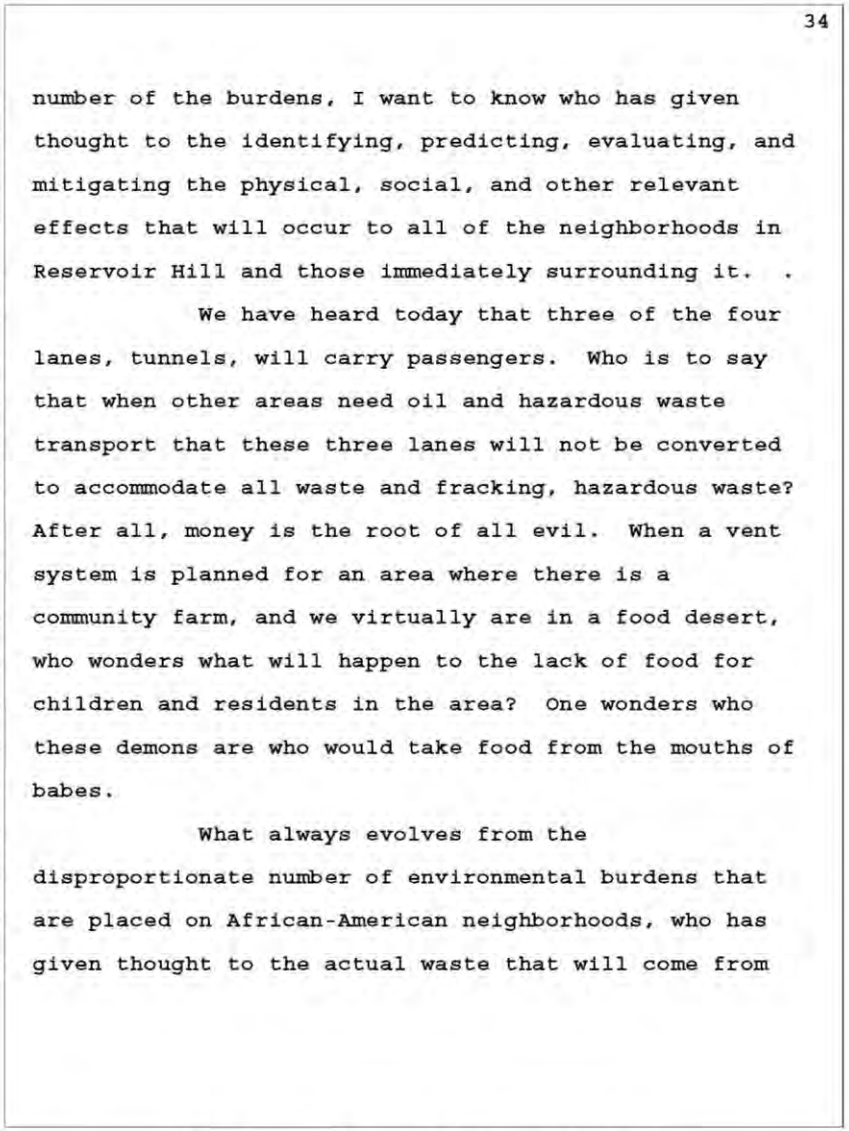
RESPONSES

Response to Comment 1:
The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**.

The Project Team has engaged in extensive public outreach throughout the development of the project, including holding three public open houses and ten community meetings where the public was given the opportunity to learn about the project and engage in discussion with the Project Team. In addition to these meetings, the Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS. Additional details of this outreach are described in **Chapter VI** as well as **Chapter VIII.**

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS



34

number of the burdens, I want to know who has given thought to the identifying, predicting, evaluating, and mitigating the physical, social, and other relevant effects that will occur to all of the neighborhoods in Reservoir Hill and those immediately surrounding it. .

1

We have heard today that three of the four lanes, tunnels, will carry passengers. Who is to say that when other areas need oil and hazardous waste transport that these three lanes will not be converted to accommodate all waste and fracking, hazardous waste?

2

After all, money is the root of all evil. When a vent system is planned for an area where there is a community farm, and we virtually are in a food desert, who wonders what will happen to the lack of food for children and residents in the area? One wonders who these demons are who would take food from the mouths of babes.

3

What always evolves from the disproportionate number of environmental burdens that are placed on African-American neighborhoods, who has given thought to the actual waste that will come from

4

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

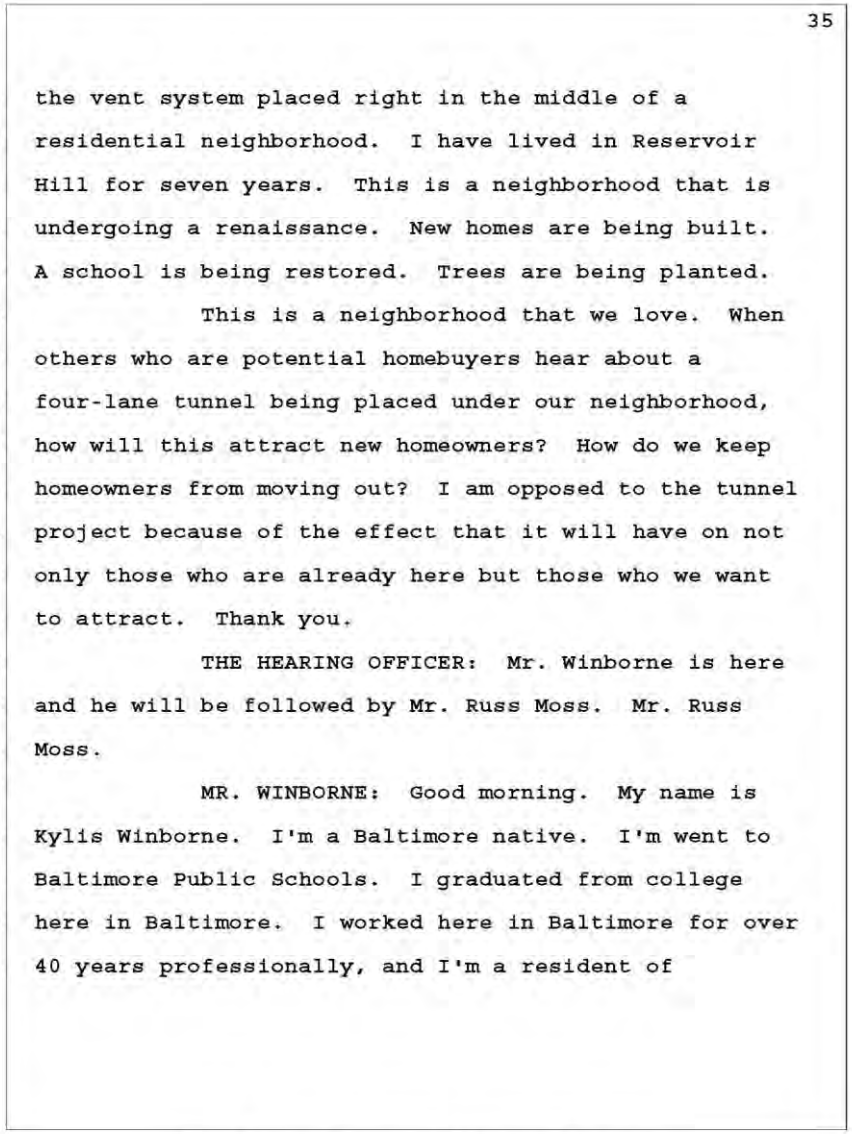
RESPONSES

Response to Comment 2:
Per **Chapter V** of the FEIS, it is projected that in 2040, 388 trains are expected to use the tunnel—386 passenger trains with no hazardous material cargo, and two freight trains with the potential to have limited hazardous material cargo (based on current freight volumes projected into the future). Since Amtrak is responsible for operating a robust passenger rail service, the two inner tracks of the four-track tunnel system would be reserved (in all but emergency conditions) for high-speed passenger train operations and freight services would be restricted to share the two slower, outer tracks. It is not possible for the tunnel system to accommodate significantly increased freight operations.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

COMMENTS



35

the vent system placed right in the middle of a residential neighborhood. I have lived in Reservoir Hill for seven years. This is a neighborhood that is undergoing a renaissance. New homes are being built. A school is being restored. Trees are being planted.

This is a neighborhood that we love. When others who are potential homebuyers hear about a four-lane tunnel being placed under our neighborhood, how will this attract new homeowners? How do we keep homeowners from moving out? I am opposed to the tunnel project because of the effect that it will have on not only those who are already here but those who we want to attract. Thank you.

THE HEARING OFFICER: Mr. Winborne is here and he will be followed by Mr. Russ Moss. Mr. Russ Moss.

MR. WINBORNE: Good morning. My name is Kylis Winborne. I'm a Baltimore native. I'm went to Baltimore Public Schools. I graduated from college here in Baltimore. I worked here in Baltimore for over 40 years professionally, and I'm a resident of

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

5

RESPONSES

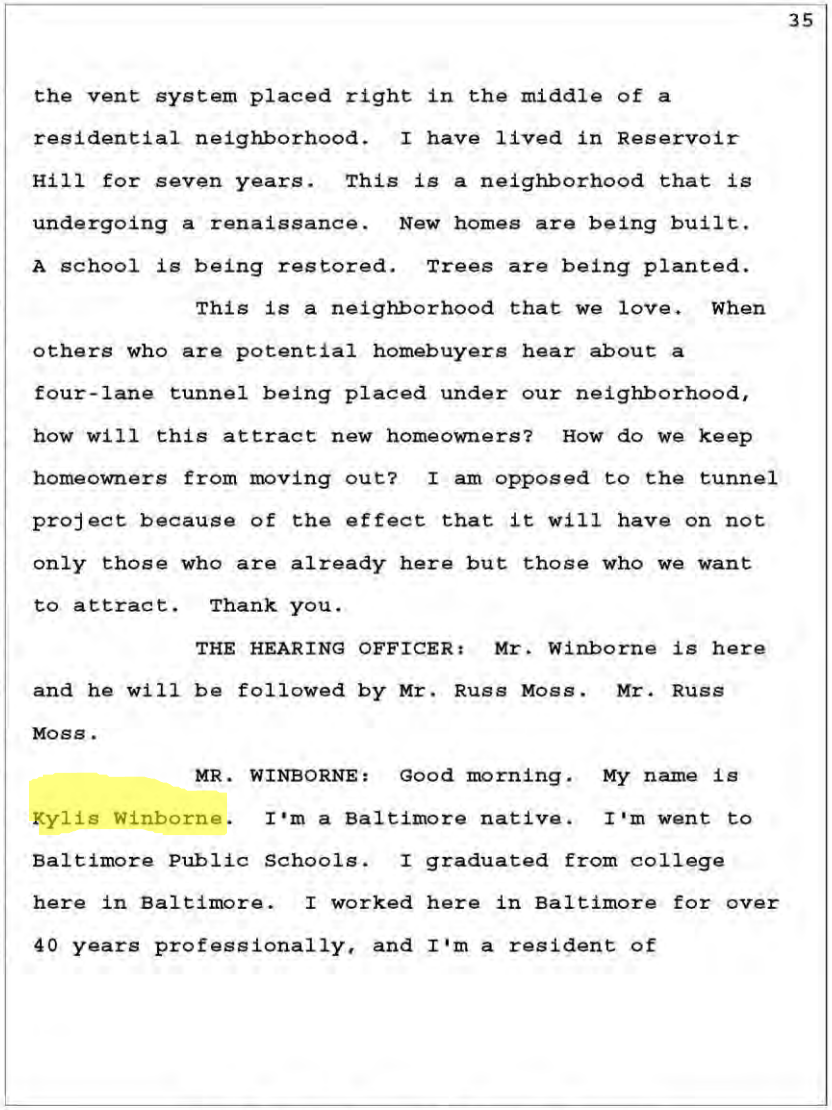
Response to Comment 5:
The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

RESPONSES

DEIS Comment 125:



35

the vent system placed right in the middle of a residential neighborhood. I have lived in Reservoir Hill for seven years. This is a neighborhood that is undergoing a renaissance. New homes are being built. A school is being restored. Trees are being planted.

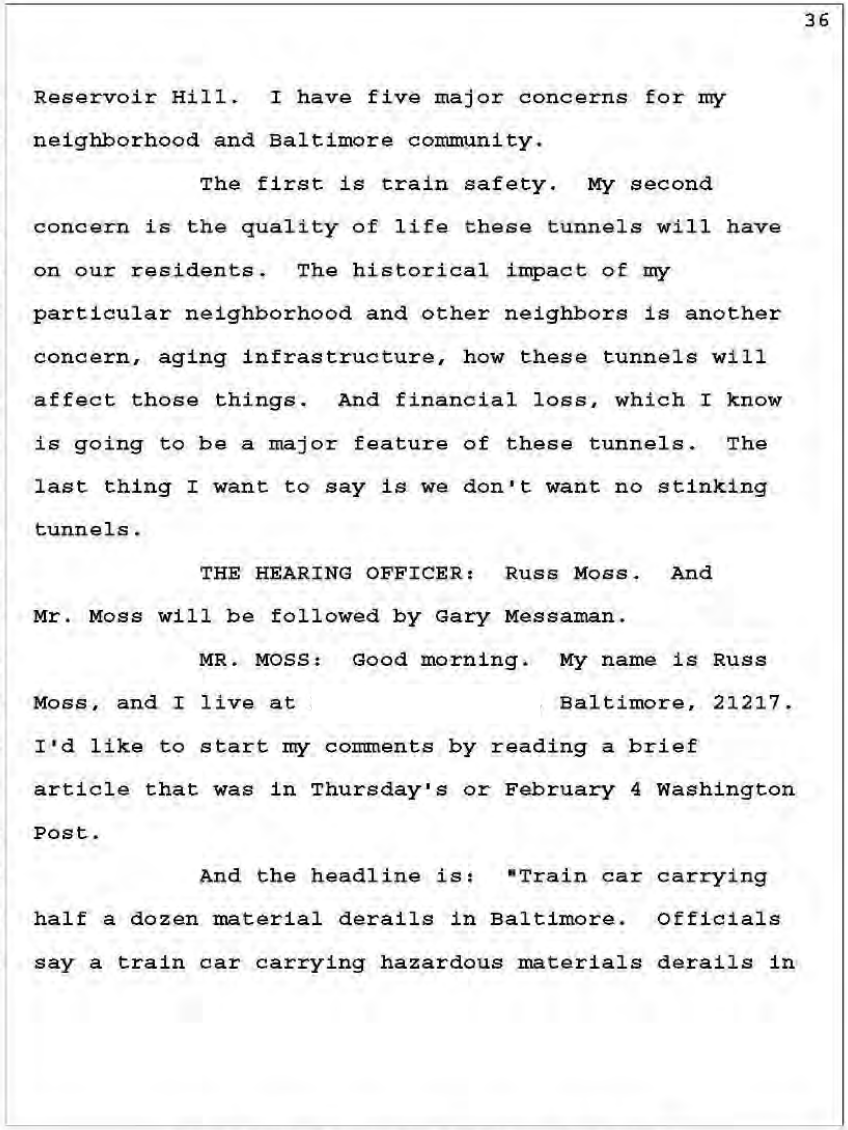
This is a neighborhood that we love. When others who are potential homebuyers hear about a four-lane tunnel being placed under our neighborhood, how will this attract new homeowners? How do we keep homeowners from moving out? I am opposed to the tunnel project because of the effect that it will have on not only those who are already here but those who we want to attract. Thank you.

THE HEARING OFFICER: Mr. Winborne is here and he will be followed by Mr. Russ Moss. Mr. Russ Moss.

MR. WINBORNE: Good morning. My name is Kylis Winborne. I'm a Baltimore native. I'm went to Baltimore Public Schools. I graduated from college here in Baltimore. I worked here in Baltimore for over 40 years professionally, and I'm a resident of

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



36

Reservoir Hill. I have five major concerns for my neighborhood and Baltimore community.

1 The first is train safety. My second concern is the quality of life these tunnels will have on our residents. The historical impact of my particular neighborhood and other neighbors is another concern, aging infrastructure, how these tunnels will affect those things. And financial loss, which I know is going to be a major feature of these tunnels. The last thing I want to say is we don't want no stinking tunnels.

THE HEARING OFFICER: Russ Moss. And Mr. Moss will be followed by Gary Messaman.

MR. MOSS: Good morning. My name is Russ Moss, and I live at Baltimore, 21217. I'd like to start my comments by reading a brief article that was in Thursday's or February 4 Washington Post.

And the headline is: "Train car carrying half a dozen material derails in Baltimore. Officials say a train car carrying hazardous materials derails in

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
Trains are among the safest form of transportation available on an accident per passenger-mile basis. In the unlikely event of an accident, local responders receive training for a variety of incidents related to specific facilities, including the B&P Tunnel. The tunnel would be constructed to meet current standards for fire protection. Additionally, the Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan to be implemented in the event of a tunnel emergency.

Response to Comment 2:
Regarding quality of life, potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII.**

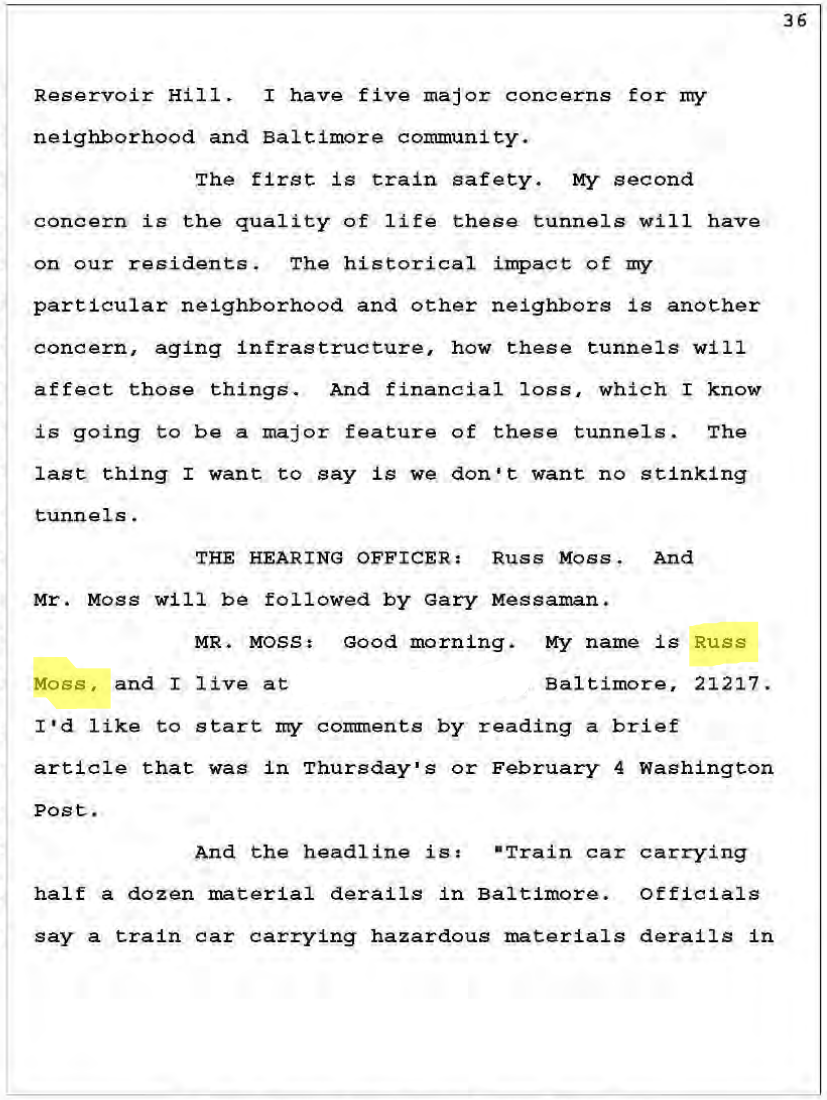
Regarding historical impact, the build alternatives would impact the Midtown-Edmondson Historic District. Construction would require demolition of nine historic properties located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The current preferred location for the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI** and **Chapter VII**.

Response to Comment 3:
The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

DEIS Comment 126:



36

Reservoir Hill. I have five major concerns for my neighborhood and Baltimore community.

The first is train safety. My second concern is the quality of life these tunnels will have on our residents. The historical impact of my particular neighborhood and other neighbors is another concern, aging infrastructure, how these tunnels will affect those things. And financial loss, which I know is going to be a major feature of these tunnels. The last thing I want to say is we don't want no stinking tunnels.

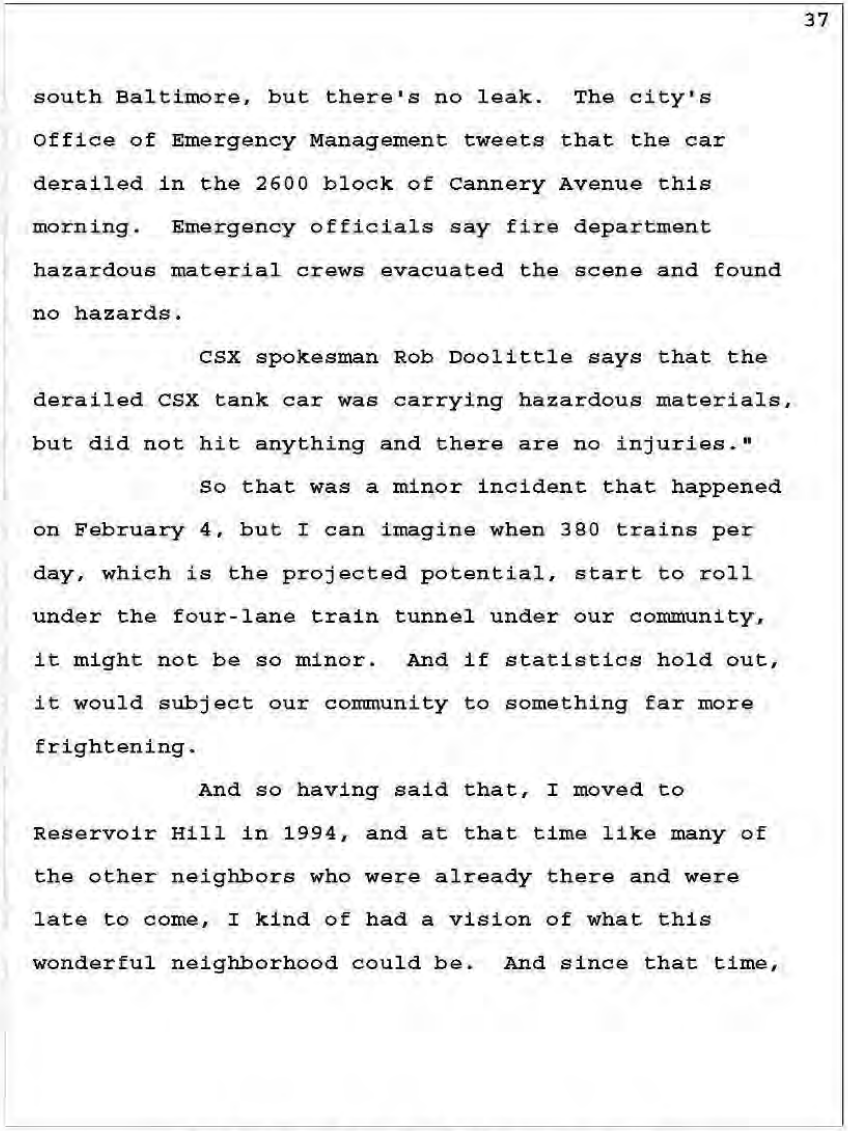
THE HEARING OFFICER: Russ Moss. And Mr. Moss will be followed by Gary Messaman.

MR. MOSS: Good morning. My name is Russ Moss, and I live at Baltimore, 21217. I'd like to start my comments by reading a brief article that was in Thursday's or February 4 Washington Post.

And the headline is: "Train car carrying half a dozen material derails in Baltimore. Officials say a train car carrying hazardous materials derails in

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



37

south Baltimore, but there's no leak. The city's Office of Emergency Management tweets that the car derailed in the 2600 block of Cannery Avenue this morning. Emergency officials say fire department hazardous material crews evacuated the scene and found no hazards.

CSX spokesman Rob Doolittle says that the derailed CSX tank car was carrying hazardous materials, but did not hit anything and there are no injuries."

So that was a minor incident that happened on February 4, but I can imagine when 380 trains per day, which is the projected potential, start to roll under the four-lane train tunnel under our community, it might not be so minor. And if statistics hold out, it would subject our community to something far more frightening.

And so having said that, I moved to Reservoir Hill in 1994, and at that time like many of the other neighbors who were already there and were late to come, I kind of had a vision of what this wonderful neighborhood could be. And since that time,

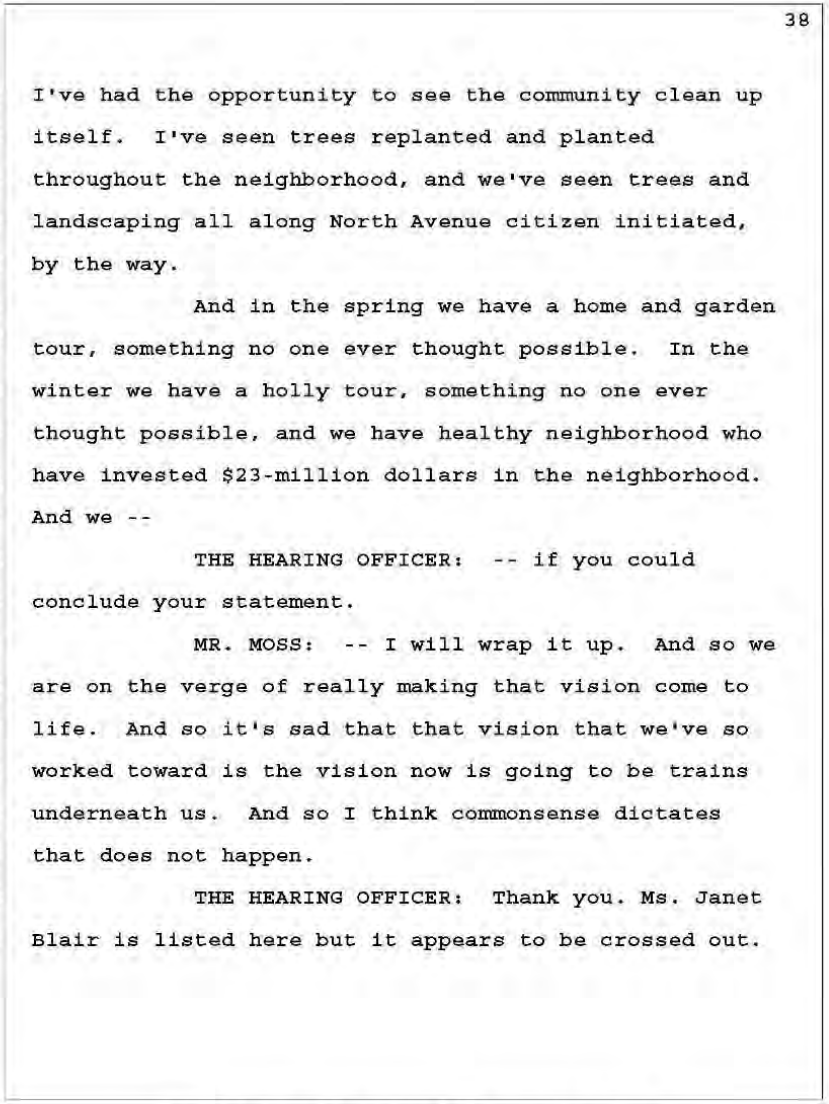
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
Trains are among the safest form of transportation available on an accident per passenger-mile basis. In the unlikely event of an accident, local responders receive training for a variety of incidents related to specific facilities, including the B&P Tunnel. The tunnel would be constructed to meet current standards for fire protection. Additionally, the Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan to be implemented in the event of a tunnel emergency.

COMMENTS



38

I've had the opportunity to see the community clean up itself. I've seen trees replanted and planted throughout the neighborhood, and we've seen trees and landscaping all along North Avenue citizen initiated, by the way.

And in the spring we have a home and garden tour, something no one ever thought possible. In the winter we have a holly tour, something no one ever thought possible, and we have healthy neighborhood who have invested $23-million dollars in the neighborhood. And we --

THE HEARING OFFICER: -- if you could conclude your statement.

MR. MOSS: -- I will wrap it up. And so we are on the verge of really making that vision come to life. And so it's sad that that vision that we've so worked toward is the vision now is going to be trains underneath us. And so I think commonsense dictates that does not happen.

THE HEARING OFFICER: Thank you. Ms. Janet Blair is listed here but it appears to be crossed out.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

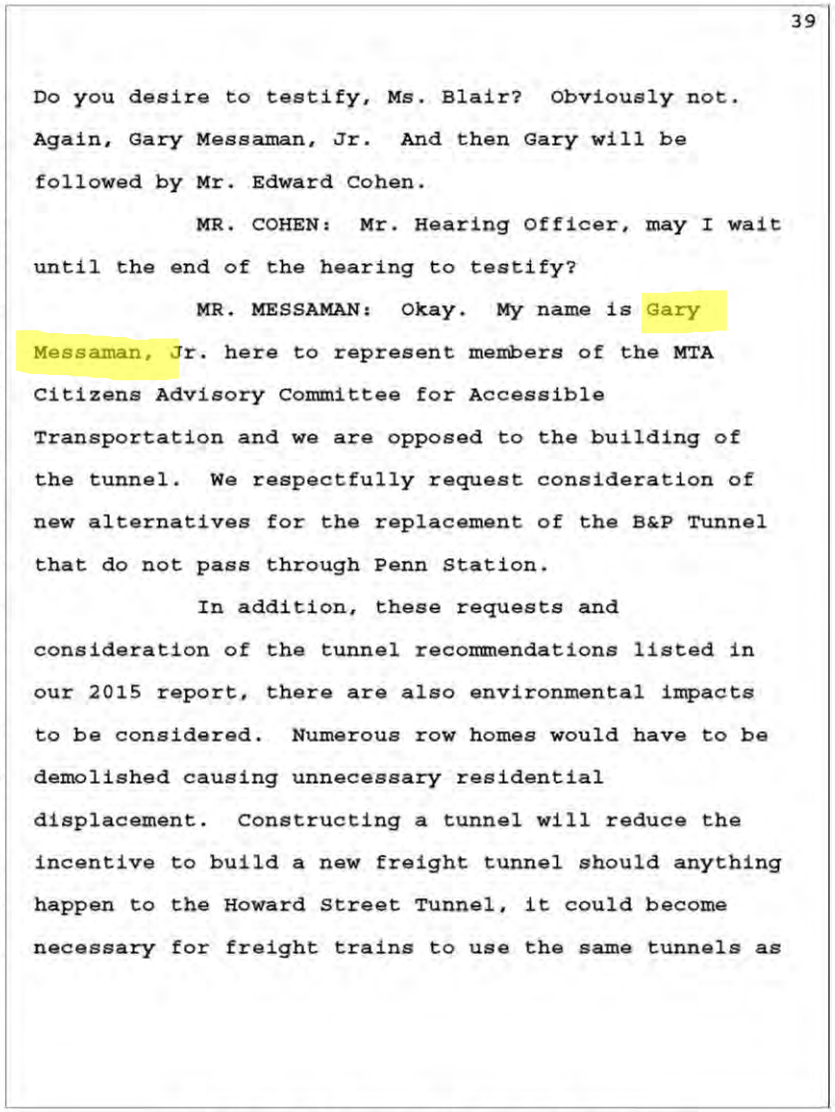
2

RESPONSES

Response to Comment 2:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 127:



39

Do you desire to testify, Ms. Blair? Obviously not. Again, Gary Messaman, Jr. And then Gary will be followed by Mr. Edward Cohen.

MR. COHEN: Mr. Hearing Officer, may I wait until the end of the hearing to testify?

MR. MESSAMAN: Okay. My name is Gary Messaman, Jr. here to represent members of the MTA Citizens Advisory Committee for Accessible Transportation and we are opposed to the building of the tunnel. We respectfully request consideration of 1 new alternatives for the replacement of the B&P Tunnel that do not pass through Penn Station.

In addition, these requests and consideration of the tunnel recommendations listed in our 2015 report, there are also environmental impacts 2 to be considered. Numerous row homes would have to be demolished causing unnecessary residential displacement. Constructing a tunnel will reduce the incentive to build a new freight tunnel should anything 3 happen to the Howard Street Tunnel, it could become necessary for freight trains to use the same tunnels as

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

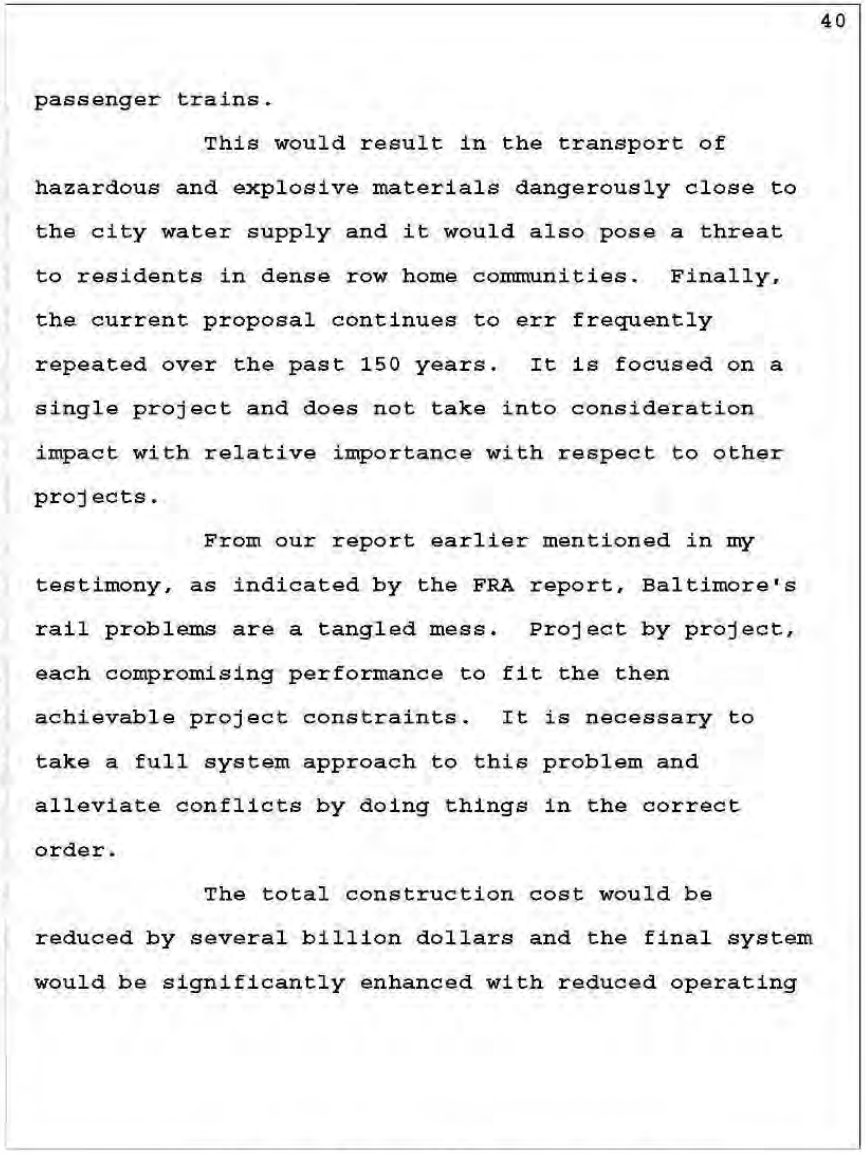
Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Response to Comment 2:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project

COMMENTS



40

passenger trains.

This would result in the transport of hazardous and explosive materials dangerously close to the city water supply and it would also pose a threat to residents in dense row home communities. Finally, the current proposal continues to err frequently repeated over the past 150 years. It is focused on a single project and does not take into consideration impact with relative importance with respect to other projects.

From our report earlier mentioned in my testimony, as indicated by the FRA report, Baltimore's rail problems are a tangled mess. Project by project, each compromising performance to fit the then achievable project constraints. It is necessary to take a full system approach to this problem and alleviate conflicts by doing things in the correct order.

The total construction cost would be reduced by several billion dollars and the final system would be significantly enhanced with reduced operating

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

Executive Order 12898 requires federal agencies to 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 Project Team has engaged in extensive public outreach throughout the development of the Project, including three public open houses and ten community meetings. In addition to these meetings, Mitigation Working Groups comprised of community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI** and **Chapter VIII.**

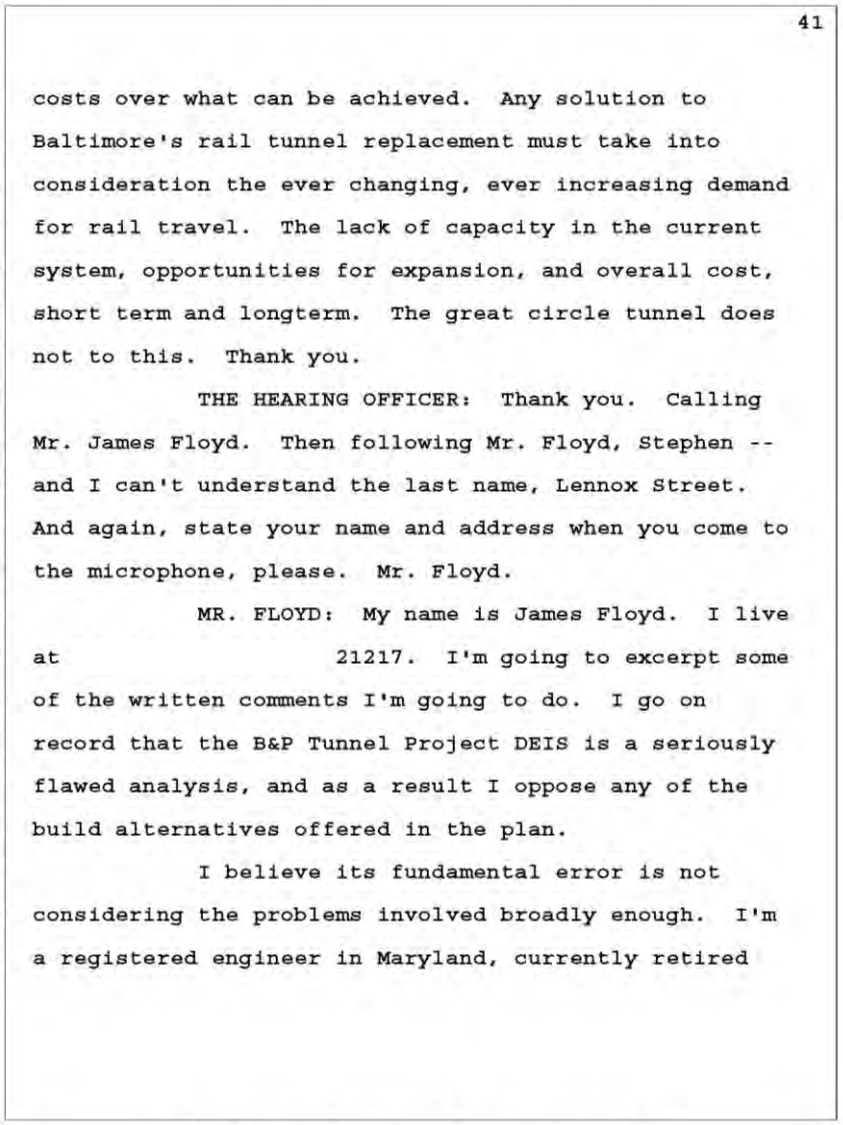
Response to Comment 3:
The purpose of this Project is to address the structural and operational deficiencies of the existing B&P Tunnel and to accommodate future high-performance intercity passenger rail service goals for the NEC. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

The Howard Street Tunnel is privately owned by CSX, who is currently studying options to increase capacity there. Those efforts are beyond the purview of the Project.

Response to Comment 4:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate*

COMMENTS



41

costs over what can be achieved. Any solution to Baltimore's rail tunnel replacement must take into consideration the ever changing, ever increasing demand for rail travel. The lack of capacity in the current system, opportunities for expansion, and overall cost, short term and longterm. The great circle tunnel does not to this. Thank you.

THE HEARING OFFICER: Thank you. Calling Mr. James Floyd. Then following Mr. Floyd, Stephen -- and I can't understand the last name, Lennox Street. And again, state your name and address when you come to the microphone, please. Mr. Floyd.

MR. FLOYD: My name is James Floyd. I live at 21217. I'm going to excerpt some of the written comments I'm going to do. I go on record that the B&P Tunnel Project DEIS is a seriously flawed analysis, and as a result I oppose any of the build alternatives offered in the plan.

I believe its fundamental error is not considering the problems involved broadly enough. I'm a registered engineer in Maryland, currently retired

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.

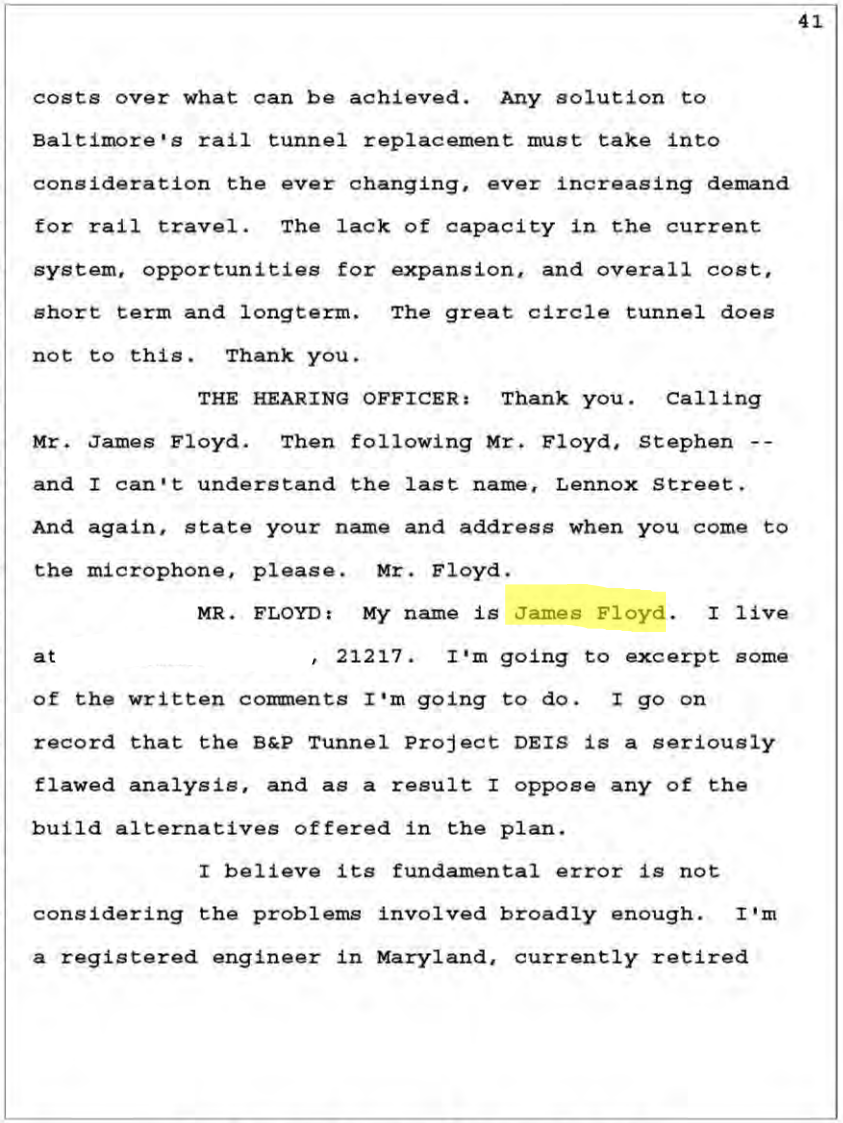
FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 5:
The Maryland Department of Transportation oversees comprehensive transportation planning for the State. Prior studies have been performed that evaluate the full network of rail corridors, especially those in and around the City of Baltimore. The study of the B&P Tunnel partly resulted from the identification of this project as a critical component to the greater rail access plan.

COMMENTS

DEIS Comment 128:



41

costs over what can be achieved. Any solution to Baltimore's rail tunnel replacement must take into consideration the ever changing, ever increasing demand for rail travel. The lack of capacity in the current system, opportunities for expansion, and overall cost, short term and longterm. The great circle tunnel does not to this. Thank you.

THE HEARING OFFICER: Thank you. Calling Mr. James Floyd. Then following Mr. Floyd, Stephen -- and I can't understand the last name, Lennox Street. And again, state your name and address when you come to the microphone, please. Mr. Floyd.

MR. FLOYD: My name is James Floyd. I live at , 21217. I'm going to excerpt some of the written comments I'm going to do. I go on record that the B&P Tunnel Project DEIS is a seriously flawed analysis, and as a result I oppose any of the build alternatives offered in the plan.

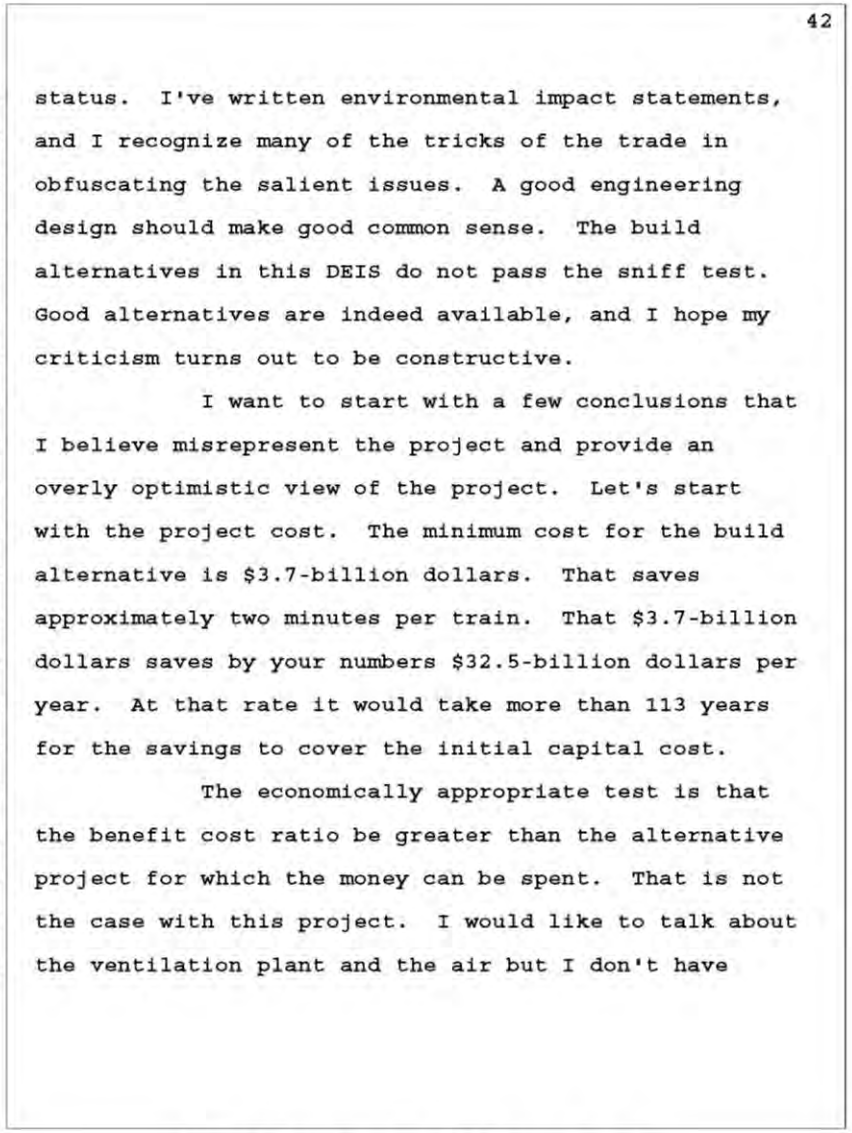
I believe its fundamental error is not considering the problems involved broadly enough. I'm a registered engineer in Maryland, currently retired

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
Please refer to **DEIS Comment #39** for corresponding written comments.

COMMENTS



42

status. I've written environmental impact statements, and I recognize many of the tricks of the trade in obfuscating the salient issues. A good engineering design should make good common sense. The build alternatives in this DEIS do not pass the sniff test. Good alternatives are indeed available, and I hope my criticism turns out to be constructive.

I want to start with a few conclusions that I believe misrepresent the project and provide an overly optimistic view of the project. Let's start with the project cost. The minimum cost for the build alternative is $3.7-billion dollars. That saves approximately two minutes per train. That $3.7-billion dollars saves by your numbers $32.5-billion dollars per year. At that rate it would take more than 113 years for the savings to cover the initial capital cost.

The economically appropriate test is that the benefit cost ratio be greater than the alternative project for which the money can be spent. That is not the case with this project. I would like to talk about the ventilation plant and the air but I don't have

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

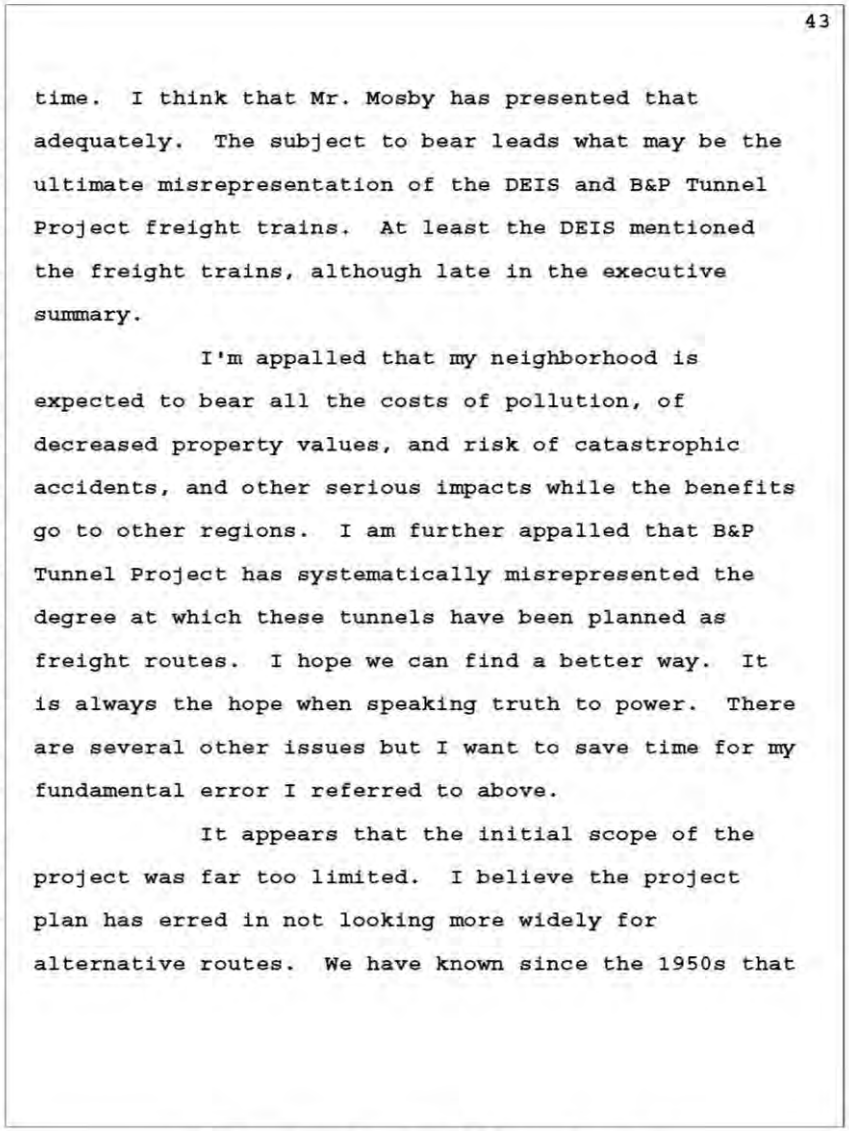
Response to Comment 2:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Response to Comment 3:
While reducing travel time through the B&P Tunnel and along the NEC is a goal of the Project, it is not the sole reason the Project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS. Goals of the Project include:

- Reducing travel time through the B&P Tunnel and along the NEC,
- Accommodating existing and projected travel demand for intercity and commuter passenger services,
- Eliminating impediments to existing and projected operations along the NEC, and
- Providing operational reliability, while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

COMMENTS



43

time. I think that Mr. Mosby has presented that adequately. The subject to bear leads what may be the ultimate misrepresentation of the DEIS and B&P Tunnel Project freight trains. At least the DEIS mentioned the freight trains, although late in the executive summary.

4

I'm appalled that my neighborhood is expected to bear all the costs of pollution, of decreased property values, and risk of catastrophic accidents, and other serious impacts while the benefits go to other regions. I am further appalled that B&P Tunnel Project has systematically misrepresented the degree at which these tunnels have been planned as freight routes. I hope we can find a better way. It is always the hope when speaking truth to power. There are several other issues but I want to save time for my fundamental error I referred to above.

5

6

It appears that the initial scope of the project was far too limited. I believe the project plan has erred in not looking more widely for alternative routes. We have known since the 1950s that

7

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

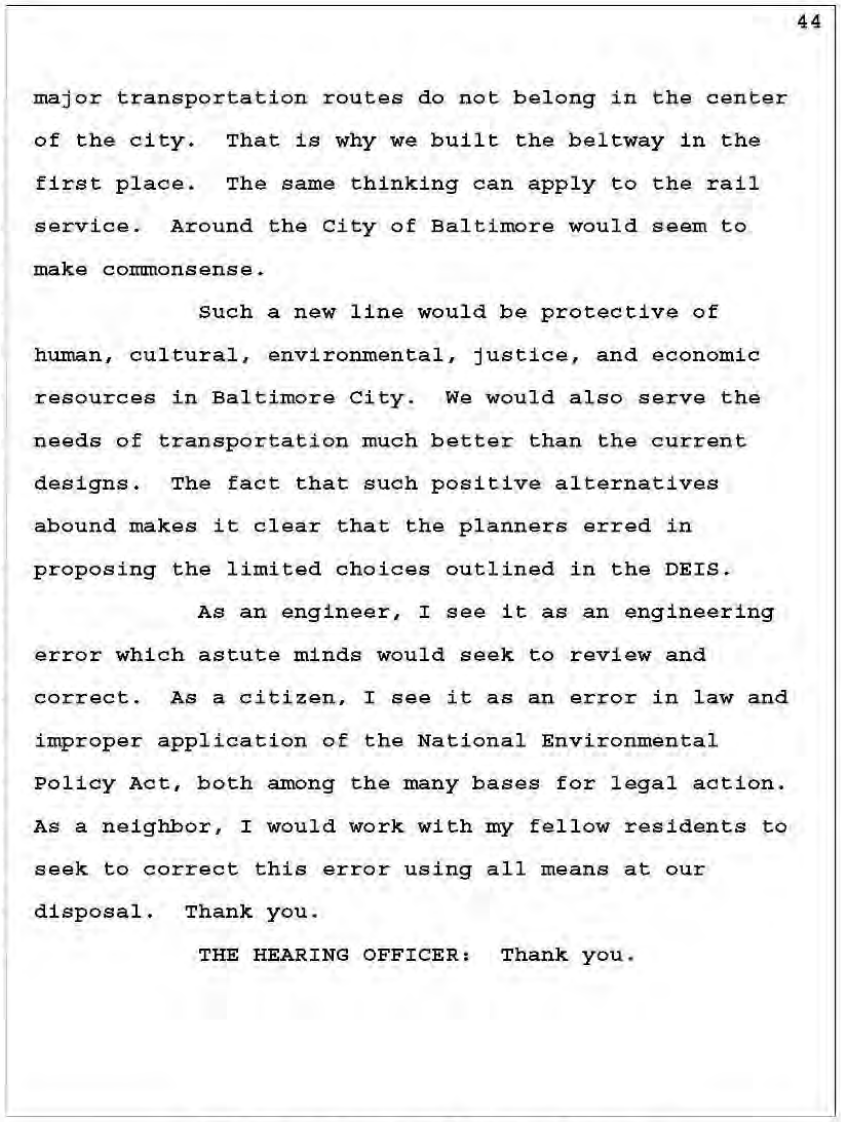
Response to Comment 4:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

Response to Comment 5:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

COMMENTS



44

major transportation routes do not belong in the center of the city. That is why we built the beltway in the first place. The same thinking can apply to the rail service. Around the City of Baltimore would seem to make commonsense.

Such a new line would be protective of human, cultural, environmental, justice, and economic resources in Baltimore City. We would also serve the needs of transportation much better than the current designs. The fact that such positive alternatives abound makes it clear that the planners erred in proposing the limited choices outlined in the DEIS.

As an engineer, I see it as an engineering error which astute minds would seek to review and correct. As a citizen, I see it as an error in law and improper application of the National Environmental Policy Act, both among the many bases for legal action. As a neighbor, I would work with my fellow residents to seek to correct this error using all means at our disposal. Thank you.

THE HEARING OFFICER: Thank you.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

8

9

RESPONSES

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

To prevent accidents and fires, FRA requires a range of measures that minimize the risk to the public, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA). Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility.

The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the Tunnel would be projected up and away from the community. In the very rare event of a tunnel fire, the path from a fire to the exhaust louvers is long and circuitous, with many bends that reduce the ability of particles to travel through the fans and louvers.

The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than an above-ground track running through the neighborhood. The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

Response to Comment 6:
Amtrak's first priority is to its passenger services. Therefore, although Amtrak must accommodate requests from NS or other freight operators with trackage rights agreements for additional train moves on the NEC, Amtrak need only schedule such moves as space between passenger trains can be made available. Where the freight operator and Amtrak have a dispute about scheduling of freight moves, the Surface Transportation Board (STB) adjudicates trackage rights agreements.

COMMENTS

RESPONSES

For the past several years, only one local NS freight train has been operating through the B&P Tunnel daily, serving customers south of the B&P Tunnel between Baltimore and Washington, DC. NS has no plans to increase or change its B&P Tunnel freight operation in the near future. NS has, however, restated its contractual right to increase freight operations in the future should it see value in doing so. In addition, the agreements provide that Amtrak cannot take any action that may restrict future growth in freight traffic through the B&P Tunnel.

Response to Comment 7:
Please refer to Response to Comment 1 for information regarding the alternatives analysis. An alternative was considered to have a fatal flaw if it did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge. The viable alternatives are close to the existing Tunnel in order to utilize existing infrastructure.

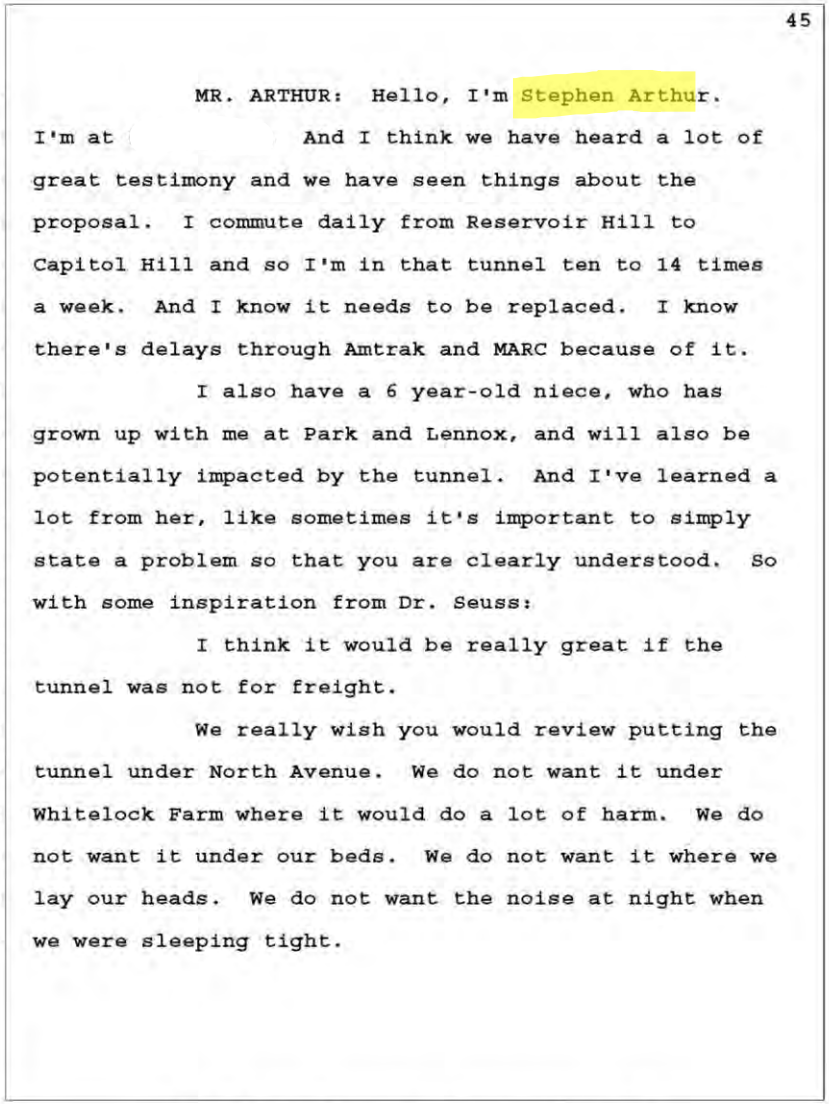
Response to Comment 8:
The Maryland Department of Transportation oversees comprehensive transportation planning for the State. Prior studies have been performed that evaluate the full network of rail corridors, especially those in and around the City of Baltimore. The study of the B&P Tunnel partly resulted from the identification of this project as a critical component to the greater rail access plan.

While recommendations for a new line might aid in resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding the purpose and need of the Project, please see **Chapter II** of this FEIS.

Response to Comment 9:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others), as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

DEIS Comment 129:



45

MR. ARTHUR: Hello, I'm Stephen Arthur. I'm at And I think we have heard a lot of great testimony and we have seen things about the proposal. I commute daily from Reservoir Hill to Capitol Hill and so I'm in that tunnel ten to 14 times a week. And I know it needs to be replaced. I know there's delays through Amtrak and MARC because of it.

I also have a 6 year-old niece, who has grown up with me at Park and Lennox, and will also be potentially impacted by the tunnel. And I've learned a lot from her, like sometimes it's important to simply state a problem so that you are clearly understood. So with some inspiration from Dr. Seuss:

I think it would be really great if the tunnel was not for freight. 1

We really wish you would review putting the tunnel under North Avenue. We do not want it under Whitelock Farm where it would do a lot of harm. We do not want it under our beds. We do not want it where we lay our heads. We do not want the noise at night when we were sleeping tight. 2 3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

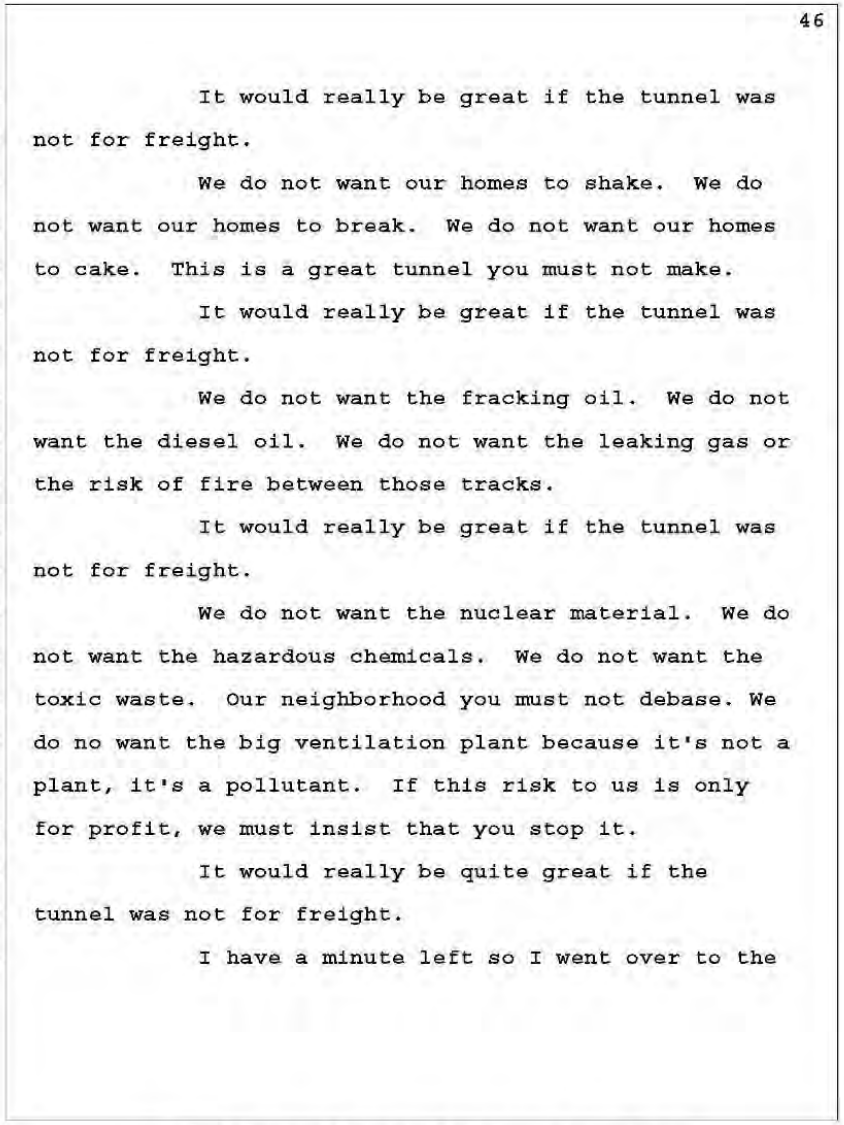
Response to Comment 1:
The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic is planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces of rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

Response to Comment 2:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since the publication of the DEIS, Alternative 3B was selected as the Preferred Alternative. Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts,

COMMENTS



46

It would really be great if the tunnel was not for freight.

We do not want our homes to shake. We do not want our homes to break. We do not want our homes to cake. This is a great tunnel you must not make.

4

It would really be great if the tunnel was not for freight.

We do not want the fracking oil. We do not want the diesel oil. We do not want the leaking gas or the risk of fire between those tracks.

5

It would really be great if the tunnel was not for freight.

We do not want the nuclear material. We do not want the hazardous chemicals. We do not want the toxic waste. Our neighborhood you must not debase. We do no want the big ventilation plant because it's not a plant, it's a pollutant. If this risk to us is only for profit, we must insist that you stop it.

6

It would really be quite great if the tunnel was not for freight.

I have a minute left so I went over to the

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

particularly to residences and historic resources. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

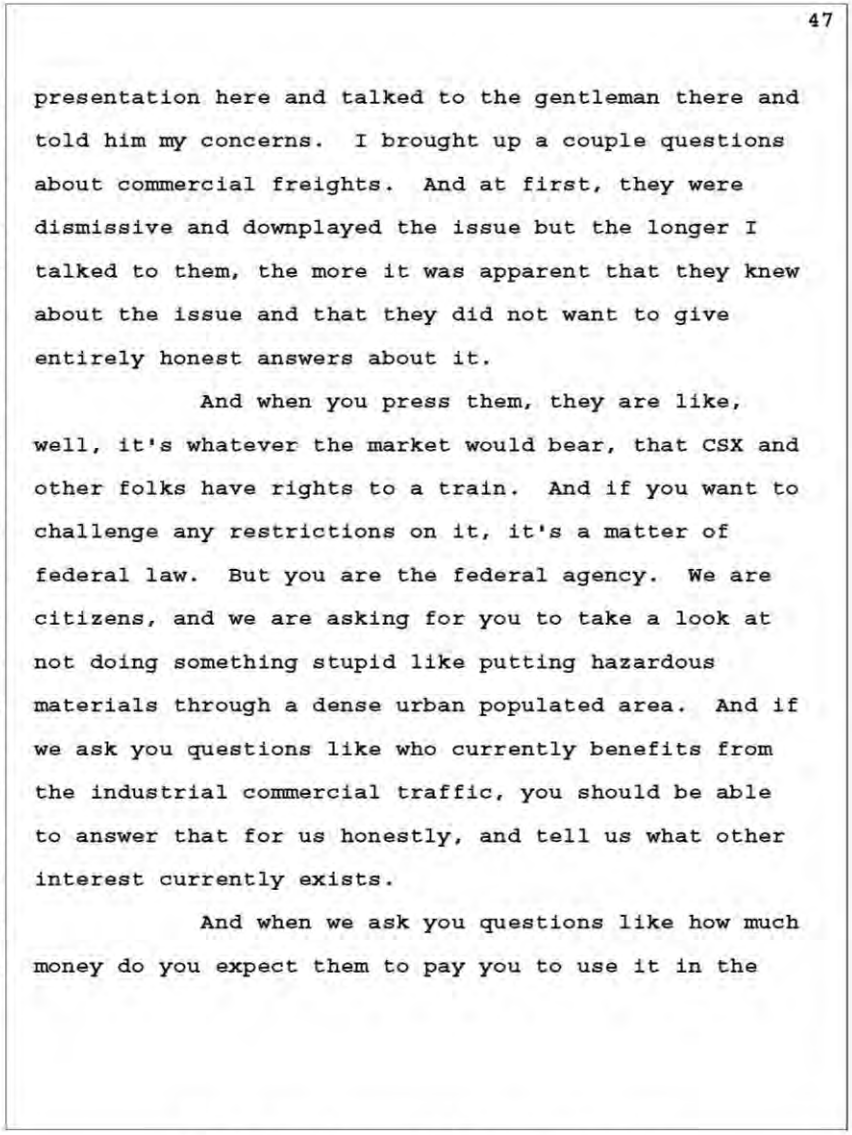
Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated

COMMENTS



47

presentation here and talked to the gentleman there and told him my concerns. I brought up a couple questions about commercial freights. And at first, they were dismissive and downplayed the issue but the longer I talked to them, the more it was apparent that they knew about the issue and that they did not want to give entirely honest answers about it.

And when you press them, they are like, well, it's whatever the market would bear, that CSX and other folks have rights to a train. And if you want to challenge any restrictions on it, it's a matter of federal law. But you are the federal agency. We are citizens, and we are asking for you to take a look at not doing something stupid like putting hazardous materials through a dense urban populated area. And if we ask you questions like who currently benefits from the industrial commercial traffic, you should be able to answer that for us honestly, and tell us what other interest currently exists.

7

And when we ask you questions like how much money do you expect them to pay you to use it in the

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

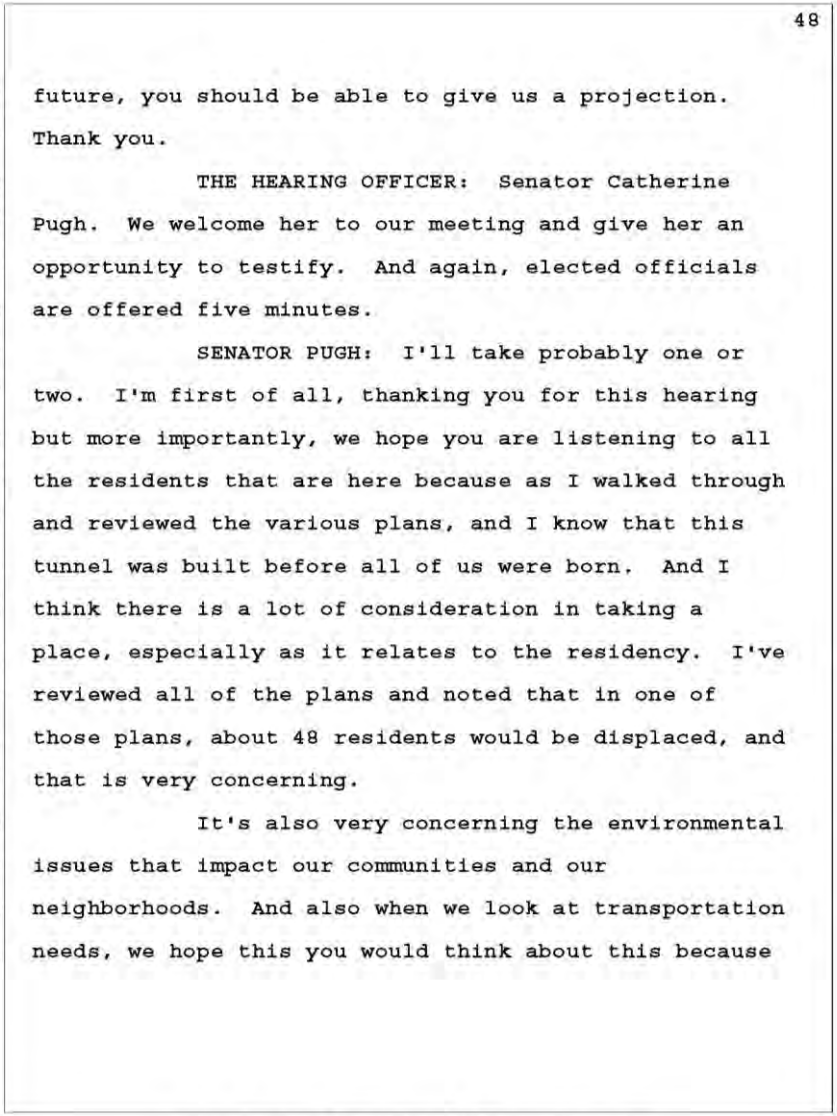
All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 5:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system,*

COMMENTS



48

future, you should be able to give us a projection. Thank you.

THE HEARING OFFICER: Senator Catherine Pugh. We welcome her to our meeting and give her an opportunity to testify. And again, elected officials are offered five minutes.

SENATOR PUGH: I'll take probably one or two. I'm first of all, thanking you for this hearing but more importantly, we hope you are listening to all the residents that are here because as I walked through and reviewed the various plans, and I know that this tunnel was built before all of us were born. And I think there is a lot of consideration in taking a place, especially as it relates to the residency. I've reviewed all of the plans and noted that in one of those plans, about 48 residents would be displaced, and that is very concerning.

It's also very concerning the environmental issues that impact our communities and our neighborhoods. And also when we look at transportation needs, we hope this you would think about this because

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

Response to Comment 6:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

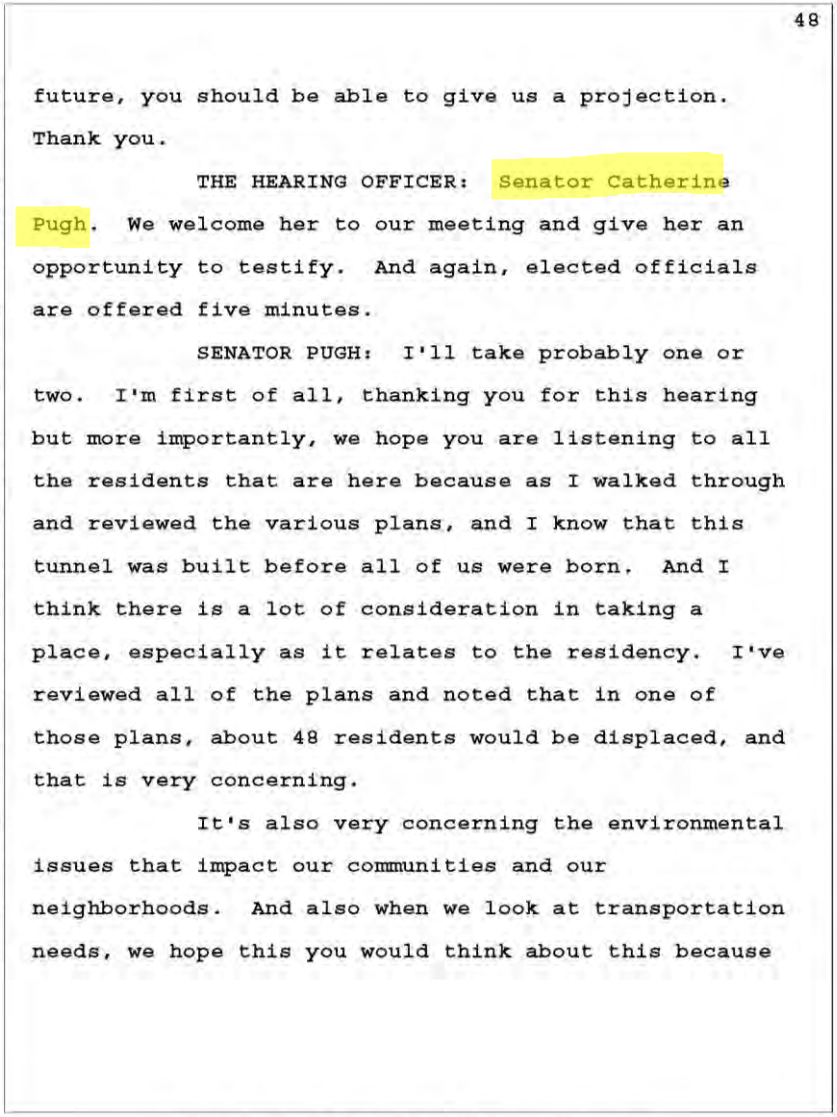
Response to Comment 7:
Efficient transport of goods provides economic benefit to the City, region, and rail consumers.

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future.

It is not possible to provide cost projections for private usage of the B&P Tunnel. The owner of the tunnel, Amtrak, is a private company, as are the freight companies that may use the tunnel in the future. NS and CSX are not required to release information on projected financials or similar information considered to be proprietary. Furthermore, it is not clear whether these companies have projected costs. Fees are unknown because usage is unknown. For more information on the relationship between the freight industry and the rail line, please see **Chapter V** of this FEIS.

COMMENTS

DEIS Comment 130:



48

future, you should be able to give us a projection. Thank you.

THE HEARING OFFICER: Senator Catherine Pugh. We welcome her to our meeting and give her an opportunity to testify. And again, elected officials are offered five minutes.

SENATOR PUGH: I'll take probably one or two. I'm first of all, thanking you for this hearing but more importantly, we hope you are listening to all the residents that are here because as I walked through and reviewed the various plans, and I know that this tunnel was built before all of us were born. And I think there is a lot of consideration in taking a place, especially as it relates to the residency. I've reviewed all of the plans and noted that in one of those plans, about 48 residents would be displaced, and that is very concerning.

It's also very concerning the environmental issues that impact our communities and our neighborhoods. And also when we look at transportation needs, we hope this you would think about this because

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

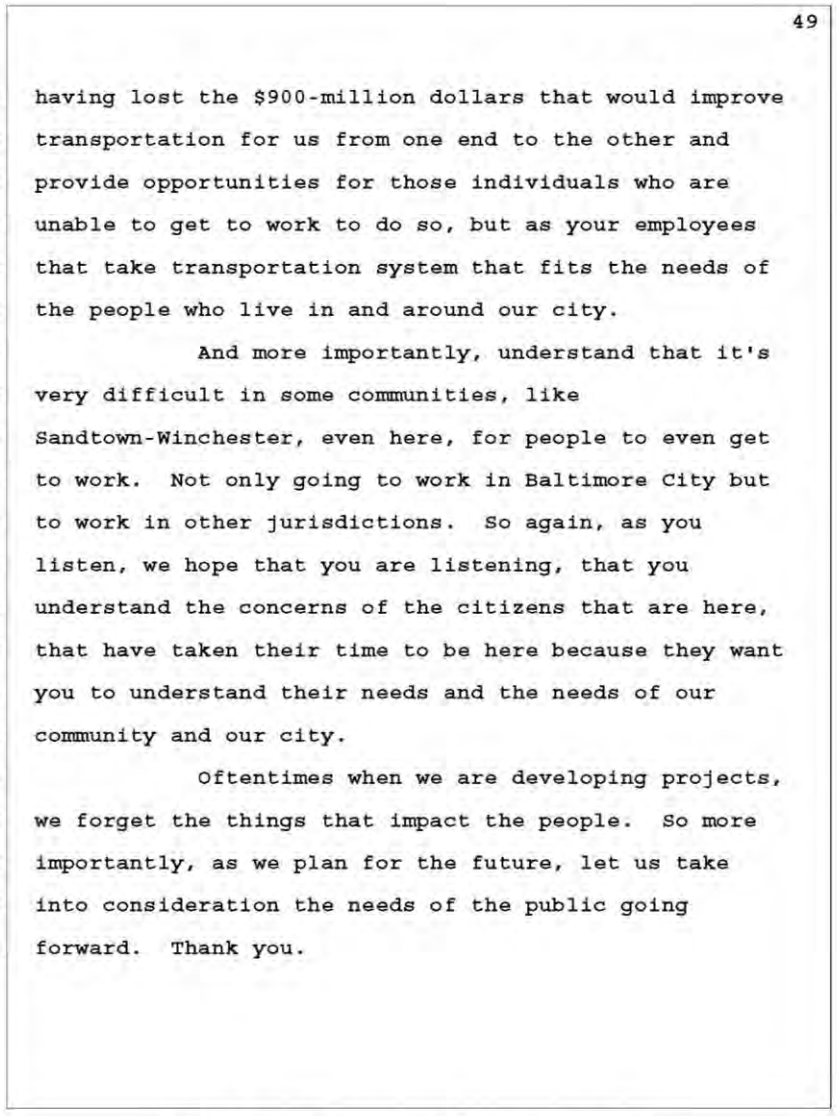
1

RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

The Preferred Alternative would displace 22 residential buildings in the Midtown-Edmondson neighborhood, Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings. Executive Order 12898 requires federal agencies to 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 Project Team has engaged in extensive public outreach throughout the development of the Project, including three public open houses and ten community meetings. In addition to these meetings, Mitigation Working Groups comprised of community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI** and **Chapter VIII**.

COMMENTS



49

having lost the $900-million dollars that would improve transportation for us from one end to the other and provide opportunities for those individuals who are unable to get to work to do so, but as your employees that take transportation system that fits the needs of the people who live in and around our city.

And more importantly, understand that it's very difficult in some communities, like Sandtown-Winchester, even here, for people to even get to work. Not only going to work in Baltimore City but to work in other jurisdictions. So again, as you listen, we hope that you are listening, that you understand the concerns of the citizens that are here, that have taken their time to be here because they want you to understand their needs and the needs of our community and our city.

Oftentimes when we are developing projects, we forget the things that impact the people. So more importantly, as we plan for the future, let us take into consideration the needs of the public going forward. Thank you.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

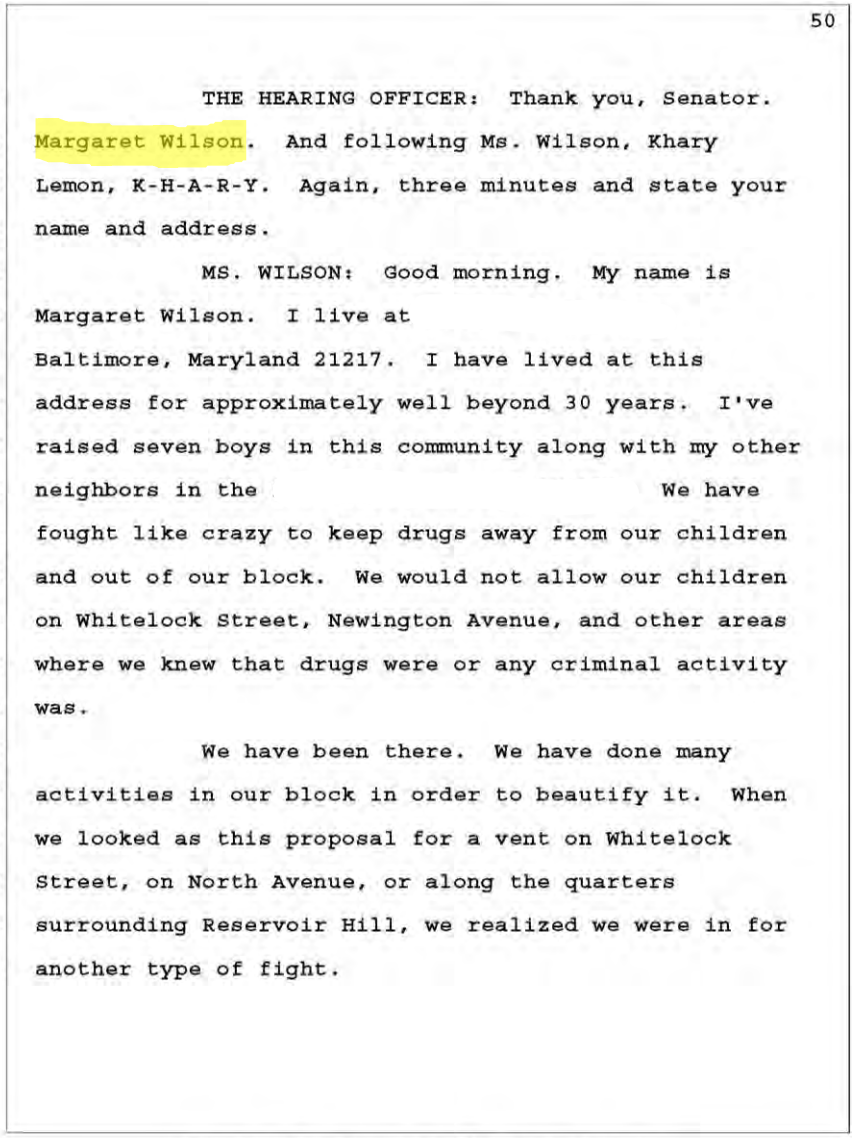
2

RESPONSES

Response to Comment 2:
The Project Team has engaged in extensive public outreach throughout the development of the project, including holding three public open houses and ten community meetings where the public was given the opportunity to learn about the project and engage in discussion with the Project Team. In addition to these meetings, the Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS. Additional details of this outreach are described in **Chapter VI** as well as **Chapter VIII.**

COMMENTS

DEIS Comment 131:



50

THE HEARING OFFICER: Thank you, Senator. Margaret Wilson. And following Ms. Wilson, Khary Lemon, K-H-A-R-Y. Again, three minutes and state your name and address.

MS. WILSON: Good morning. My name is Margaret Wilson. I live at Baltimore, Maryland 21217. I have lived at this address for approximately well beyond 30 years. I've raised seven boys in this community along with my other neighbors in the We have fought like crazy to keep drugs away from our children and out of our block. We would not allow our children on Whitelock Street, Newington Avenue, and other areas where we knew that drugs were or any criminal activity was.

We have been there. We have done many activities in our block in order to beautify it. When we looked as this proposal for a vent on Whitelock Street, on North Avenue, or along the quarters surrounding Reservoir Hill, we realized we were in for another type of fight.

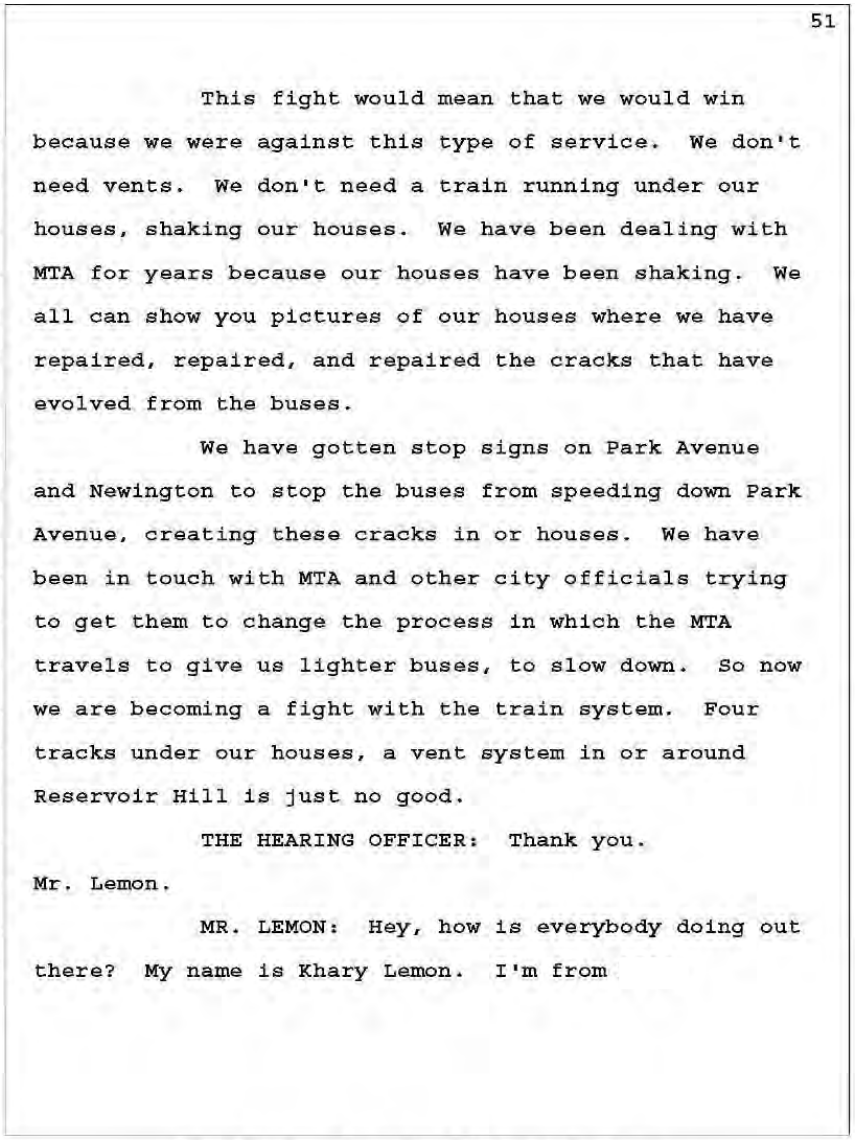
1

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



51

This fight would mean that we would win because we were against this type of service. We don't need vents. We don't need a train running under our houses, shaking our houses. We have been dealing with MTA for years because our houses have been shaking. We all can show you pictures of our houses where we have repaired, repaired, and repaired the cracks that have evolved from the buses.

We have gotten stop signs on Park Avenue and Newington to stop the buses from speeding down Park Avenue, creating these cracks in or houses. We have been in touch with MTA and other city officials trying to get them to change the process in which the MTA travels to give us lighter buses, to slow down. So now we are becoming a fight with the train system. Four tracks under our houses, a vent system in or around Reservoir Hill is just no good.

THE HEARING OFFICER: Thank you. Mr. Lemon.

MR. LEMON: Hey, how is everybody doing out there? My name is Khary Lemon. I'm from

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 2:
As described in **Chapter III** of the FEIS, the build alternatives would require three ventilation facilities in order to meet current safety industry standards (NFPA 130) for projected NEC FUTURE train demand headway, and to ensure proper ventilation of the proposed tunnels. The purpose of the ventilation facility is to pull fresh air into the tunnel and ventilate the tunnel air to the outside. One ventilation facility will be located at the south portal, and another will be located 300-600 feet from the north portal. A third ventilation facility would be located at street level, connected to the bored portion of the tunnels by a vertical shaft and connecting tunnel (plenum), splitting the proposed tunnel into two unequal lengths. The Intermediate Ventilation Facility would consist of a building, approximately 100 feet by 200 feet in plan with a maximum height of 60 feet.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals

COMMENTS

RESPONSES

could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

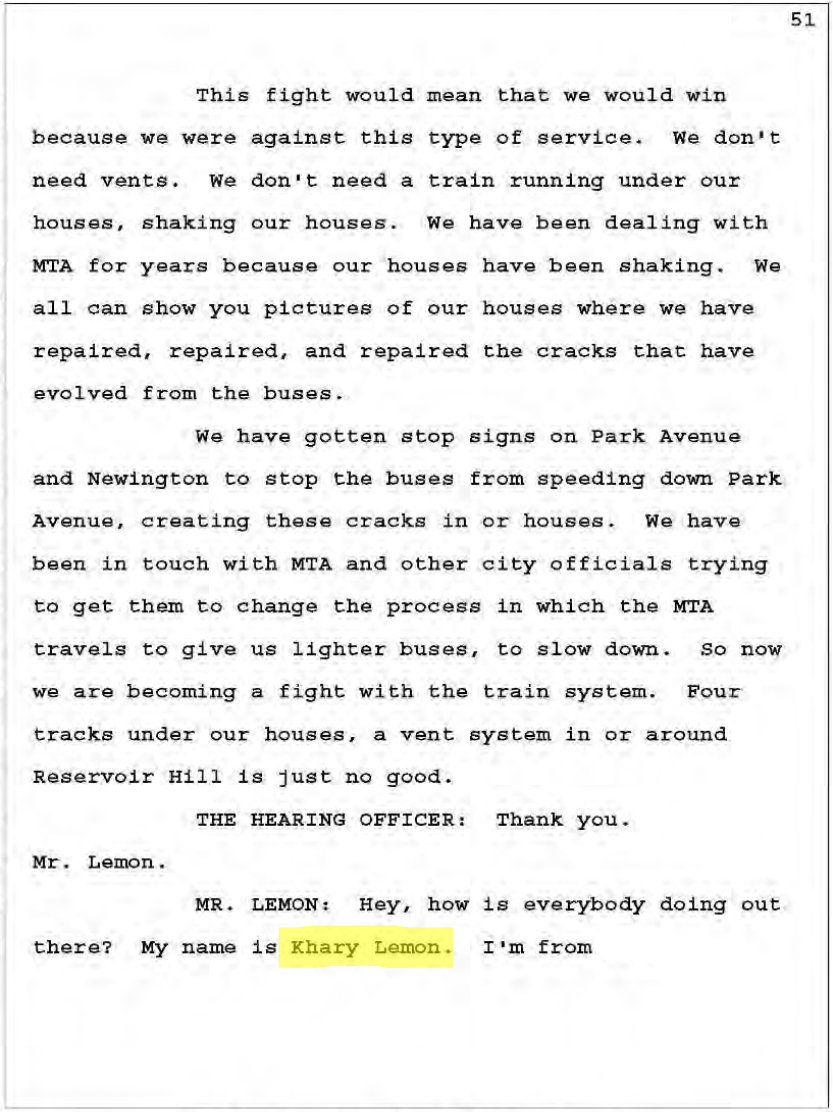
Response to Comment 3:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

COMMENTS

RESPONSES

DEIS Comment 132:



51

This fight would mean that we would win because we were against this type of service. We don't need vents. We don't need a train running under our houses, shaking our houses. We have been dealing with MTA for years because our houses have been shaking. We all can show you pictures of our houses where we have repaired, repaired, and repaired the cracks that have evolved from the buses.

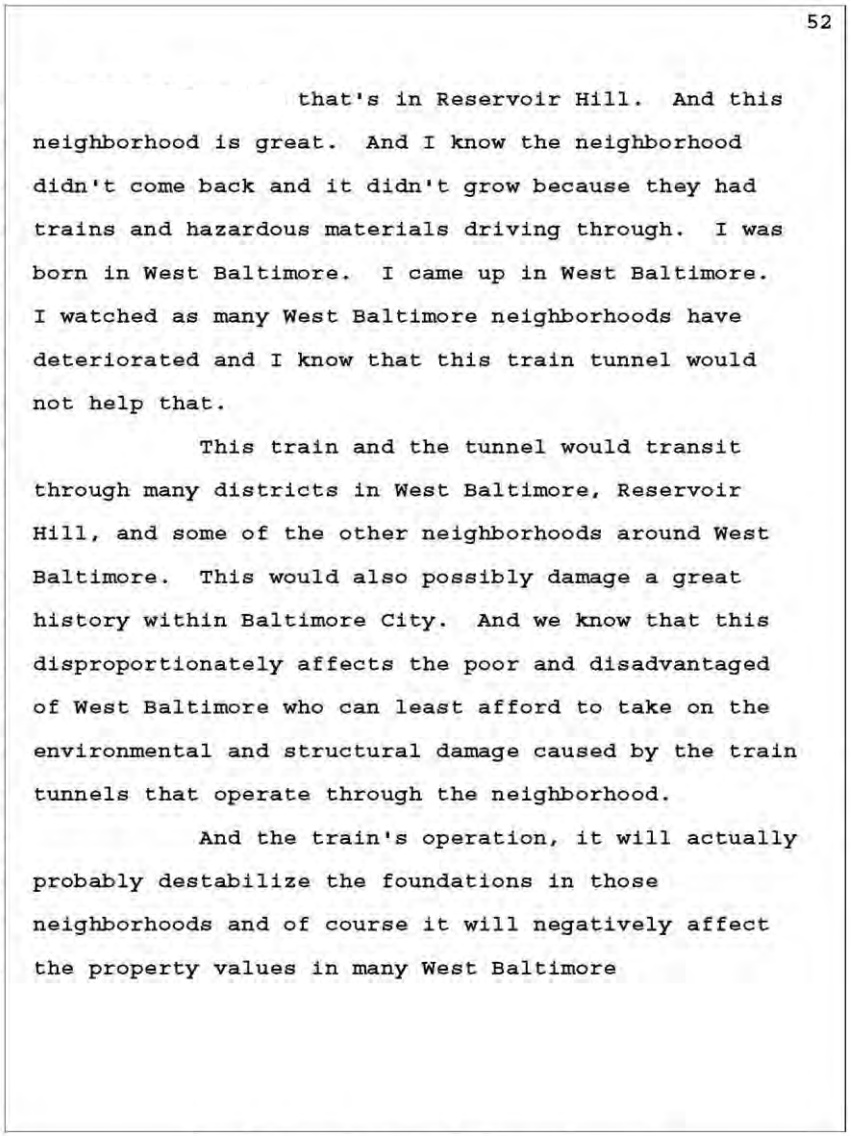
We have gotten stop signs on Park Avenue and Newington to stop the buses from speeding down Park Avenue, creating these cracks in or houses. We have been in touch with MTA and other city officials trying to get them to change the process in which the MTA travels to give us lighter buses, to slow down. So now we are becoming a fight with the train system. Four tracks under our houses, a vent system in or around Reservoir Hill is just no good.

THE HEARING OFFICER: Thank you. Mr. Lemon.

MR. LEMON: Hey, how is everybody doing out there? My name is Khary Lemon. I'm from

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



52

that's in Reservoir Hill. And this neighborhood is great. And I know the neighborhood didn't come back and it didn't grow because they had trains and hazardous materials driving through. I was born in West Baltimore. I came up in West Baltimore. I watched as many West Baltimore neighborhoods have deteriorated and I know that this train tunnel would not help that.

This train and the tunnel would transit through many districts in West Baltimore, Reservoir Hill, and some of the other neighborhoods around West Baltimore. This would also possibly damage a great history within Baltimore City. And we know that this disproportionately affects the poor and disadvantaged of West Baltimore who can least afford to take on the environmental and structural damage caused by the train tunnels that operate through the neighborhood.

1

And the train's operation, it will actually probably destabilize the foundations in those neighborhoods and of course it will negatively affect the property values in many West Baltimore

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

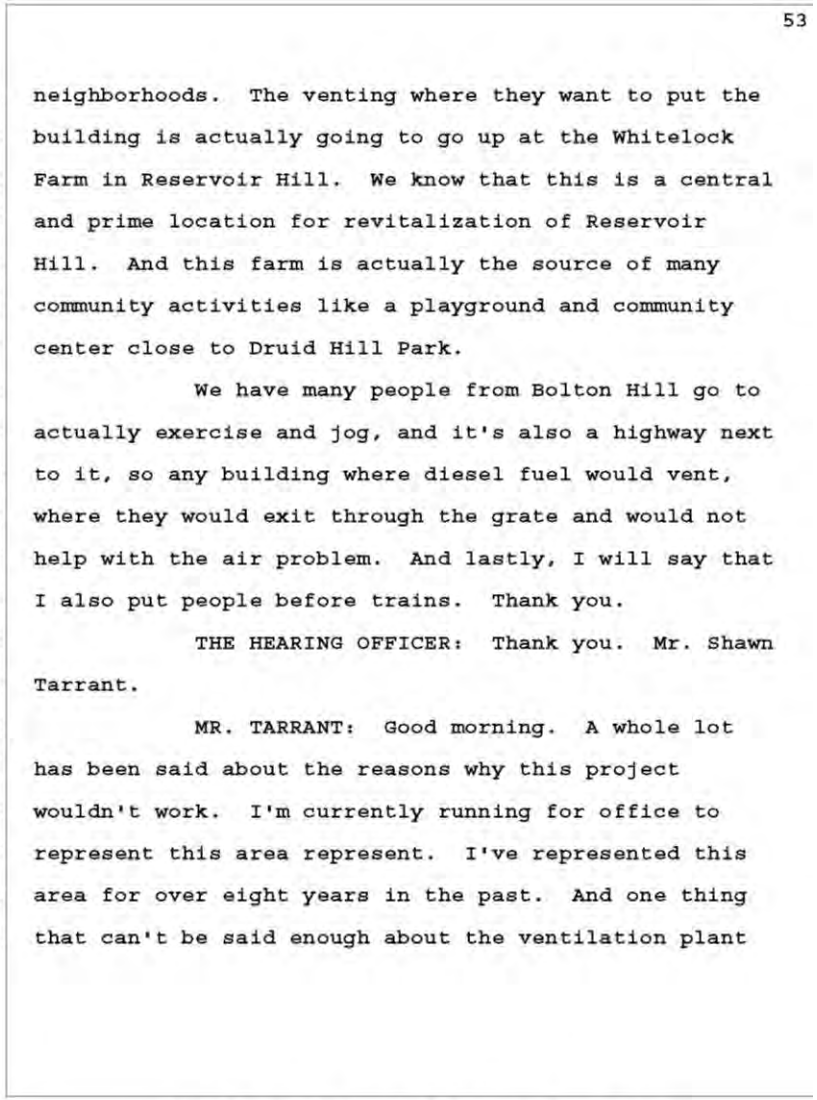
Response to Comment 1:
The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS



53

neighborhoods. The venting where they want to put the building is actually going to go up at the Whitelock Farm in Reservoir Hill. We know that this is a central and prime location for revitalization of Reservoir Hill. And this farm is actually the source of many community activities like a playground and community center close to Druid Hill Park.

3

We have many people from Bolton Hill go to actually exercise and jog, and it's also a highway next to it, so any building where diesel fuel would vent, where they would exit through the grate and would not help with the air problem. And lastly, I will say that I also put people before trains. Thank you.

4

THE HEARING OFFICER: Thank you. Mr. Shawn Tarrant.

MR. TARRANT: Good morning. A whole lot has been said about the reasons why this project wouldn't work. I'm currently running for office to represent this area represent. I've represented this area for over eight years in the past. And one thing that can't be said enough about the ventilation plant

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

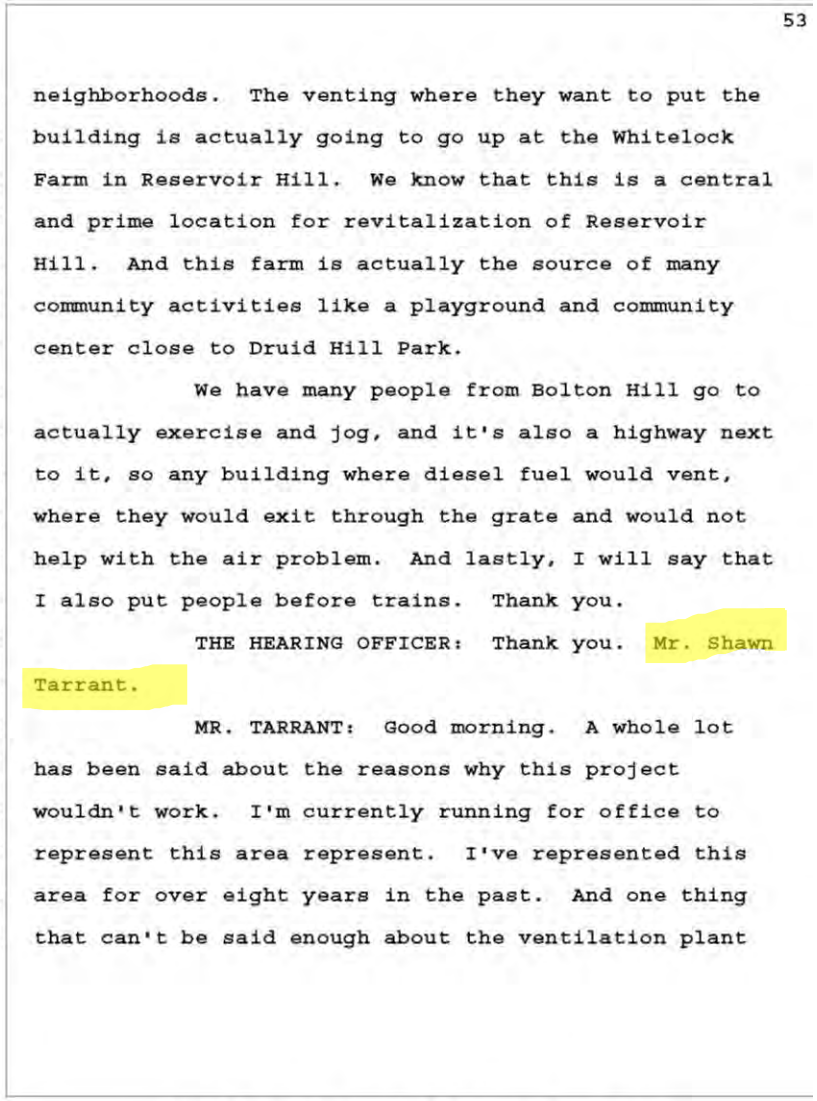
RESPONSES

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

COMMENTS

DEIS Comment 133:



53

neighborhoods. The venting where they want to put the building is actually going to go up at the Whitelock Farm in Reservoir Hill. We know that this is a central and prime location for revitalization of Reservoir Hill. And this farm is actually the source of many community activities like a playground and community center close to Druid Hill Park.

We have many people from Bolton Hill go to actually exercise and jog, and it's also a highway next to it, so any building where diesel fuel would vent, where they would exit through the grate and would not help with the air problem. And lastly, I will say that I also put people before trains. Thank you.

THE HEARING OFFICER: Thank you. Mr. Shawn Tarrant.

MR. TARRANT: Good morning. A whole lot has been said about the reasons why this project wouldn't work. I'm currently running for office to represent this area represent. I've represented this area for over eight years in the past. And one thing that can't be said enough about the ventilation plant

1

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

that they are talking about putting in the center of Reservoir Hill, where it is a community that has a whole lot to offer Baltimore City.

There's not a lot of neighborhoods that have the right location, the right park, the right housing stock, the right diversity Reservoir Hill has. No one would come to Reservoir Hill and feel as if they don't belong, because there's a little bit of everybody in Reservoir Hill. And so I ask that this project halt this project because if you're going to put in a project that can potentially have a negative impact, that there is some type of emergency or there's an explosion, that we could cause a problem that you can't turn back from, just like what happened in Flint, Michigan.

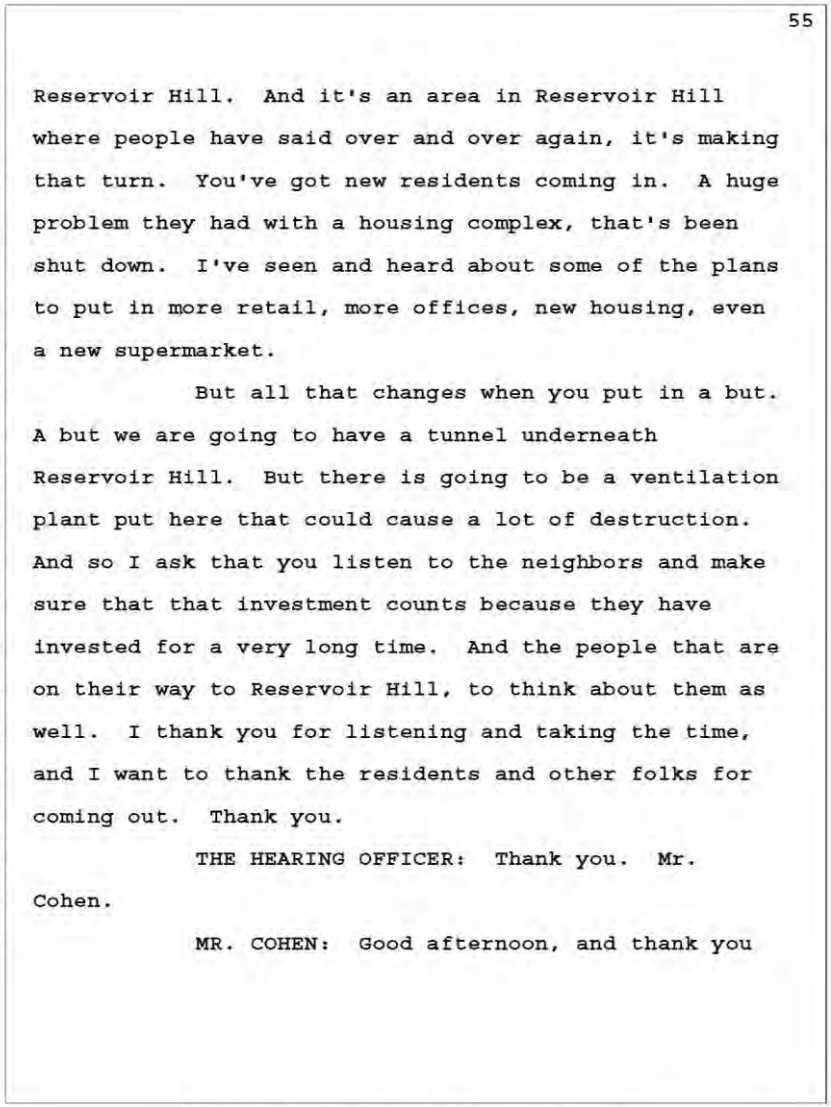
2

I really hate to mention that, but that happened, it's happening now. The decision was made that they thought it's going to save some money. And that is a problem they are going to have to live with for many generations to come. And I don't want to see that happen anywhere in Baltimore City, not in

RESPONSES

Response to Comment 2:
Trains are among the safest form of transportation available on an accident per passenger-mile basis. In the unlikely event of an accident, local responders receive training for a variety of incidents related to specific facilities, including the B&P Tunnel. The tunnel would be constructed to meet current standards for fire protection. Additionally, the Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan to be implemented in the event of a tunnel emergency.

COMMENTS



55

Reservoir Hill. And it's an area in Reservoir Hill where people have said over and over again, it's making that turn. You've got new residents coming in. A huge problem they had with a housing complex, that's been shut down. I've seen and heard about some of the plans to put in more retail, more offices, new housing, even a new supermarket.

But all that changes when you put in a but.

3 A but we are going to have a tunnel underneath Reservoir Hill. But there is going to be a ventilation plant put here that could cause a lot of destruction. And so I ask that you listen to the neighbors and make sure that that investment counts because they have invested for a very long time. And the people that are on their way to Reservoir Hill, to think about them as well. I thank you for listening and taking the time, and I want to thank the residents and other folks for coming out. Thank you.

THE HEARING OFFICER: Thank you. Mr. Cohen.

MR. COHEN: Good afternoon, and thank you

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

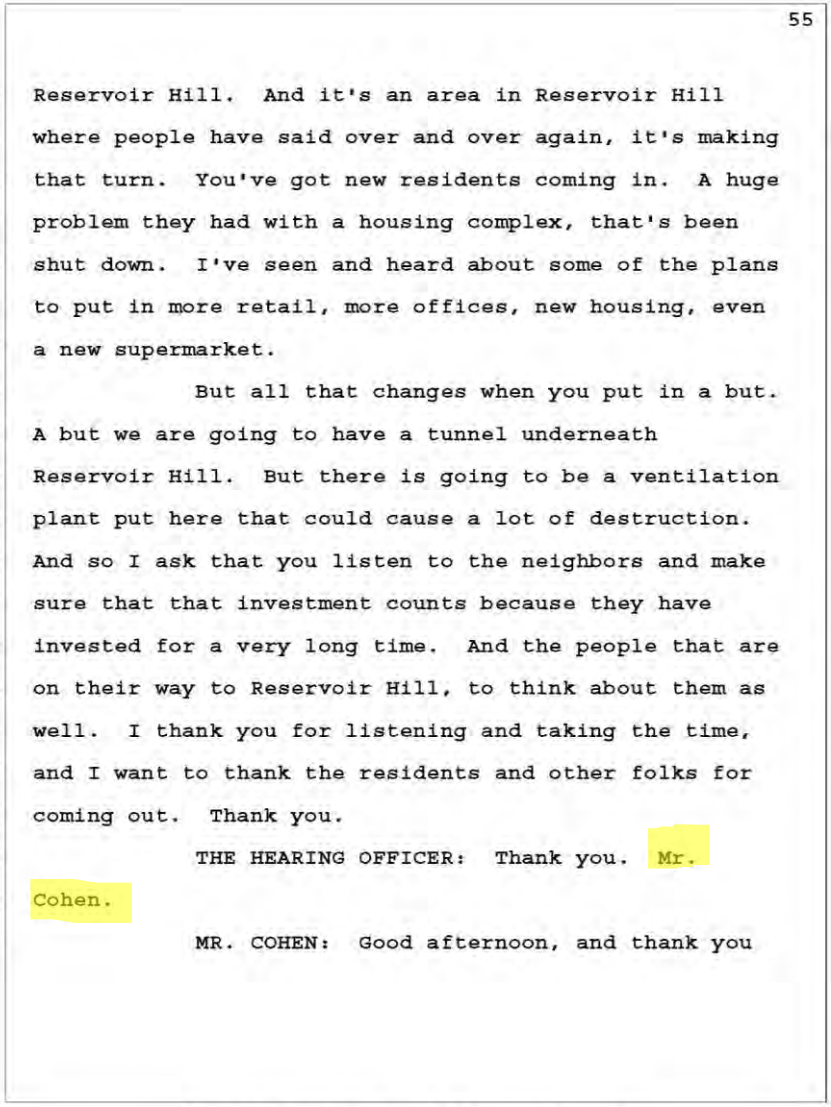
RESPONSES

Response to Comment 3:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

DEIS Comment 134:



55

Reservoir Hill. And it's an area in Reservoir Hill where people have said over and over again, it's making that turn. You've got new residents coming in. A huge problem they had with a housing complex, that's been shut down. I've seen and heard about some of the plans to put in more retail, more offices, new housing, even a new supermarket.

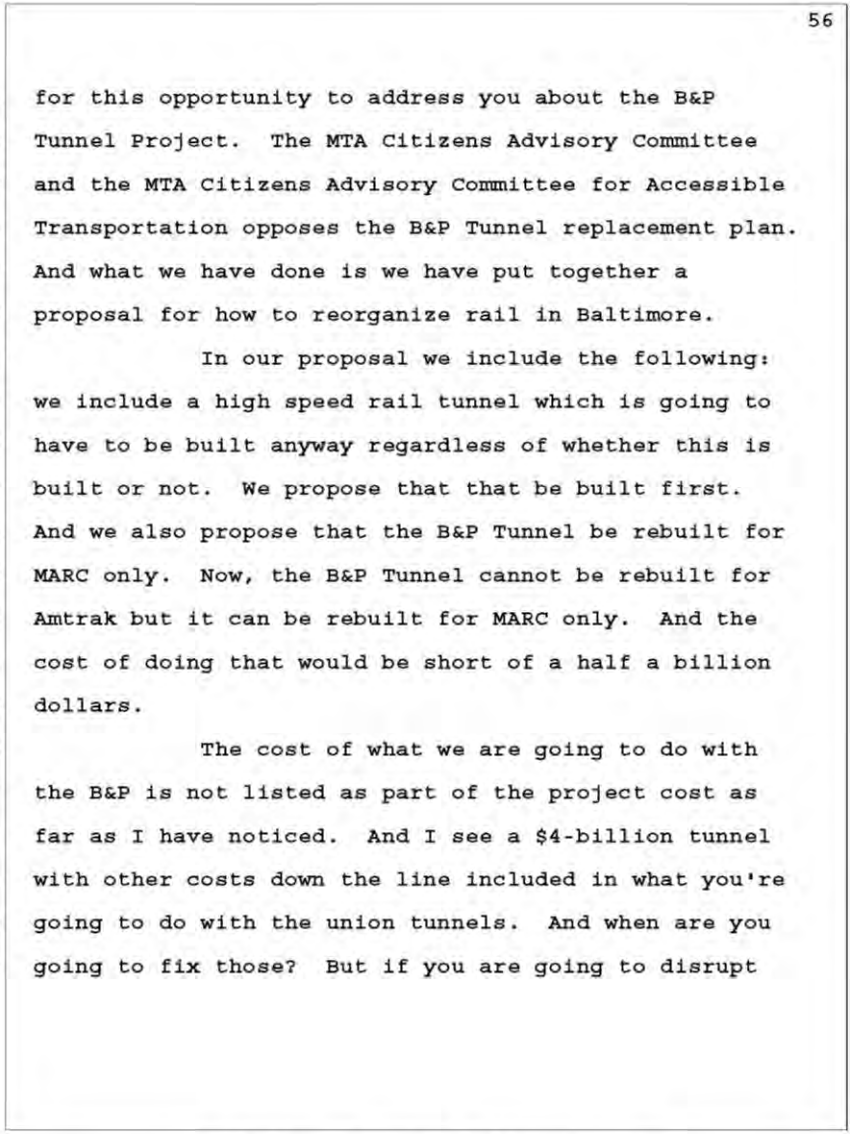
But all that changes when you put in a but. A but we are going to have a tunnel underneath Reservoir Hill. But there is going to be a ventilation plant put here that could cause a lot of destruction. And so I ask that you listen to the neighbors and make sure that that investment counts because they have invested for a very long time. And the people that are on their way to Reservoir Hill, to think about them as well. I thank you for listening and taking the time, and I want to thank the residents and other folks for coming out. Thank you.

THE HEARING OFFICER: Thank you. Mr. Cohen.

MR. COHEN: Good afternoon, and thank you

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



56

for this opportunity to address you about the B&P Tunnel Project. The MTA Citizens Advisory Committee and the MTA Citizens Advisory Committee for Accessible Transportation opposes the B&P Tunnel replacement plan. And what we have done is we have put together a proposal for how to reorganize rail in Baltimore.

In our proposal we include the following: we include a high speed rail tunnel which is going to have to be built anyway regardless of whether this is built or not. We propose that that be built first. And we also propose that the B&P Tunnel be rebuilt for MARC only. Now, the B&P Tunnel cannot be rebuilt for Amtrak but it can be rebuilt for MARC only. And the cost of doing that would be short of a half a billion dollars.

The cost of what we are going to do with the B&P is not listed as part of the project cost as far as I have noticed. And I see a $4-billion tunnel with other costs down the line included in what you're going to do with the union tunnels. And when are you going to fix those? But if you are going to disrupt

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
It is beyond the scope of this study to consider alignments outside the NEC. This project evaluated replacement or re-use of the existing B&P Tunnel. The current Preferred Alternative would not re-purpose the existing tunnel; however, Amtrak desires to reserve the existing tunnel for a future rail transportation use.

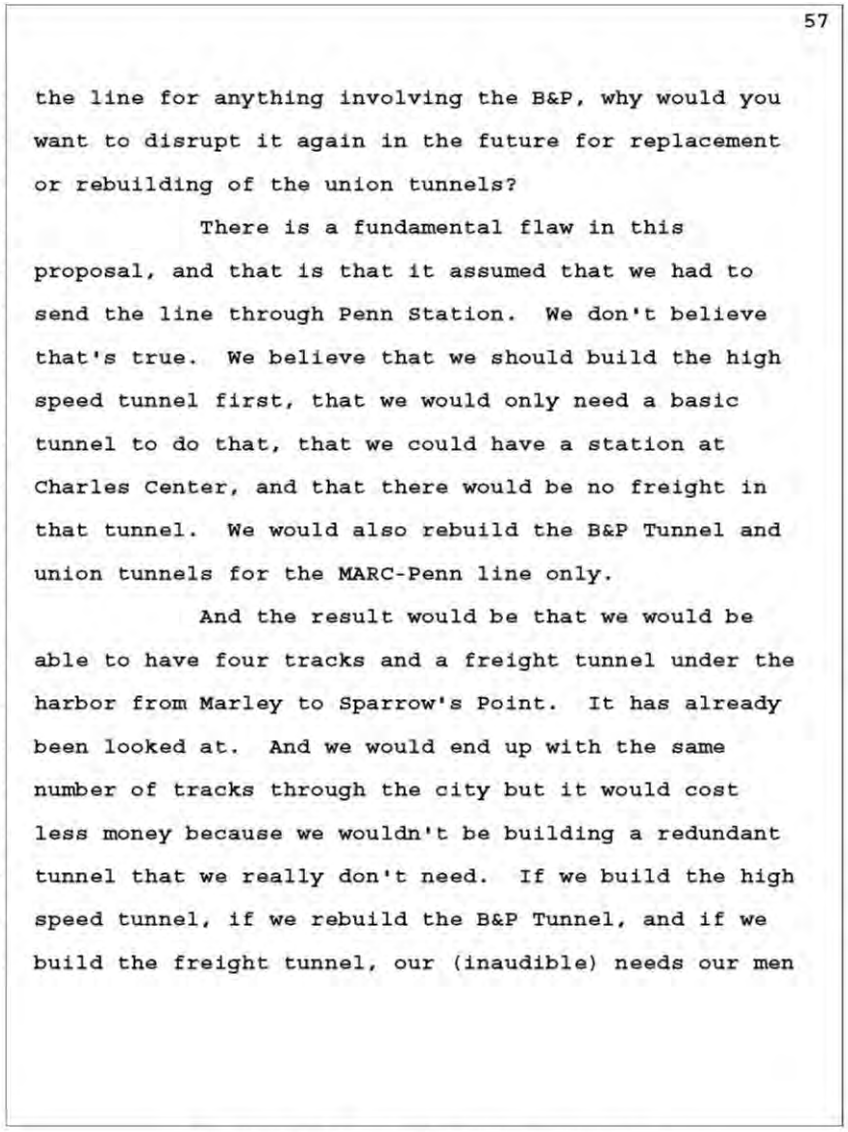
The B&P Tunnel Project proposes four tracks, which will be designed to accommodate Amtrak, MARC, and existing freight traffic. Additional improvements would be required to increase the amount of freight going through the tunnel.

Additionally, the report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The Tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding the purpose and need of the Project, please see **Chapter II** of this FEIS.

To review the September 2015 report in its entirety, please refer to **DEIS Comment #11**.

COMMENTS



57

the line for anything involving the B&P, why would you want to disrupt it again in the future for replacement or rebuilding of the union tunnels?

There is a fundamental flaw in this proposal, and that is that it assumed that we had to send the line through Penn Station. We don't believe that's true. We believe that we should build the high speed tunnel first, that we would only need a basic tunnel to do that, that we could have a station at Charles Center, and that there would be no freight in that tunnel. We would also rebuild the B&P Tunnel and union tunnels for the MARC-Penn line only.

And the result would be that we would be able to have four tracks and a freight tunnel under the harbor from Marley to Sparrow's Point. It has already been looked at. And we would end up with the same number of tracks through the city but it would cost less money because we wouldn't be building a redundant tunnel that we really don't need. If we build the high speed tunnel, if we rebuild the B&P Tunnel, and if we build the freight tunnel, our (inaudible) needs our men

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

RESPONSES

Response to Comment 2:
An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Please see **Chapter III** of the FEIS, which details the basis of elimination or retention for each alternative.

COMMENTS

RESPONSES

and we don't have to the build this many tubes.

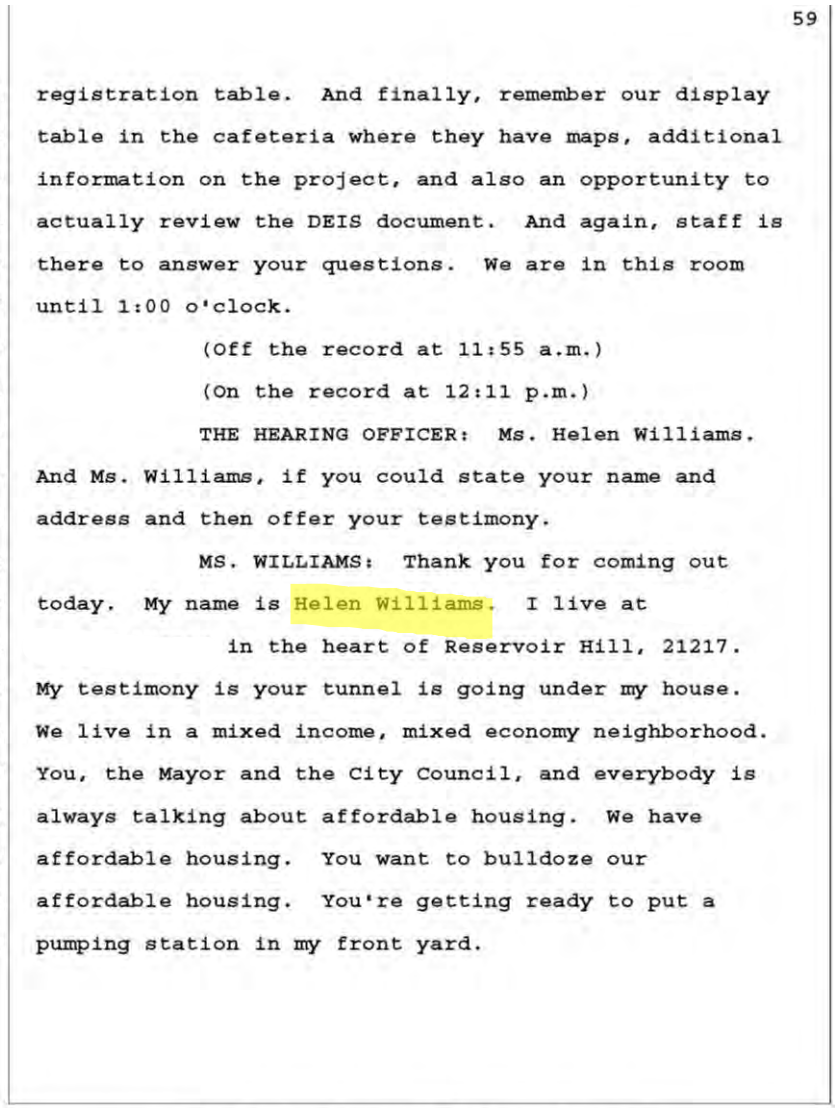
That would mean that we would end up for something that would work better for Baltimore. We would not have to deal with the hazmat going through the harbor and the city and we would have high speed rail sooner. And not end up with extra traffic in the future. Those who are interested in what our proposal is can go to the MTA website and look under the Citizens Advisory Committee. If it is not online yet, and it may not be, you can contact MTA customer service and speak with Denise Hagans, who can e-mail it to you. Thank you very much.

THE HEARING OFFICER: Thank you. This concludes at this time the list of persons who have registered to testify. If there are other persons who would like to testify, you can register at our registration table. We will be accepting registrations through 12:55 p.m. this afternoon to testify here.

Also a reminder, if you want to provide private testimony, there is a location outside of this room. And again, they can give you directions at the

COMMENTS

DEIS Comment 135:



59

registration table. And finally, remember our display table in the cafeteria where they have maps, additional information on the project, and also an opportunity to actually review the DEIS document. And again, staff is there to answer your questions. We are in this room until 1:00 o'clock.

(Off the record at 11:55 a.m.)

(On the record at 12:11 p.m.)

THE HEARING OFFICER: Ms. Helen Williams. And Ms. Williams, if you could state your name and address and then offer your testimony.

MS. WILLIAMS: Thank you for coming out today. My name is Helen Williams. I live at in the heart of Reservoir Hill, 21217. My testimony is your tunnel is going under my house. We live in a mixed income, mixed economy neighborhood. You, the Mayor and the City Council, and everybody is always talking about affordable housing. We have affordable housing. You want to bulldoze our affordable housing. You're getting ready to put a pumping station in my front yard.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

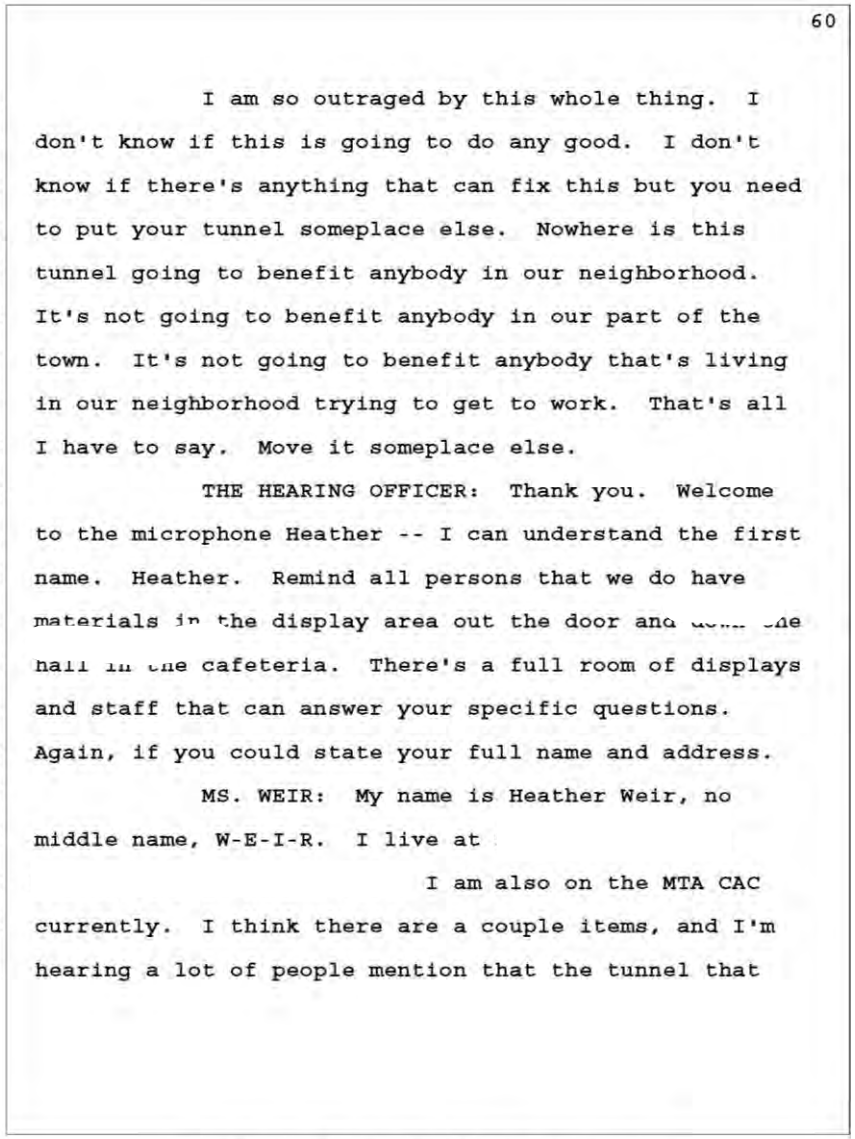
1

RESPONSES

Response to Comment 1:
The Preferred Alternative would displace 22 residential buildings in the Midtown-Edmondson neighborhood, Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings. Executive Order 12898 requires federal agencies to 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 Project Team has engaged in extensive public outreach throughout the development of the Project, including three public open houses and ten community meetings. In addition to these meetings, Mitigation Working Groups comprised of community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI** and **Chapter VIII**.

The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



60

I am so outraged by this whole thing. I don't know if this is going to do any good. I don't know if there's anything that can fix this but you need to put your tunnel someplace else. Nowhere is this tunnel going to benefit anybody in our neighborhood. It's not going to benefit anybody in our part of the town. It's not going to benefit anybody that's living in our neighborhood trying to get to work. That's all I have to say. Move it someplace else.

THE HEARING OFFICER: Thank you. Welcome to the microphone Heather -- I can understand the first name. Heather. Remind all persons that we do have materials in the display area out the door and down the hall in the cafeteria. There's a full room of displays and staff that can answer your specific questions. Again, if you could state your full name and address.

MS. WEIR: My name is Heather Weir, no middle name, W-E-I-R. I live at

I am also on the MTA CAC currently. I think there are a couple items, and I'm hearing a lot of people mention that the tunnel that

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

RESPONSES

Response to Comment 2:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since the publication of the DEIS, Alternative 3B was selected as the Preferred Alternative. Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

RESPONSES

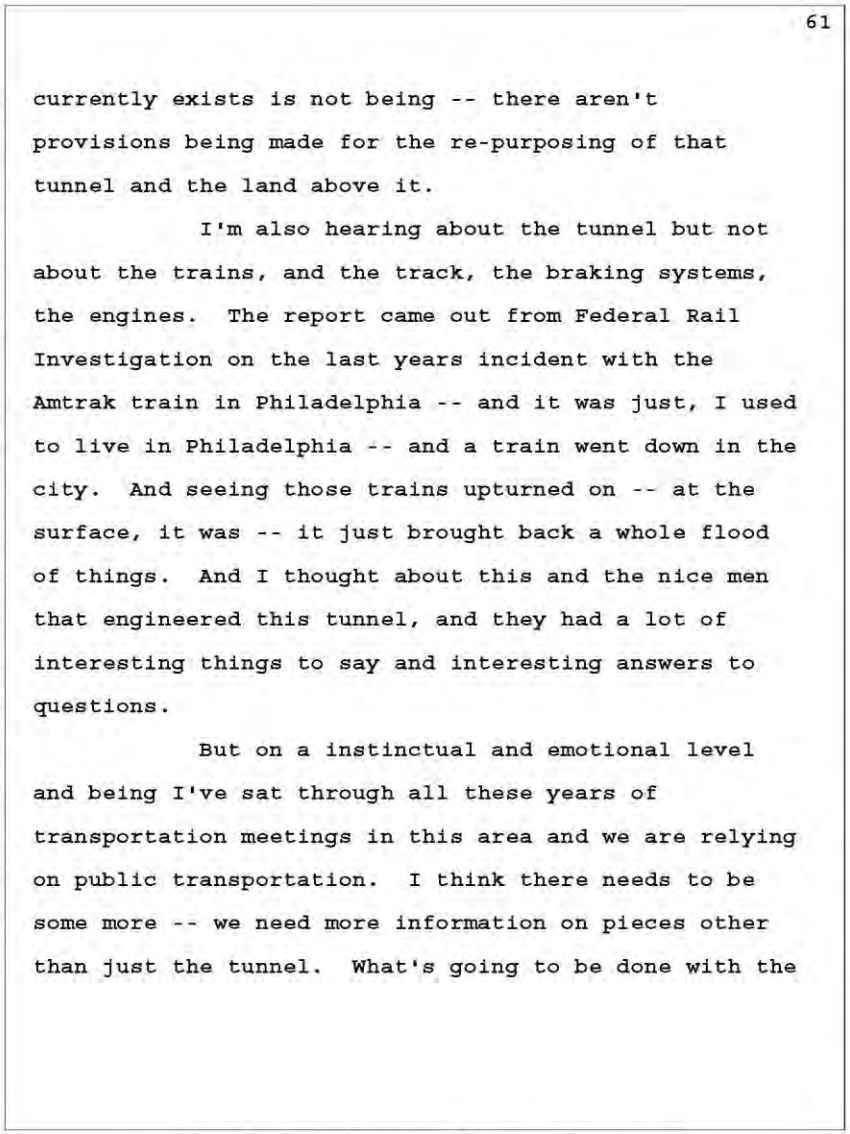
DEIS Comment 136:

I am so outraged by this whole thing. I don't know if this is going to do any good. I don't know if there's anything that can fix this but you need to put your tunnel someplace else. Nowhere is this tunnel going to benefit anybody in our neighborhood. It's not going to benefit anybody in our part of the town. It's not going to benefit anybody that's living in our neighborhood trying to get to work. That's all I have to say. Move it someplace else.

THE HEARING OFFICER: Thank you. Welcome to the microphone Heather -- I can understand the first name. Heather. Remind all persons that we do have materials in the display area out the door and down the hall in the cafeteria. There's a full room of displays and staff that can answer your specific questions. Again, if you could state your full name and address.

MS. WEIR: My name is Heather Weir, no middle name, W-E-I-R. I live at [redacted] I am also on the MTA CAC currently. I think there are a couple items, and I'm hearing a lot of people mention that the tunnel that

COMMENTS



61

currently exists is not being -- there aren't provisions being made for the re-purposing of that tunnel and the land above it.

I'm also hearing about the tunnel but not about the trains, and the track, the braking systems, the engines. The report came out from Federal Rail Investigation on the last years incident with the Amtrak train in Philadelphia -- and it was just, I used to live in Philadelphia -- and a train went down in the city. And seeing those trains upturned on -- at the surface, it was -- it just brought back a whole flood of things. And I thought about this and the nice men that engineered this tunnel, and they had a lot of interesting things to say and interesting answers to questions.

But on a instinctual and emotional level and being I've sat through all these years of transportation meetings in this area and we are relying on public transportation. I think there needs to be some more -- we need more information on pieces other than just the tunnel. What's going to be done with the

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

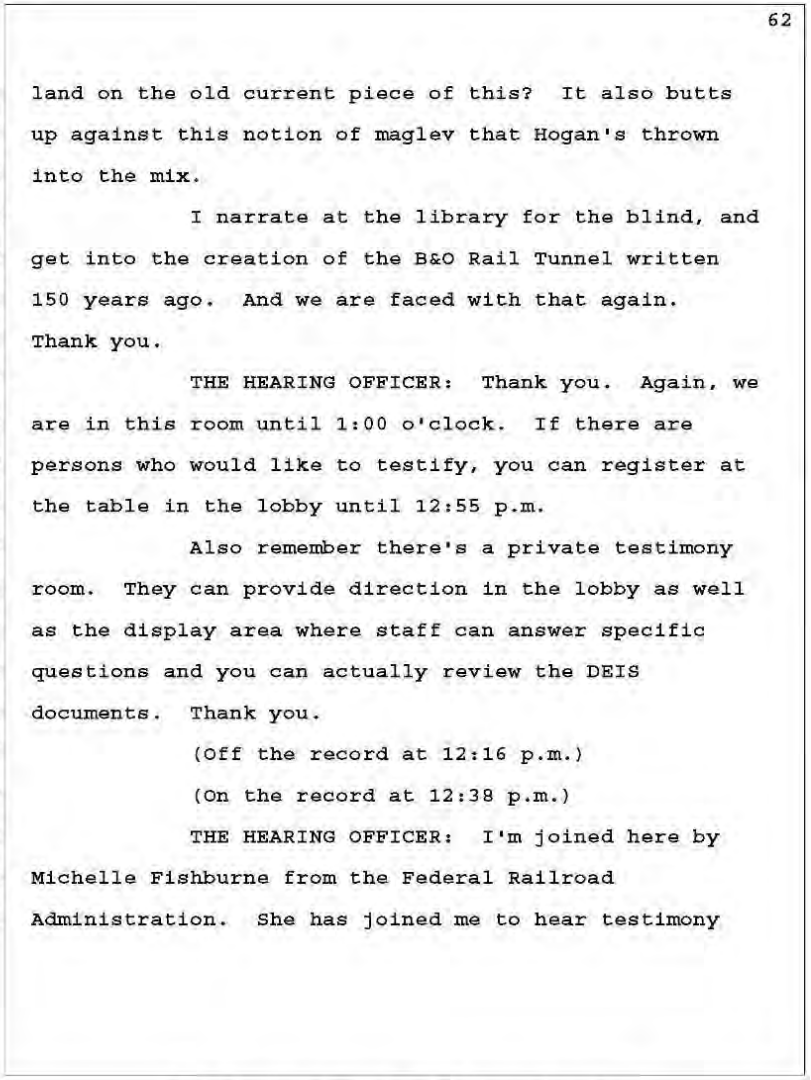
2

RESPONSES

Response to Comment 1:
Amtrak desires to reserve the existing tunnel for a future rail transportation use.

Response to Comment 2:
New tunnels would be designed to optimize safety and meet modern standards. Amtrak and Norfolk Southern (NS) are anticipated to use existing fleets and newly-acquired equipment in the B&P Tunnel and the equipment must meet federal standards for safe operations. In addition, the B&P Tunnel would be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and freight trains within the tunnel.

COMMENTS



62

land on the old current piece of this? It also butts up against this notion of maglev that Hogan's thrown into the mix.

I narrate at the library for the blind, and get into the creation of the B&O Rail Tunnel written 150 years ago. And we are faced with that again. Thank you.

THE HEARING OFFICER: Thank you. Again, we are in this room until 1:00 o'clock. If there are persons who would like to testify, you can register at the table in the lobby until 12:55 p.m.

Also remember there's a private testimony room. They can provide direction in the lobby as well as the display area where staff can answer specific questions and you can actually review the DEIS documents. Thank you.

(Off the record at 12:16 p.m.)

(On the record at 12:38 p.m.)

THE HEARING OFFICER: I'm joined here by Michelle Fishburne from the Federal Railroad Administration. She has joined me to hear testimony

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

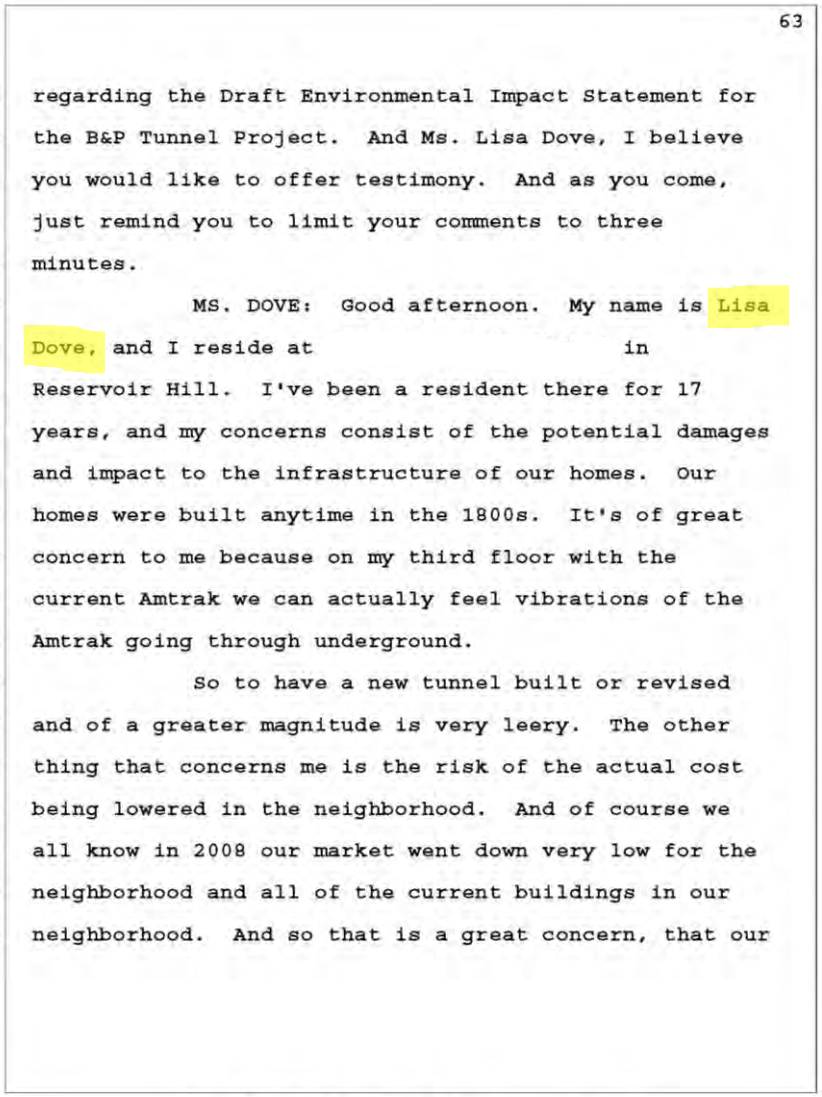
3

RESPONSES

Response to Comment 3:
A Maglev train would not utilize existing or planned Amtrak infrastructure. The design of such a system requires significantly different rights-of-way and infrastructure. The design criteria for Maglev are extremely restrictive and would only be achievable on new alignments.

COMMENTS

DEIS Comment 137:



63

regarding the Draft Environmental Impact Statement for the B&P Tunnel Project. And Ms. Lisa Dove, I believe you would like to offer testimony. And as you come, just remind you to limit your comments to three minutes.

MS. DOVE: Good afternoon. My name is Lisa Dove, and I reside at in Reservoir Hill. I've been a resident there for 17 years, and my concerns consist of the potential damages and impact to the infrastructure of our homes. Our homes were built anytime in the 1800s. It's of great concern to me because on my third floor with the current Amtrak we can actually feel vibrations of the Amtrak going through underground.

So to have a new tunnel built or revised and of a greater magnitude is very leery. The other thing that concerns me is the risk of the actual cost being lowered in the neighborhood. And of course we all know in 2008 our market went down very low for the neighborhood and all of the current buildings in our neighborhood. And so that is a great concern, that our

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 2:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS

RESPONSES

homes would incur lower costs in the market as a result. Thank you.

THE HEARING OFFICER: Thank you so much. Again, we are here through 1:00 o'clock. If you would like to testify in this room you can register in the lobby through 12:55 p.m. Thank you.

(Off the record at 12:40 p.m.)

(On the record at 12:56 p.m.)

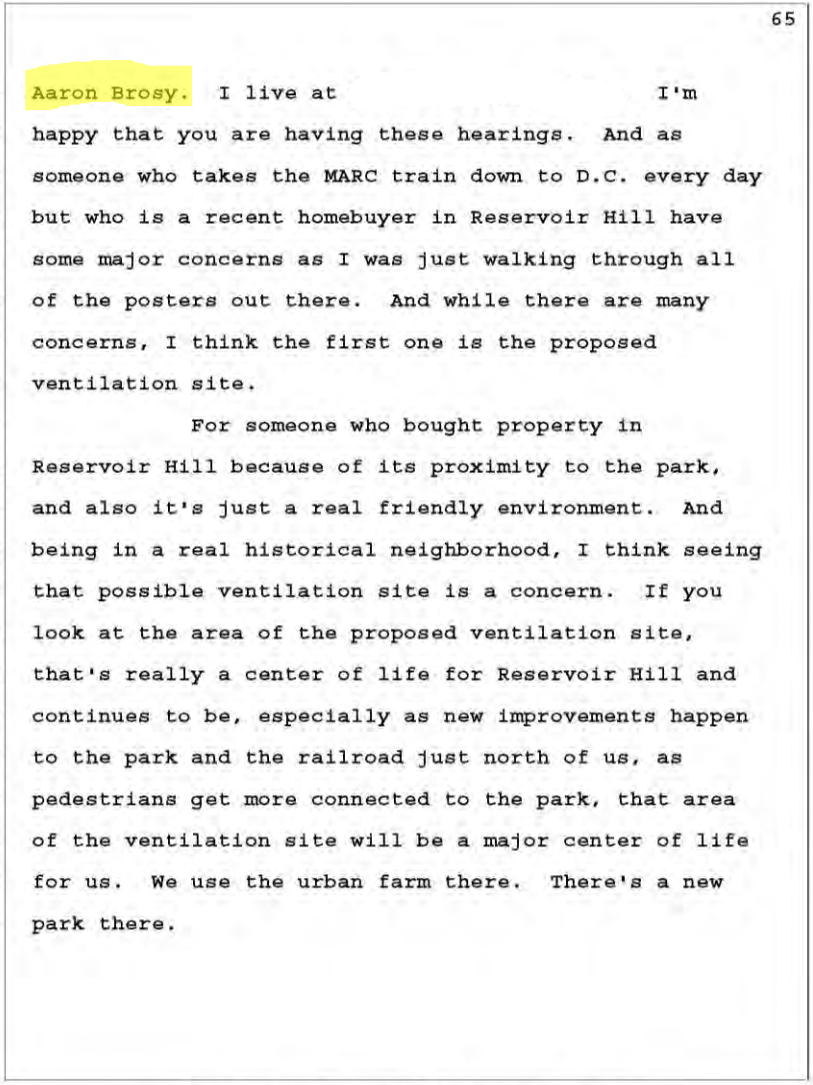
THE HEARING OFFICER: We are opening the Public Hearing for the B&P Tunnel Project. We are receiving public comments on the Draft Environmental Impact Statement today. Today is Saturday, February 6. This is the second of a series of three hearings. A final hearing will take place on Wednesday, February 17, 5:00 to 8:00 p.m. at Carver Vo-Tech High School.

Reminding all of those who have signed up to testify that you are limited to three minutes for your comments. And we welcome Aaron Brosy (ph.). And as you come, if you could just restate your name and address.

MR. BROSY: Sure. Thank you. My name is

COMMENTS

DEIS Comment 138:



65

Aaron Brosy. I live at I'm happy that you are having these hearings. And as someone who takes the MARC train down to D.C. every day but who is a recent homebuyer in Reservoir Hill have some major concerns as I was just walking through all of the posters out there. And while there are many concerns, I think the first one is the proposed ventilation site.

For someone who bought property in Reservoir Hill because of its proximity to the park, and also it's just a real friendly environment. And being in a real historical neighborhood, I think seeing that possible ventilation site is a concern. If you look at the area of the proposed ventilation site, that's really a center of life for Reservoir Hill and continues to be, especially as new improvements happen to the park and the railroad just north of us, as pedestrians get more connected to the park, that area of the ventilation site will be a major center of life for us. We use the urban farm there. There's a new park there.

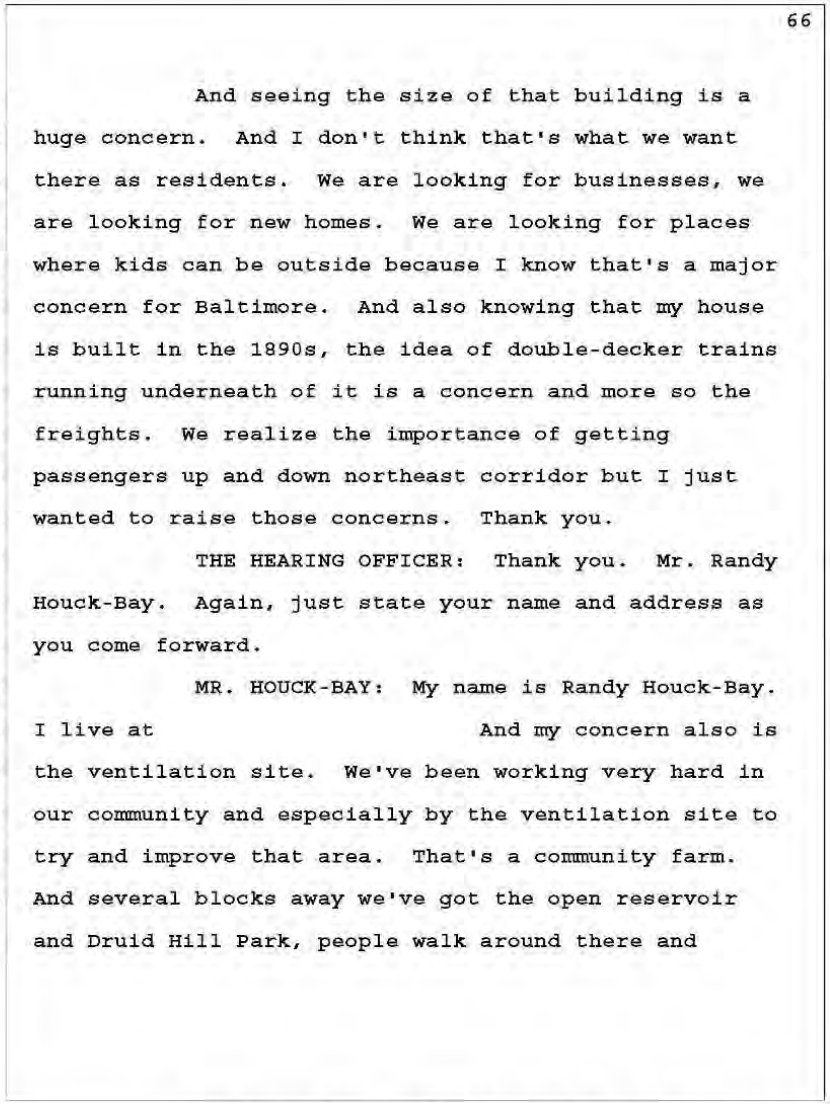
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



66

And seeing the size of that building is a huge concern. And I don't think that's what we want there as residents. We are looking for businesses, we are looking for new homes. We are looking for places where kids can be outside because I know that's a major concern for Baltimore. And also knowing that my house 2
is built in the 1890s, the idea of double-decker trains running underneath of it is a concern and more so the 3
freights. We realize the importance of getting passengers up and down northeast corridor but I just wanted to raise those concerns. Thank you.

THE HEARING OFFICER: Thank you. Mr. Randy Houck-Bay. Again, just state your name and address as you come forward.

MR. HOUCK-BAY: My name is Randy Houck-Bay. I live at And my concern also is the ventilation site. We've been working very hard in our community and especially by the ventilation site to try and improve that area. That's a community farm. And several blocks away we've got the open reservoir and Druid Hill Park, people walk around there and

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

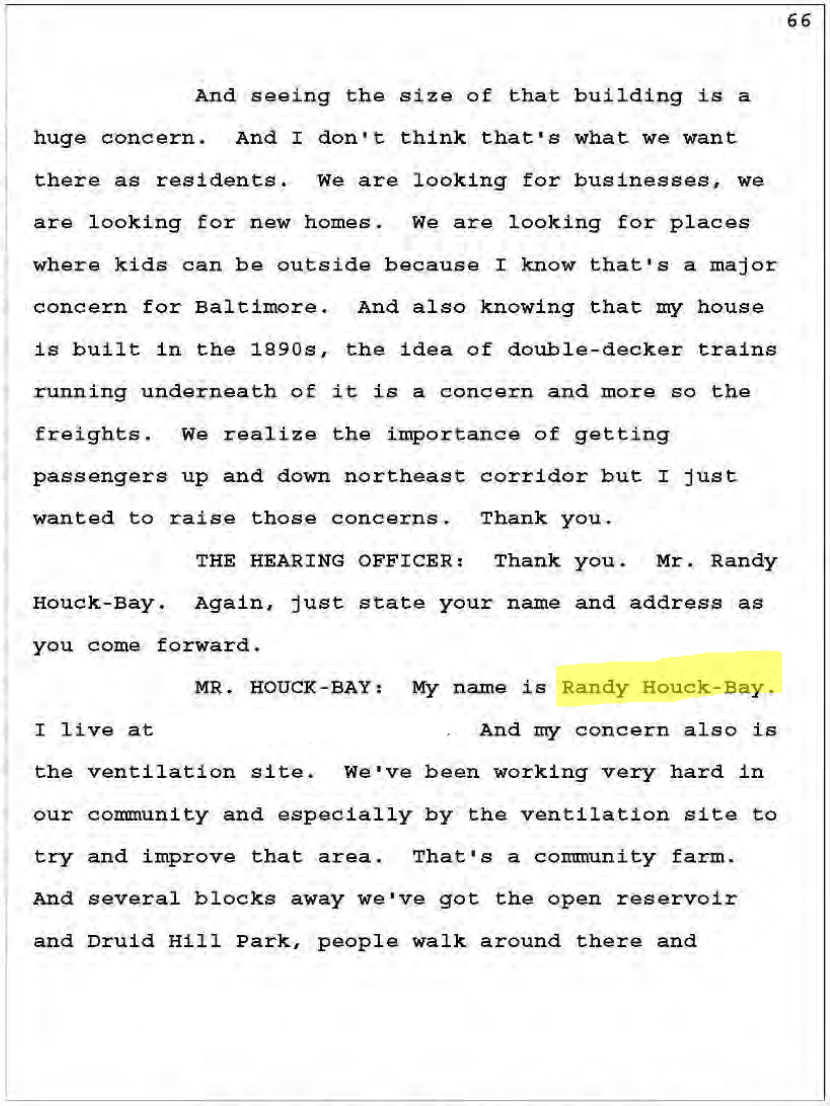
Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 3:
Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes. Due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Amtrak's first priority is to its passenger services. Therefore, although Amtrak must accommodate requests from NS or other freight operators with trackage rights agreements for additional train moves on the NEC, Amtrak need only schedule such moves as space between passenger trains can be made available. Where the freight operator and Amtrak have a dispute about scheduling of freight moves, the Surface Transportation Board (STB) adjudicates trackage rights agreements.

COMMENTS

DEIS Comment 139:



66

And seeing the size of that building is a huge concern. And I don't think that's what we want there as residents. We are looking for businesses, we are looking for new homes. We are looking for places where kids can be outside because I know that's a major concern for Baltimore. And also knowing that my house is built in the 1890s, the idea of double-decker trains running underneath of it is a concern and more so the freights. We realize the importance of getting passengers up and down northeast corridor but I just wanted to raise those concerns. Thank you.

THE HEARING OFFICER: Thank you. Mr. Randy Houck-Bay. Again, just state your name and address as you come forward.

MR. HOUCK-BAY: My name is Randy Houck-Bay. I live at . And my concern also is the ventilation site. We've been working very hard in our community and especially by the ventilation site to try and improve that area. That's a community farm. And several blocks away we've got the open reservoir and Druid Hill Park, people walk around there and

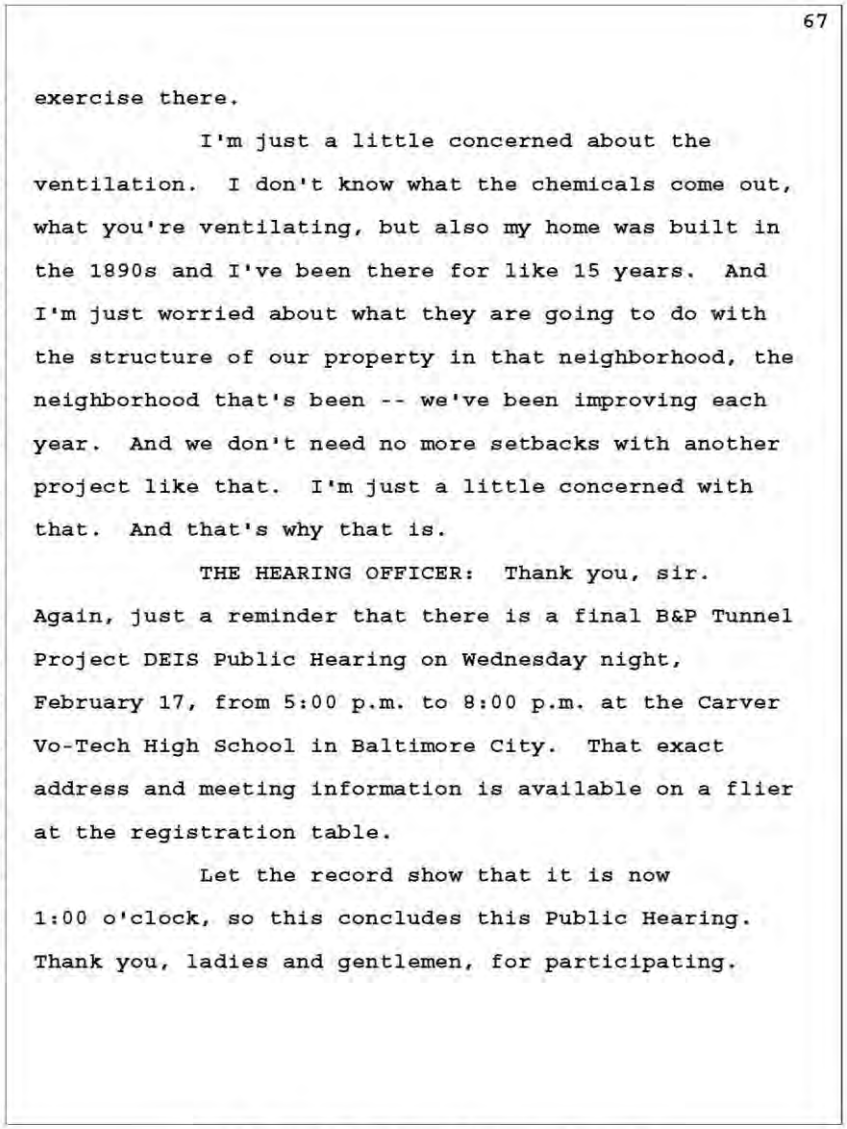
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The current preferred location of the Intermediate Ventilation Facility is 900-940 West The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



67

exercise there.

I'm just a little concerned about the ventilation. I don't know what the chemicals come out, what you're ventilating, but also my home was built in the 1890s and I've been there for like 15 years. And I'm just worried about what they are going to do with the structure of our property in that neighborhood, the neighborhood that's been -- we've been improving each year. And we don't need no more setbacks with another project like that. I'm just a little concerned with that. And that's why that is.

THE HEARING OFFICER: Thank you, sir. Again, just a reminder that there is a final B&P Tunnel Project DEIS Public Hearing on Wednesday night, February 17, from 5:00 p.m. to 8:00 p.m. at the Carver Vo-Tech High School in Baltimore City. That exact address and meeting information is available on a flier at the registration table.

Let the record show that it is now 1:00 o'clock, so this concludes this Public Hearing. Thank you, ladies and gentlemen, for participating.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

3

RESPONSES

Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 3:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS | **RESPONSES**

The comments you provide are valuable and will be considered as a part of FRA's decision making process. Thank you.

(Hearing concluded at 1:00 p.m.)

COMMENTS

RESPONSES

State of Maryland,
City of Baltimore, to wit:

I, Kyle L. Kingsley, a Notary Public of the State of Maryland, City of Baltimore, do hereby certify that the within-proceedings took place before me at time and place herein set out.

I further certify that the proceedings were recorded stenographically by me and this transcript is a true record of the proceedings.

I further certify that I am not of counsel to any of the parties, nor in any way interested in the outcome of this action.

As witness my hand this 18th day of February, 2016.

Kyle L. Kingsley

Kyle L. Kingsley
Notary Public

My Commission Expires:
April 4, 2017

COMMENTS | **RESPONSES**

INDEX

Hearing Officer's Hearing

February 1, 2016

SPEAKER:	Page
Ryan Jordan	10

COMMENTS | **RESPONSES**

THE HEARING OFFICER: Let the record show that it is now 10:30 a.m. on Saturday, February 6th, 2016. Good evening, ladies and gentlemen. My name is Anthony Brown, I will serve as today's Hearing Officer. Also in the audience tonight is Michelle Fishburne from The Federal Railroad Administration. I would like to welcome you to this Public Hearing regarding the Draft Environmental Impact Statement and Section 4(f) Evaluation (DEIS) for the B&P Tunnel Project. Thank you for taking the time to attend.

I call to order this Public Hearing conducted by the Federal Railroad Administration (FRA) in coordination with the Federal Transit Administration (FTA) and in coordination with the Maryland Department of Transportation and the National Railroad Passenger Corporation (Amtrak) as provided for in accordance to Title 23, Section 771.111(h) of the Code of the Federal Regulations. The FRA will be holding two Public Hearings regarding the Draft Environmental Impact Statement for the B&P Tunnel Project. You are attending the first of two hearings tonight, February 1st, Monday, from 5:00 to 8:00 p.m. In addition to tonight's hearing, a second hearing is scheduled for this

COMMENTS

RESPONSES

Saturday, February 6th, from 10:00 a.m. until 1:00 p.m., at this same location, Frederick Douglas High School. The DEIS was released to the public on December 18th, 2015 and will be available for review and comment until 5:00 p.m. on February the 19th, 2016. The DEIS and supporting documents are available on the B&P Tunnel website located at www.bptunnel.com, as well as public libraries and other locations described later in this hearing.

The Baltimore and Potomac or B&P Tunnel is a two-track railroad tunnel underneath central Baltimore City. The tunnel opened in 1873 and is located between the West Baltimore MARC Station and Penn Station or the Pennsylvania Station along Amtrak's Northeast Corridor, which I will refer to throughout this period as the NEC. Again, along Amtrak's Northeast Corridor, referred to as NEC. This section of the NEC is used by Amtrak and Maryland's MARC Commuter Rail passenger trains, as well as Norfolk Southern Railway freight trains. The purpose of the Project is address the structural and operational deficiencies of the existing B&P Tunnel and to accommodate future high-performance intercity passenger rail service goals for

COMMENTS

RESPONSES

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.

The purpose of the project is derived from the following needs:

The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the tunnel currently remains safe for rail transportation, it requires substantial maintenance and repairs and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands due to the combination of its vertical and horizontal track alignment, example, its grades and its curves. The low-speed tunnel

COMMENTS

RESPONSES

creates a bottleneck at a critical point in the Northeast Corridor, affecting operations of the most heavily traveled rail line in the United States.

The existing B&P Tunnel does not provide enough capacity to support existing and projected demands for regional and computer passenger service along the Northeast Corridor.

Additionally, the existing B&P Tunnel is not suited for modern high speed usage due to the current horizontal and vertical track alignments, which limit passenger train speeds through the tunnel to 30 miles per hour.

The existing B&P Tunnel is a valuable resource. The disposition of the existing tunnel needs to be considered in the project.

The DEIS, the Draft Environmental Impact Statement, analyzes impacts of the project on the natural and human environment. The DEIS provides an evaluation of the alternatives that are still under consideration and assesses environmental impacts for these alternatives. I would emphasize for those who are unaware that the DEIS and

COMMENTS | **RESPONSES**

supporting technical documents, as well as project displays are available in a display area. If you travel to the lobby's registration table, they can direct you to that area where you can see those displays. There are four alternatives evaluated in the DEIS: Alternative 1, the No-Build Alternative; and three Build Alternatives, called Alternative 3A, Alternative 3B, and Alternative 3C. These alternatives were retained through a comprehensive screening process which identified those alternatives that best address the project needs in consideration of environmental impacts. I will mention those alternatives again: Alternative 1, the No-Build Alternative; the Build Alternatives are Alternative 3A, 3B, and 3C. I mention again, complete information regarding all of these alternatives is available in the display area located in the cafeteria portion of the building, and they are available for your review tonight.

The purpose of these hearings is to allow the public an opportunity to provide testimony on the DEIS. Comments received at the Public Hearing will be considered in FRA's identification of a Preferred Alternative.

COMMENTS

RESPONSES

Following the Public Hearing and comment period for the DEIS, FRA, the Federal Railroad Administration, in cooperation with FTA, the Federal Transit Administration, and in coordination with the Maryland Department of Transportation and Amtrak will identify a Preferred Alternative for the project. FRA, the Federal Railroad Administration may identify the Preferred Alternative as Alternative 1, Alternative 3A, Alternative 3B, or Alternative 3C. In consideration of public and agency comments received regarding the alternatives, as well as the environmental impacts of the alternatives, the FRA may refine one or more alternatives prior identifying its preference. FRA's goal is to identify the best alternative in light of the alternative's benefits and ability to meet project needs, while taking into account potential impacts to the environment and public input. FRA, the Federal Railroad Administration will then prepare a Final Environmental Impact Statement referred to as an FEIS, to address comments received on the DEIS and document the basis for the identification of the preferred alternative. Following the FEIS, FRA will issue a Record of Decision,

COMMENTS

RESPONSES

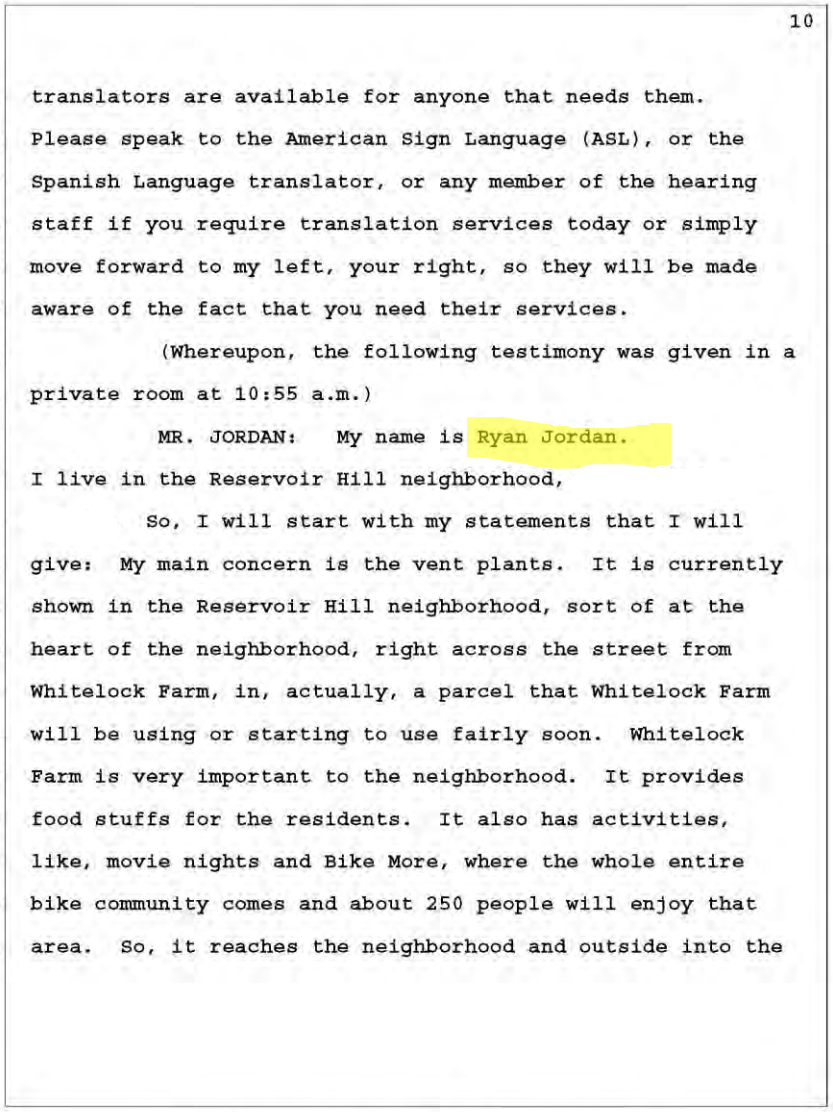
(ROD), which will formally select the alternative that could be advanced to design and construction.

The FRA is committed to insuring that no person is excluded from participation in, or denied the benefit of its transit services on the basis of race, color, or national origin as protected by Title VI of the Civil Rights Act of 1964. I mention again that in the audience with us tonight is Miss Michelle Fishburne, representing the Federal Railroad Administration, and I believe she is joining me on the stage now. You may address any questions to the Project Team who are represented in the display area. Again, I emphasize, we are hearing testimony only in this room, not responding to specific questions; however, again, in the display area is a full staff of project team members who can answer questions, provide details on the specific alternatives, and better possibly position you for your testimony tonight. You may address any question, again, to the Project Team members. We have also provided maps so you may visualize the proposed alternatives.

I will now ask that the American Sign Language (ASL) and Spanish Language translators to stand. These

COMMENTS

DEIS Comment 140:



10

translators are available for anyone that needs them. Please speak to the American Sign Language (ASL), or the Spanish Language translator, or any member of the hearing staff if you require translation services today or simply move forward to my left, your right, so they will be made aware of the fact that you need their services.

(Whereupon, the following testimony was given in a private room at 10:55 a.m.)

MR. JORDAN: My name is Ryan Jordan. I live in the Reservoir Hill neighborhood,

So, I will start with my statements that I will give: My main concern is the vent plants. It is currently shown in the Reservoir Hill neighborhood, sort of at the heart of the neighborhood, right across the street from Whitelock Farm, in, actually, a parcel that Whitelock Farm will be using or starting to use fairly soon. Whitelock Farm is very important to the neighborhood. It provides food stuffs for the residents. It also has activities, like, movie nights and Bike More, where the whole entire bike community comes and about 250 people will enjoy that area. So, it reaches the neighborhood and outside into the

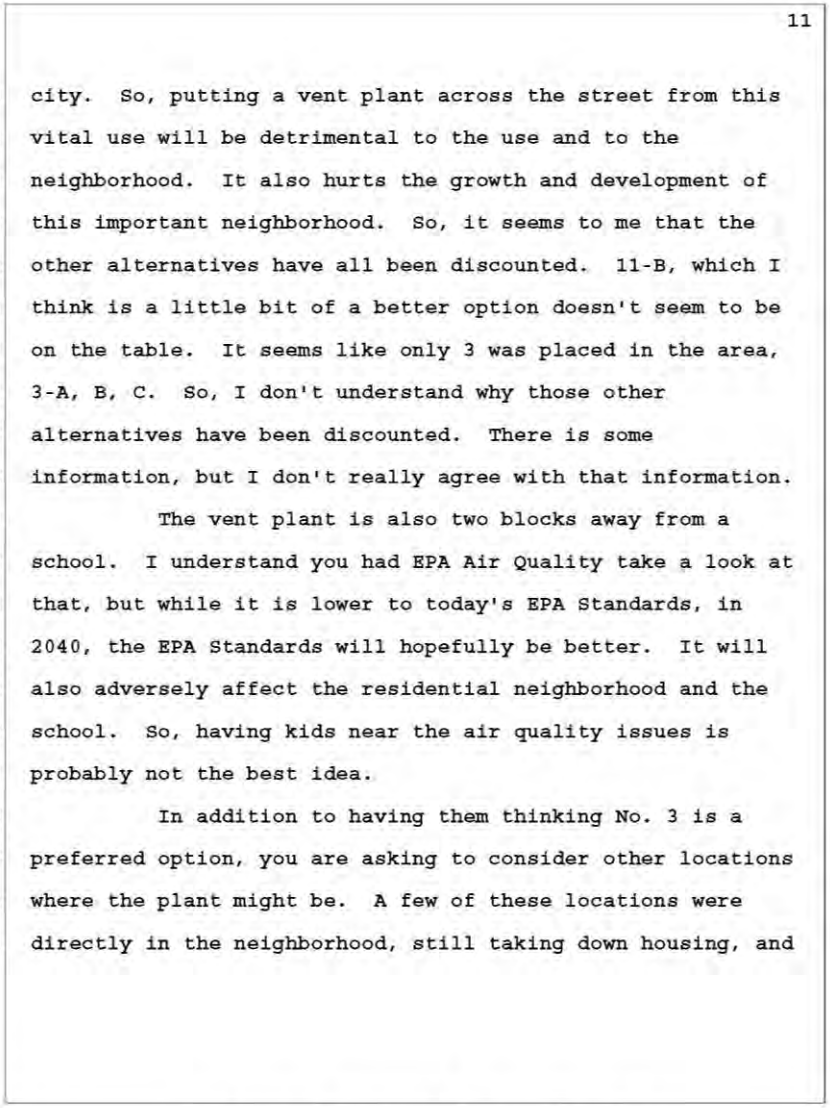
1

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



11

city. So, putting a vent plant across the street from this vital use will be detrimental to the use and to the neighborhood. It also hurts the growth and development of this important neighborhood. So, it seems to me that the other alternatives have all been discounted. 11-B, which I think is a little bit of a better option doesn't seem to be on the table. It seems like only 3 was placed in the area, 3-A, B, C. So, I don't understand why those other alternatives have been discounted. There is some information, but I don't really agree with that information.

The vent plant is also two blocks away from a school. I understand you had EPA Air Quality take a look at that, but while it is lower to today's EPA Standards, in 2040, the EPA Standards will hopefully be better. It will also adversely affect the residential neighborhood and the school. So, having kids near the air quality issues is probably not the best idea.

In addition to having them thinking No. 3 is a preferred option, you are asking to consider other locations where the plant might be. A few of these locations were directly in the neighborhood, still taking down housing, and

2

3

4

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 2:
The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

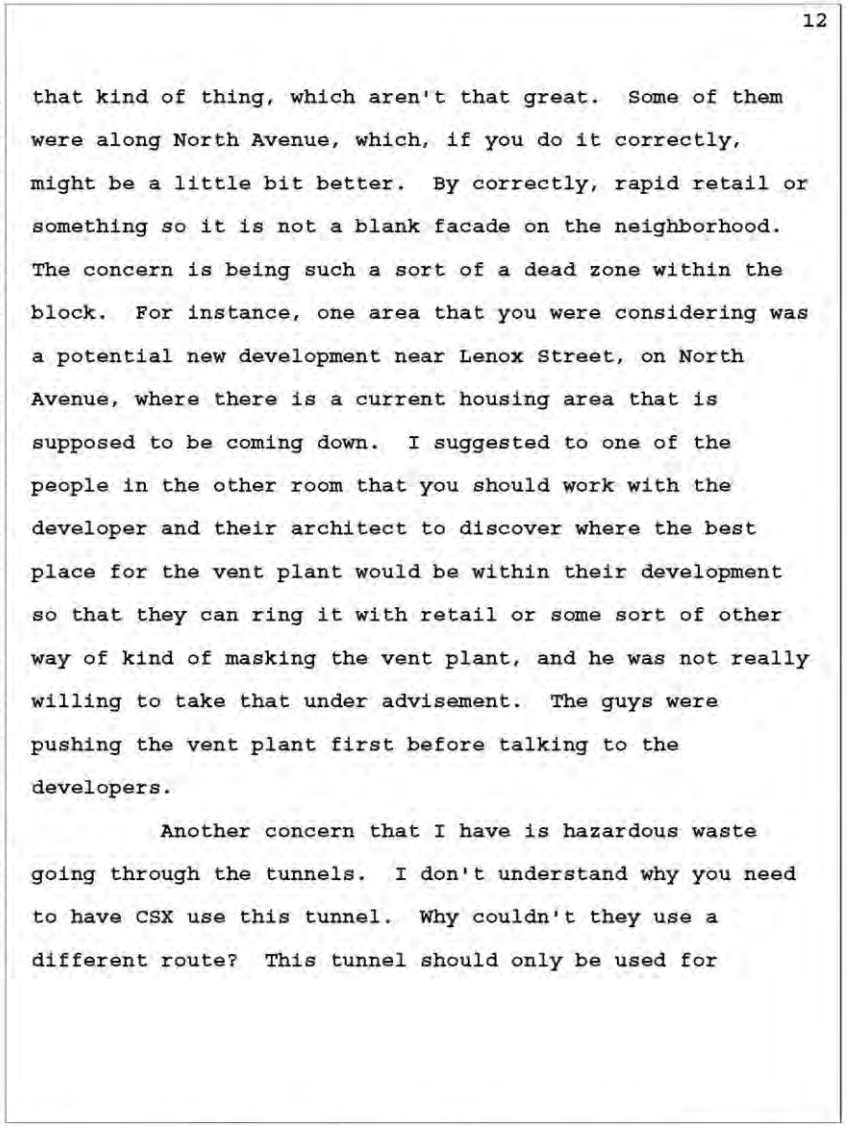
Response to Comment 3:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since the publication of the DEIS, Alternative 3B was selected as the Preferred Alternative. Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Response to Comment 4:
Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis*

COMMENTS



12

that kind of thing, which aren't that great. Some of them were along North Avenue, which, if you do it correctly, might be a little bit better. By correctly, rapid retail or something so it is not a blank facade on the neighborhood. The concern is being such a sort of a dead zone within the block. For instance, one area that you were considering was a potential new development near Lenox Street, on North Avenue, where there is a current housing area that is supposed to be coming down. I suggested to one of the people in the other room that you should work with the developer and their architect to discover where the best place for the vent plant would be within their development so that they can ring it with retail or some sort of other way of kind of masking the vent plant, and he was not really willing to take that under advisement. The guys were pushing the vent plant first before talking to the developers.

5 Another concern that I have is hazardous waste going through the tunnels. I don't understand why you need to have CSX use this tunnel. Why couldn't they use a different route? This tunnel should only be used for

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 5:
Amtrak has statutory and contractual obligations to permit the continued operation of freight trains. Currently, Norfolk Southern (NS) operates two trains through the existing B&P Tunnel daily for freight purposes.

NS has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

COMMENTS

passenger traffic only. And if MARC does not switch -- I know it sounds like they are, but if they don't switch to, you would have a smaller vent plant to start off with.

The last point is the cost for building owners is quite a lot of money for only about three minutes of extra travel time that I saw. That is a huge amount especially since the Governor of Maryland just denied the Baltimore region a red line that was going to be probably one quarter of this cost, which would have created today a lot more benefits to this area than just redoing a passenger tunnel. That's it.

(Hearing concluded at 11:00 a.m.)

6

RESPONSES

CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the B&P Tunnel Project.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 6:
While reducing travel time through the B&P Tunnel is one of several goals of the Project, it is not the reason that the project was initiated. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the Project is further defined in **Chapter II** of this FEIS.

COMMENTS

RESPONSES

State of Maryland:
County of Baltimore, to wit:

I, Susan Kambouris, a Notary Public of the State of Maryland, County of Baltimore, do hereby certify that the within-named proceedings took place before me at the time and place herein set out.

I further certify that the proceedings were recorded stenographically by me and this transcript is a true record of the proceedings.

I further certify that I am not of counsel to any of the parties, nor in any way interested in the outcome of this action.

As witness my hand this 17th day of February, 2016.

Susan A. Kambouris

SUSAN A. KAMBOURIS
Notary Public

My Commission Expires:
May 17, 2017

COMMENTS | **RESPONSES**

INDEX

Hearing Officer's Hearing

February 17, 2016

SPEAKER:	Page
Jon Kenney	14
Nancy Cooper Morgan	17
Bill Lee	18
Peter Halstad	19
Field Blaubelt	22
Rebekah Kuk	25
Mark West	26
Unidentified Speaker	29
Pamela Patterson	32
Stephanie Gates	34
Ross Moss	35
Warrick St. Jean	37
Jessica Childress	40
Emanuel Leach	42
Marlene Handler	44
Margaret Wilson	46

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS **RESPONSES**

INDEX (Continued)

Hearing Officer's Hearing

February 17, 2016

SPEAKER:	Page
Daniel Robertson	48
Tambry Brose	51
Dr. John Azalea	52

COMMENTS

RESPONSES

THE HEARING OFFICER: Let the record show that it is now 5:30 p.m., on Wednesday, February 17th, 2016. Good evening, ladies and gentlemen. My name is Anthony Brown, I will serve as today's Hearing Officer. I am joined -- along side me is Miss Michelle Fishburne from The Federal Railroad Administration. Also present in the hearing audience and more specifically in our display area are Project Tea and staff from the Maryland Transportation, Amtrak, and Maryland Transit Administration. I would like to welcome you to this Public Hearing regarding the Draft Environmental Impact Statement and Section 4(f) Evaluation (DEIS) for the B&P Tunnel Project. Thank you for taking the time to attend.

I call to order this Public Hearing which is being conducted by the Federal Railroad Administration (FRA) in coordination with the Federal Transit Administration (FTA) and in coordination with the Maryland Department of Transportation and the National Railroad Passenger Corporation (Amtrak) as provided for in accordance to Title 23, Section 771.111(h) of the Code of the Federal Regulations. The FRA will be holding or has held two

COMMENTS

RESPONSES

previous Public Hearings regarding the DEIS on February 1st, and February 6th. The DEIS was released to the public on December 18th, 2015 and will be available for review and comment until 5:00 p.m. on February 26th of this year. The DEIS and supporting documents are available on the B&P Tunnel website, www.bptunnel.com, as well as public libraries and other locations which will be described later in this hearing and also listed on information handouts you might have picked up at our registration table.

The B&P Tunnel is a two-track railroad tunnel underneath central Baltimore City. The tunnel opened in 1873 and is located between the West Baltimore MARC Station and Penn Station or the Pennsylvania Station, along Amtrak's Northeast Corridor. This section of the Northeast Corridor is used by Amtrak and Maryland's MARC Commuter Rail passenger trains, as well as Norfolk Southern Railway freight trains. 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 Northeast Corridor, including: To reduce travel time through the B&P

COMMENTS

RESPONSES

Tunnel and along the Northeast Corridor to accommodate existing and projected travel demand for intercity and commuter passenger services; to eliminate impediments to existing and projected operations along the Northeast Corridor; and to provide operational flexibility while accounting for the value of the existing tunnel as an important element of Baltimore's rail infrastructure.

The purpose of the project is derived from the following needs:

The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the tunnel currently remains safe for rail transportation, it requires substantial maintenance and repairs, and it does not meet current design standards. The tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The tunnel is also functionally obsolete and unable to meet current and future rail demands due to the combination of its vertical and horizontal track alignment, example, its grades and curves. The low-speed tunnel creates a bottleneck at a critical point in the Northeast

COMMENTS

RESPONSES

Corridor, affecting operations of the most heavily traveled rail line in the United States.

Additionally, the existing B&P Tunnel does not provide enough capacity to support existing and projected demands for regional and commuter passenger service along the Northeast Corridor.

The existing B&P Tunnel is not suited for modern high speed usage due to the current horizontal and vertical track alignments, which limit passenger train speeds through the tunnel to 30 miles per hour.

The existing B&P Tunnel is a valuable resource. The disposition of the existing tunnel needs to be considered in the project.

The DEIS, the Draft Environmental Impact Statement, analyzes impacts of the project on the natural and human environment. It involved the alternatives which are still under consideration and assesses environmental impacts for these alternatives. There are four alternatives being evaluated by the DEIS: Alternative 1, the No-Build Alternative; and, then, there are three Build Alternatives, called Alternative 3A, Alternative 3B, and Alternative 3C.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS | **RESPONSES**

These alternatives were retained through a comprehensive screening process which identified those alternatives that best address the project needs in consideration of environmental impacts.

These hearings will allow the public an opportunity to provide testimony on the DEIS. Comments received at the Public Hearing will be considered in the FRA's identification of a Preferred Alternative. Following the Hearing and comment period, which is, again, through February 26th for the DEIS, FRA, in cooperation with the FTA, the Federal Transit Administration, and in coordination with MDOT and Amtrak will identify a Preferred Alternative for the project. FRA may identify the Preferred Alternative as Alternative 1, Alternative 3A, Alternative 3B, or Alternative 3C. In consideration of public and agency comments received regarding the alternatives, as well as the environmental impacts of the alternatives, the FRA may refine one or more alternatives prior to identifying a preference. FRA's goal is to identify the best alternative in light of the alternative's benefits and ability to meet project needs, while taking into account potential impacts

COMMENTS

RESPONSES

to the environment and public input. FRA will then prepare a Final Environmental Impact Statement or FEIS to address comments received on the DEIS and document the basis for the identification of the preferred alternative. Following the FEIS, FRA will issue a Record of Decision, which will formally select the alternative that could be advanced to design and construction.

The FRA is committed to insuring that no person is excluded from participation in, or denied the benefit of its transit services on the basis of race, color, or national origin as protected by Title VI of the Civil Rights Act of 1964. You may address any questions to the Project Team in the display area. We will not respond to questions during this portion of the public testimony; however, again, project representatives are available in the cafeteria area to respond to your questions. They also have maps so you may visualize the proposed alternatives.

As you have seen by now, we do have interpreters from American Sign Language, as well as a Spanish translator who can provide assistance for those who may need them. Please speak to the American Sign Language individual who is

COMMENTS

RESPONSES

standing to my right if you need her assistance or the Spanish translator is also available, seated here to my right. I will ask her to address the crowd in Spanish should someone need assistance.

(Whereupon, an announcement was made to the audience in Spanish.)

THE HEARING OFFICER: Again, these individuals will be here throughout the meeting. Should you need their assistance, please move forward and contact them to my right. There is a handout -- was a handout which outlined the procedure conducting these hearings. This format will be followed to permit everyone an opportunity to be heard. For the record, I will read quickly through these procedures:

1. Elected and public officials will be heard first and will receive five minutes to speak.

2. Persons desiring to testify should register at the entrance to the school tonight and will be called in order of registration.

3. Any individual may appear and speak for him or herself, or if duly authorized, for any local civic group,

COMMENTS

RESPONSES

organization, club, or association subject to the rules provided herein. Speakers should give their name and address, and if representing a group, this information should also be given.

4. Speakers are requested to limit their statements to three minutes to be courteous to all of those who wish to speak. Again, elected officials will be allowed five minutes. Additional prepared statements or literature pertaining to the B&P Tunnel Project may be submitted at this hearing or by 5:00 p.m. February 26th, 2016 to the B&P Tunnel Project address for DEIS Comment, 81 West Mosher Street, Baltimore, Maryland 21217. All of these statements will be made part of the official hearing record. I am aware that that address should be on the printed literature you got today.

5. For this hearing, all statements oral or written, should be directed to myself, the Hearing Officer, and should be related to the subject matter of this hearing. All testimony may also be submitted privately to a court stenographer, out the door and to the left. I believe it is Room 314. There is a stenographer there where you can

COMMENTS

RESPONSES

provide your testimony in private, and, again, out the door to my left, and that person will be here throughout the evening.

6. If required, I, the Hearing Officer will announce any other specific rules governing this hearing.

Persons who registered to speak, as I said, will be called in the order of registration. You must register in order to speak. When you approach the mike, I would ask that you state your name and your address. With your cooperation, everyone will be heard. Let me summarize the sixth way your testimony -- six ways your testimony can become a part of the official record for this project. You can leave a written comment with us today. There are comment forms. There are comment boxes. You can give oral testimony in this hearing. You can give oral testimony in a private room out the door to my left. You can send written correspondence to the address I shared earlier. That address, again, is printed on your handout materials today. You can send an email to infor@bptunnel.com, DEIS Comment as the subject line, or you can complete an On-line Comment Form at the website, www.bptunnel.com. For the purposes of

COMMENTS | **RESPONSES**

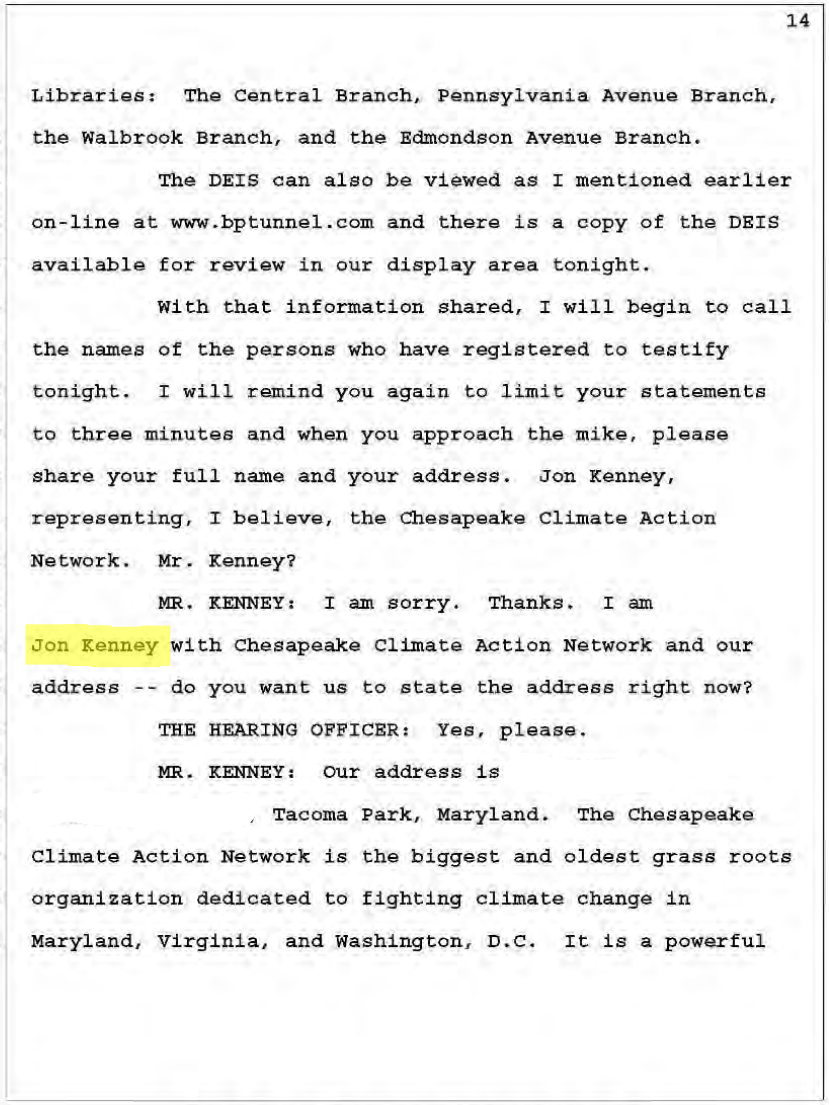
tonight, should you choose to give public testimony, you would not also be allowed to share private testimony. All correspondence regarding the B&P Tunnel Project received through 5:00 p.m. February 26th will be made a part of the official hearing record. For the record, announcement of these hearings has been made in the Afro-American, The Baltimore Sun, The City Paper, The Grace & Glory Magazine. The DEIS remains available for public review at the Baltimore City Department of Transportation Transit Bureau, the Maryland Department of Transportation, the Maryland Transit Administration, Bon Secours Community Works, the John Eager Howard Recreation Center, the Bentalou Recreation Center, as well as the following Enoch Pratt Free Libraries: The Central Branch, the Walbrook Branch, the Pennsylvania Avenue Branch, and the Edmondson Avenue Branch.

The DEIS remains available for public review at the Baltimore City Department of Transportation Transit Bureau, Maryland Department of Transportation, Mass Transit or Maryland Transit Administration, Bon Secours Community Works, John Eagar Howard Recreation Center, Bentalou Recreation Center, as well as the following Enoch Pratt Free

COMMENTS

RESPONSES

DEIS Comment 141:



14

Libraries: The Central Branch, Pennsylvania Avenue Branch, the Walbrook Branch, and the Edmondson Avenue Branch.

The DEIS can also be viewed as I mentioned earlier on-line at www.bptunnel.com and there is a copy of the DEIS available for review in our display area tonight.

With that information shared, I will begin to call the names of the persons who have registered to testify tonight. I will remind you again to limit your statements to three minutes and when you approach the mike, please share your full name and your address. Jon Kenney, representing, I believe, the Chesapeake Climate Action Network. Mr. Kenney?

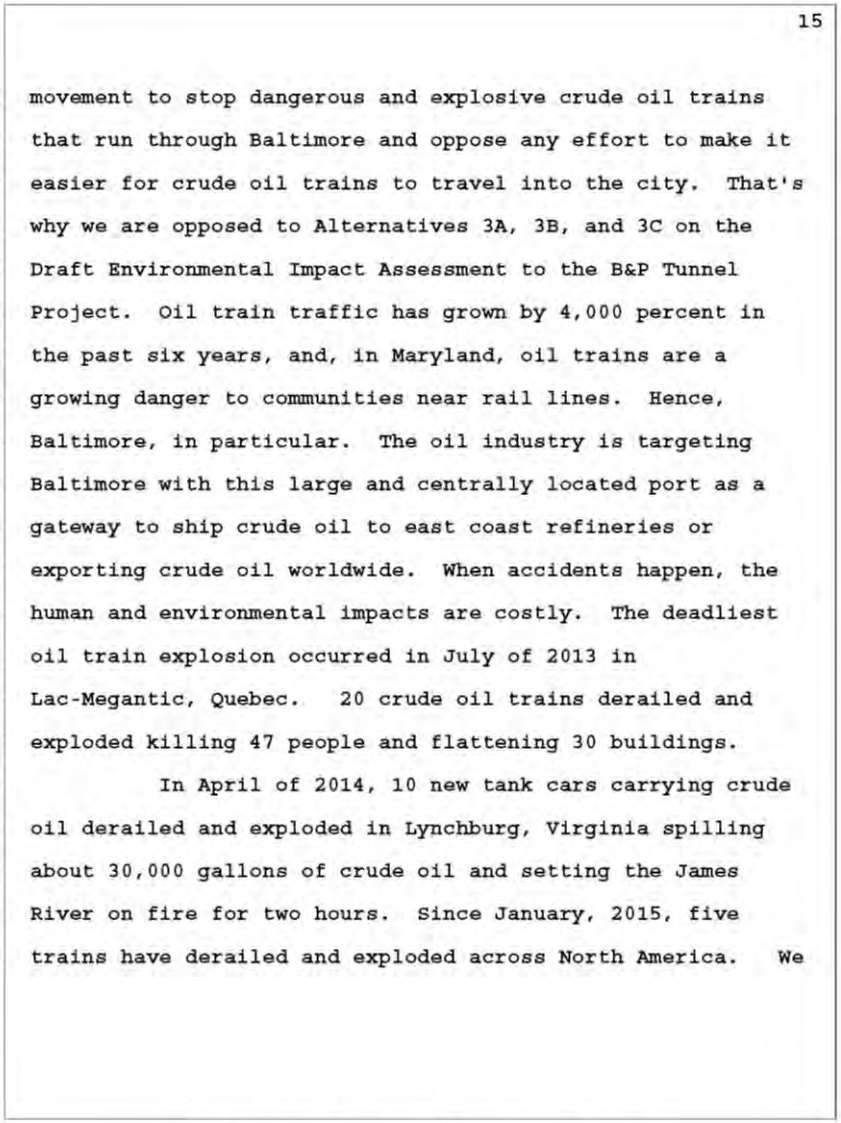
MR. KENNEY: I am sorry. Thanks. I am Jon Kenney with Chesapeake Climate Action Network and our address -- do you want us to state the address right now?

THE HEARING OFFICER: Yes, please.

MR. KENNEY: Our address is , Tacoma Park, Maryland. The Chesapeake Climate Action Network is the biggest and oldest grass roots organization dedicated to fighting climate change in Maryland, Virginia, and Washington, D.C. It is a powerful

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



15

movement to stop dangerous and explosive crude oil trains that run through Baltimore and oppose any effort to make it easier for crude oil trains to travel into the city. That's why we are opposed to Alternatives 3A, 3B, and 3C on the Draft Environmental Impact Assessment to the B&P Tunnel Project. Oil train traffic has grown by 4,000 percent in the past six years, and, in Maryland, oil trains are a growing danger to communities near rail lines. Hence, Baltimore, in particular. The oil industry is targeting Baltimore with this large and centrally located port as a gateway to ship crude oil to east coast refineries or exporting crude oil worldwide. When accidents happen, the human and environmental impacts are costly. The deadliest oil train explosion occurred in July of 2013 in Lac-Megantic, Quebec. 20 crude oil trains derailed and exploded killing 47 people and flattening 30 buildings.

In April of 2014, 10 new tank cars carrying crude oil derailed and exploded in Lynchburg, Virginia spilling about 30,000 gallons of crude oil and setting the James River on fire for two hours. Since January, 2015, five trains have derailed and exploded across North America. We

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at https://www.fra.dot.gov/Page/P0444. From that text:

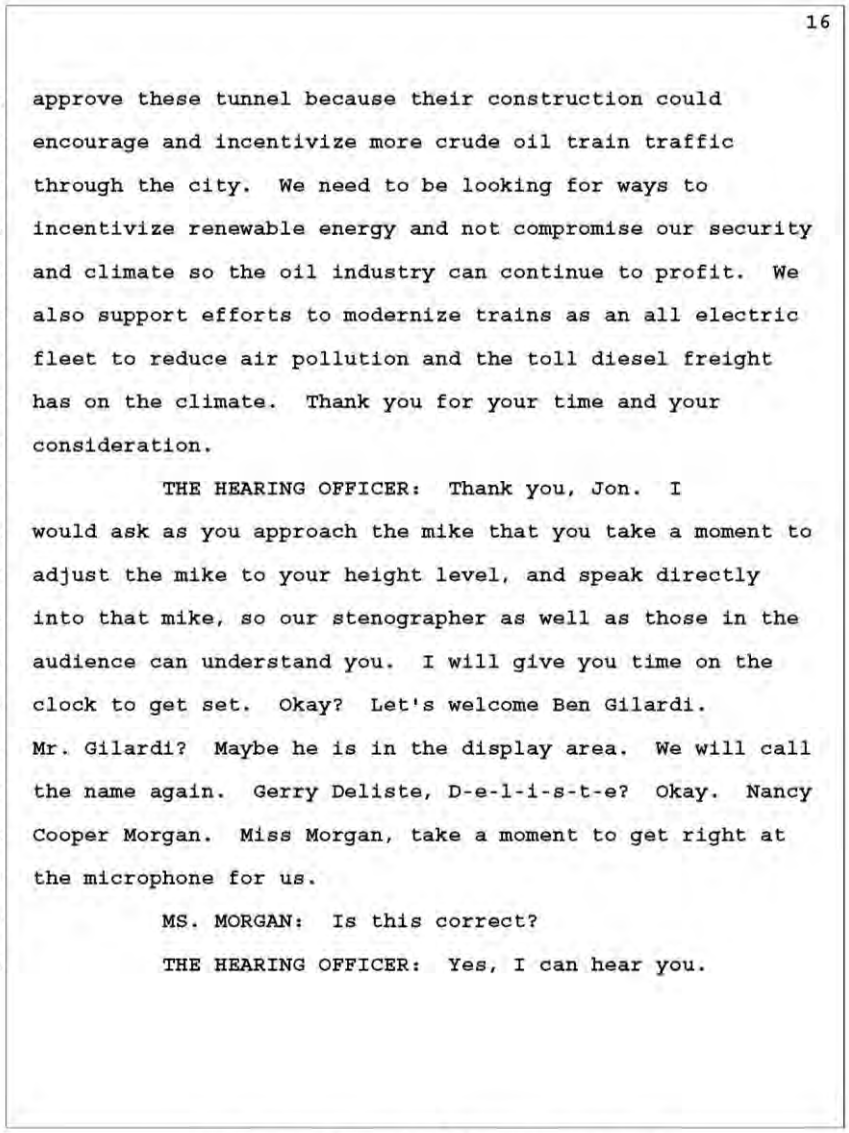
> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

Response to Comment 2:
The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than a fire or other emergency event on an above-ground track running through the neighborhood. The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

COMMENTS



16

approve these tunnel because their construction could encourage and incentivize more crude oil train traffic through the city. We need to be looking for ways to incentivize renewable energy and not compromise our security and climate so the oil industry can continue to profit. We also support efforts to modernize trains as an all electric fleet to reduce air pollution and the toll diesel freight has on the climate. Thank you for your time and your consideration.

THE HEARING OFFICER: Thank you, Jon. I would ask as you approach the mike that you take a moment to adjust the mike to your height level, and speak directly into that mike, so our stenographer as well as those in the audience can understand you. I will give you time on the clock to get set. Okay? Let's welcome Ben Gilardi. Mr. Gilardi? Maybe he is in the display area. We will call the name again. Gerry Deliste, D-e-l-i-s-t-e? Okay. Nancy Cooper Morgan. Miss Morgan, take a moment to get right at the microphone for us.

MS. MORGAN: Is this correct?

THE HEARING OFFICER: Yes, I can hear you.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

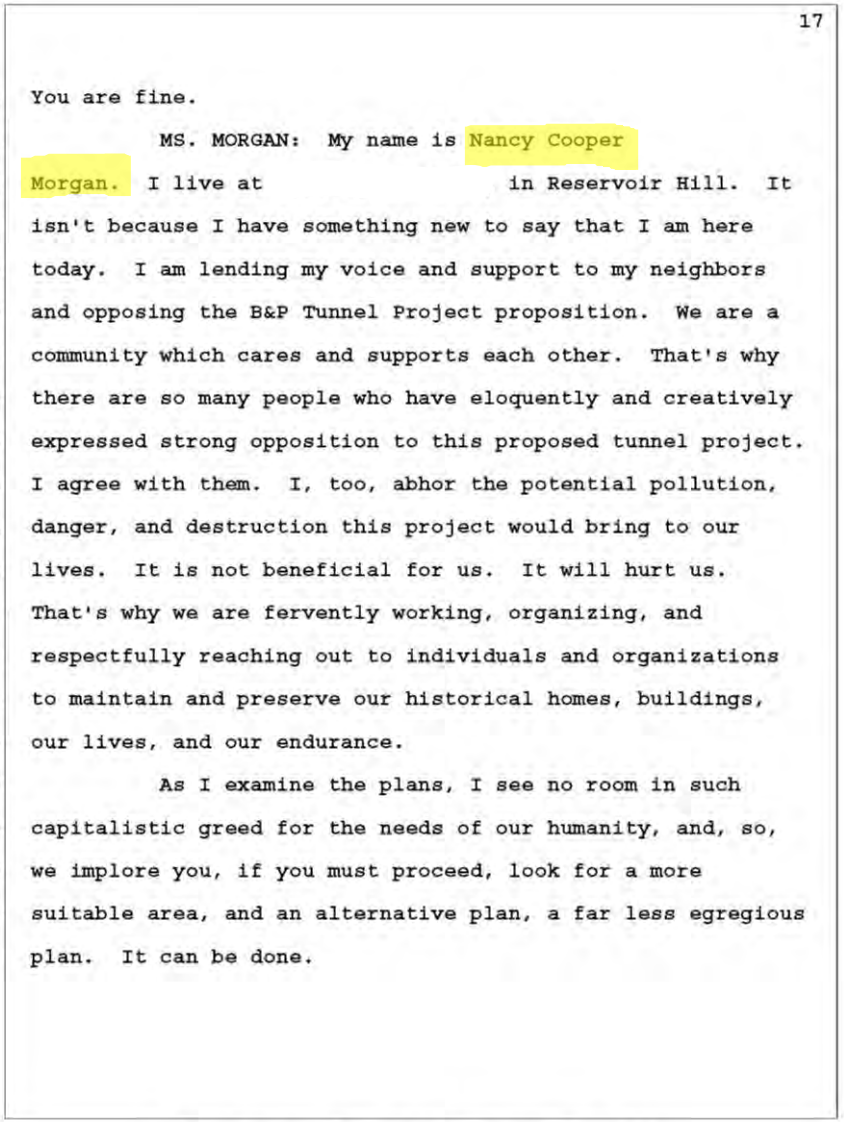
3

RESPONSES

Response to Comment 3:
The type of locomotive traveling through the tunnel is determined by the train service operator. As per the 2040 projections, of the 388 daily vehicles running through the tunnel, 222 will be electric (Acela, NE Regional, and Metropolitan), and 166 will be diesel (2 freight and 164 MARC). Please refer to **Chapter VI** for additional information.

COMMENTS

DEIS Comment 142:



17

You are fine.

MS. MORGAN: My name is Nancy Cooper Morgan. I live at in Reservoir Hill. It isn't because I have something new to say that I am here today. I am lending my voice and support to my neighbors and opposing the B&P Tunnel Project proposition. We are a community which cares and supports each other. That's why there are so many people who have eloquently and creatively expressed strong opposition to this proposed tunnel project. I agree with them. I, too, abhor the potential pollution, danger, and destruction this project would bring to our lives. It is not beneficial for us. It will hurt us. That's why we are fervently working, organizing, and respectfully reaching out to individuals and organizations to maintain and preserve our historical homes, buildings, our lives, and our endurance.

As I examine the plans, I see no room in such capitalistic greed for the needs of our humanity, and, so, we implore you, if you must proceed, look for a more suitable area, and an alternative plan, a far less egregious plan. It can be done.

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are in **Chapter VI**.

Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII.**

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

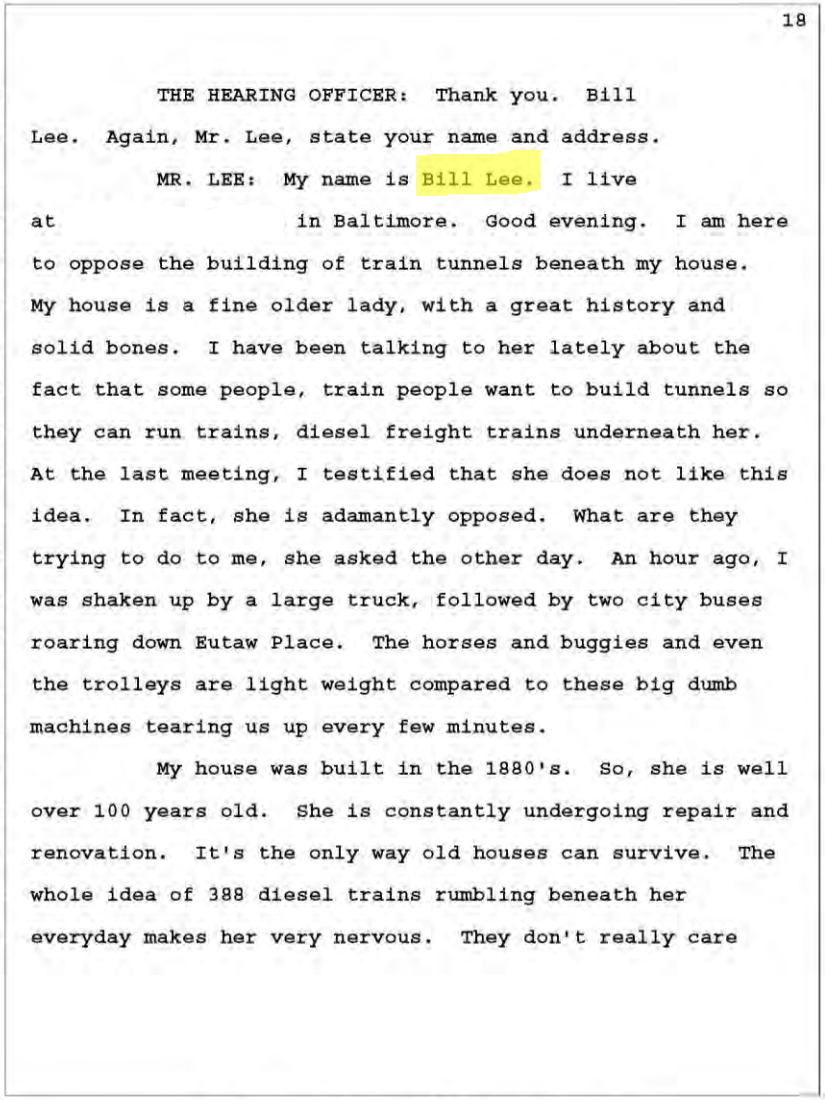
Response to Comment 2:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of

COMMENTS	RESPONSES
	alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative. Since the publication of the DEIS, Alternative 3B was selected as the Preferred Alternative. Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

COMMENTS

DEIS Comment 143:



18

THE HEARING OFFICER: Thank you. Bill Lee. Again, Mr. Lee, state your name and address.

MR. LEE: My name is Bill Lee. I live at in Baltimore. Good evening. I am here to oppose the building of train tunnels beneath my house. My house is a fine older lady, with a great history and solid bones. I have been talking to her lately about the fact that some people, train people want to build tunnels so they can run trains, diesel freight trains underneath her. At the last meeting, I testified that she does not like this idea. In fact, she is adamantly opposed. What are they trying to do to me, she asked the other day. An hour ago, I was shaken up by a large truck, followed by two city buses roaring down Eutaw Place. The horses and buggies and even the trolleys are light weight compared to these big dumb machines tearing us up every few minutes.

My house was built in the 1880's. So, she is well over 100 years old. She is constantly undergoing repair and renovation. It's the only way old houses can survive. The whole idea of 388 diesel trains rumbling beneath her everyday makes her very nervous. They don't really care

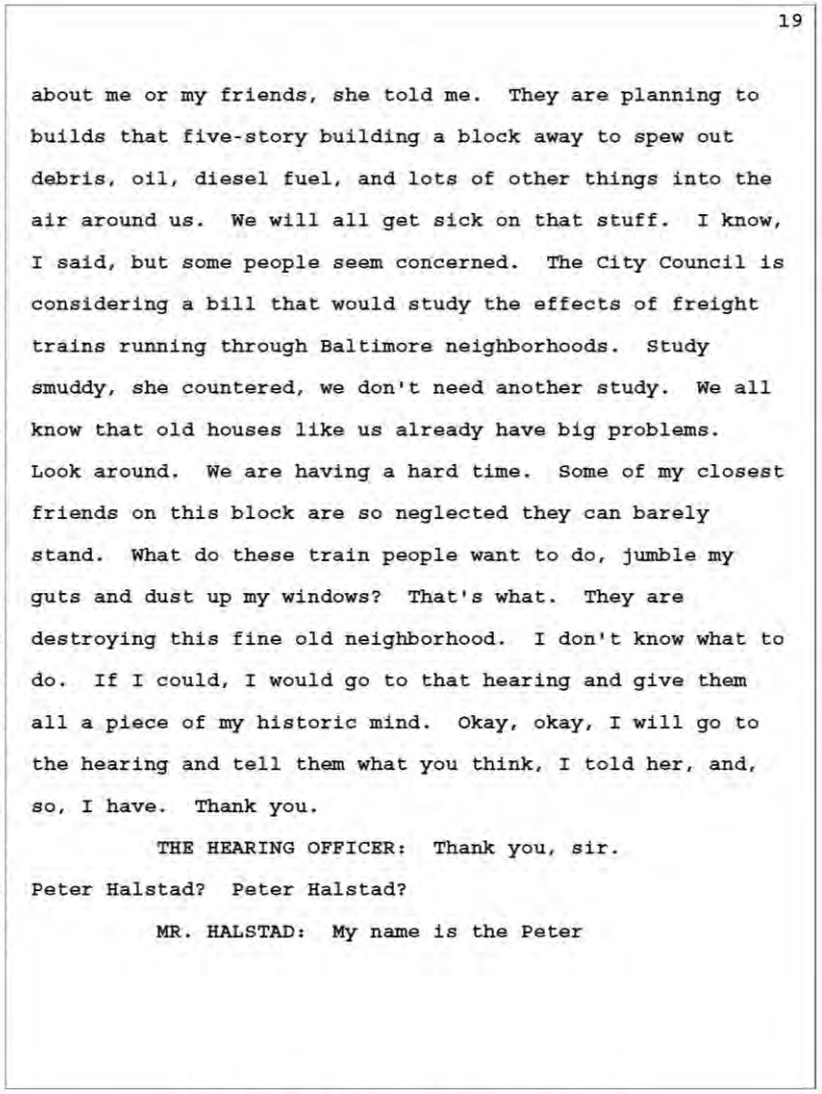
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

COMMENTS



19

about me or my friends, she told me. They are planning to builds that five-story building a block away to spew out debris, oil, diesel fuel, and lots of other things into the air around us. We will all get sick on that stuff. I know, I said, but some people seem concerned. The City Council is considering a bill that would study the effects of freight trains running through Baltimore neighborhoods. Study smuddy, she countered, we don't need another study. We all know that old houses like us already have big problems. Look around. We are having a hard time. Some of my closest friends on this block are so neglected they can barely stand. What do these train people want to do, jumble my guts and dust up my windows? That's what. They are destroying this fine old neighborhood. I don't know what to do. If I could, I would go to that hearing and give them all a piece of my historic mind. Okay, okay, I will go to the hearing and tell them what you think, I told her, and, so, I have. Thank you.

THE HEARING OFFICER: Thank you, sir. Peter Halstad? Peter Halstad?

MR. HALSTAD: My name is the Peter

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

3

RESPONSES

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

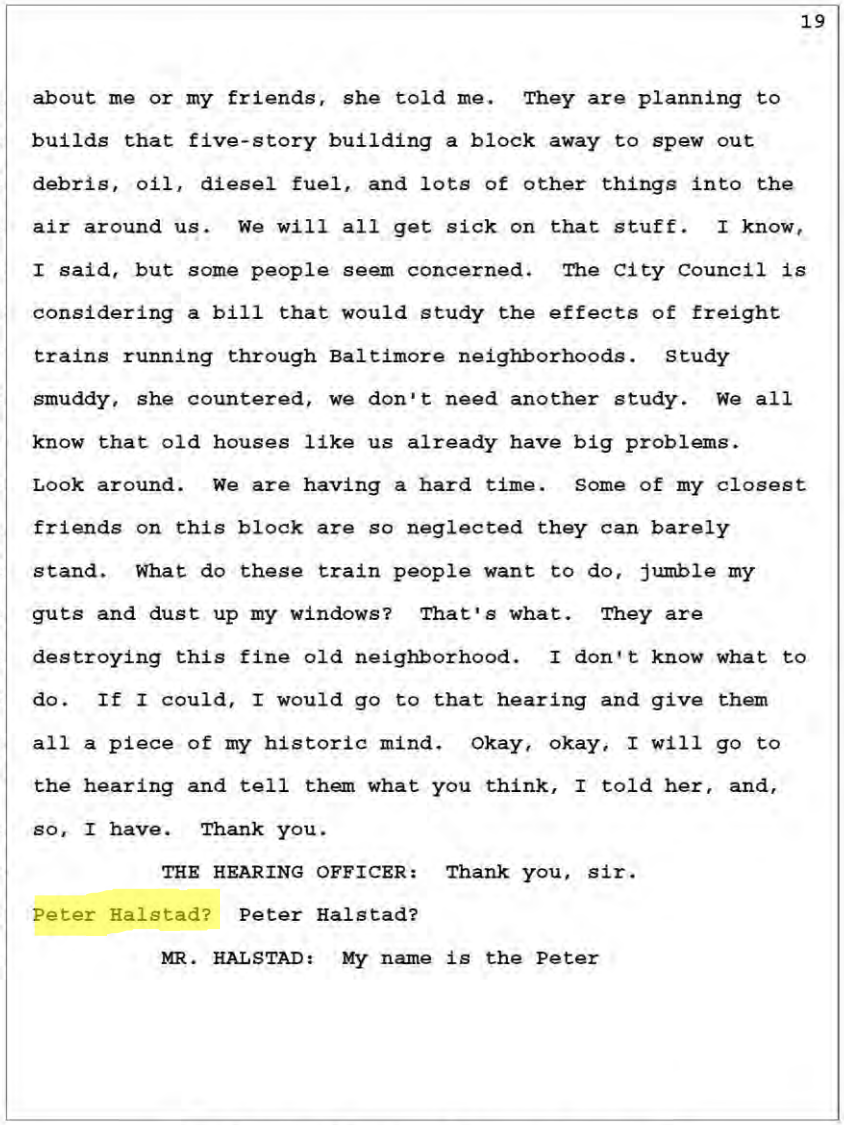
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 3:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

COMMENTS

RESPONSES

DEIS Comment 144:



19

about me or my friends, she told me. They are planning to builds that five-story building a block away to spew out debris, oil, diesel fuel, and lots of other things into the air around us. We will all get sick on that stuff. I know, I said, but some people seem concerned. The City Council is considering a bill that would study the effects of freight trains running through Baltimore neighborhoods. Study smuddy, she countered, we don't need another study. We all know that old houses like us already have big problems. Look around. We are having a hard time. Some of my closest friends on this block are so neglected they can barely stand. What do these train people want to do, jumble my guts and dust up my windows? That's what. They are destroying this fine old neighborhood. I don't know what to do. If I could, I would go to that hearing and give them all a piece of my historic mind. Okay, okay, I will go to the hearing and tell them what you think, I told her, and, so, I have. Thank you.

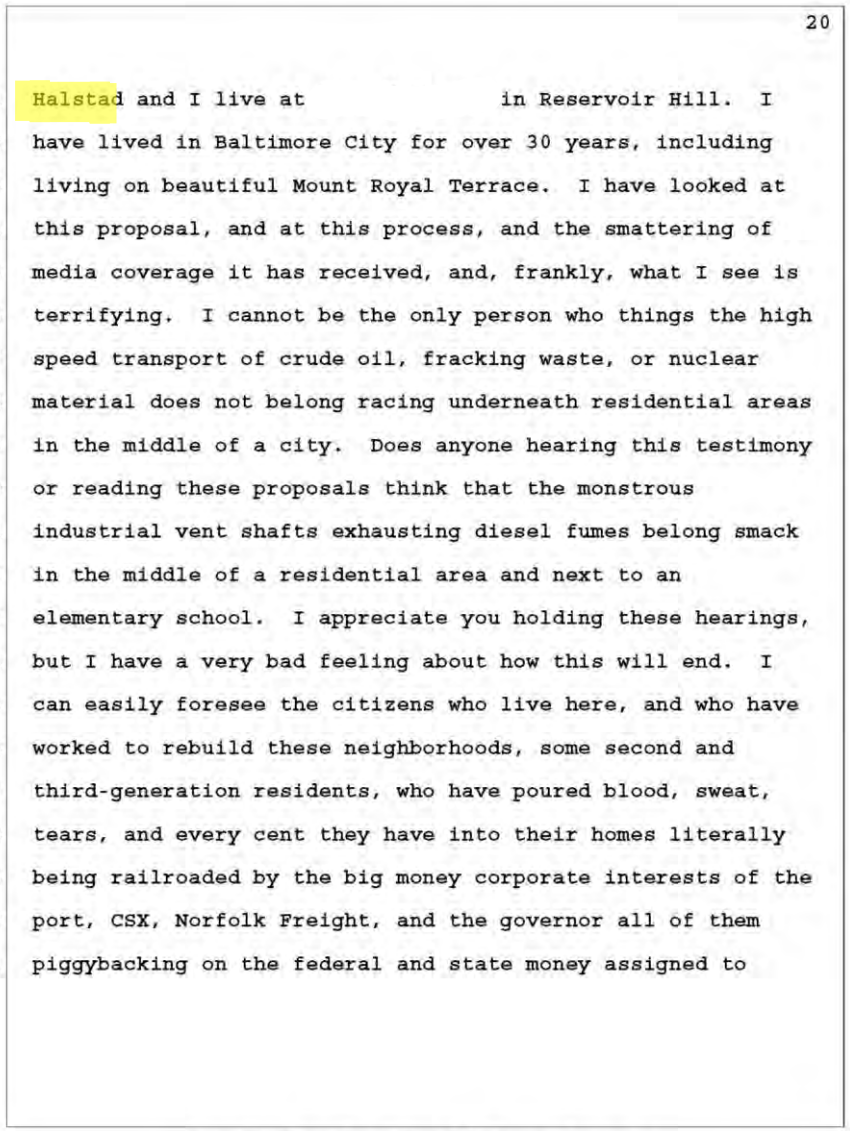
THE HEARING OFFICER: Thank you, sir.

Peter Halstad? Peter Halstad?

MR. HALSTAD: My name is the Peter

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



20

Halstad and I live at in Reservoir Hill. I have lived in Baltimore City for over 30 years, including living on beautiful Mount Royal Terrace. I have looked at this proposal, and at this process, and the smattering of media coverage it has received, and, frankly, what I see is terrifying. I cannot be the only person who things the high speed transport of crude oil, fracking waste, or nuclear material does not belong racing underneath residential areas in the middle of a city. Does anyone hearing this testimony or reading these proposals think that the monstrous industrial vent shafts exhausting diesel fumes belong smack in the middle of a residential area and next to an elementary school. I appreciate you holding these hearings, but I have a very bad feeling about how this will end. I can easily foresee the citizens who live here, and who have worked to rebuild these neighborhoods, some second and third-generation residents, who have poured blood, sweat, tears, and every cent they have into their homes literally being railroaded by the big money corporate interests of the port, CSX, Norfolk Freight, and the governor all of them piggybacking on the federal and state money assigned to

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

2

RESPONSES

Response to Comment 1:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

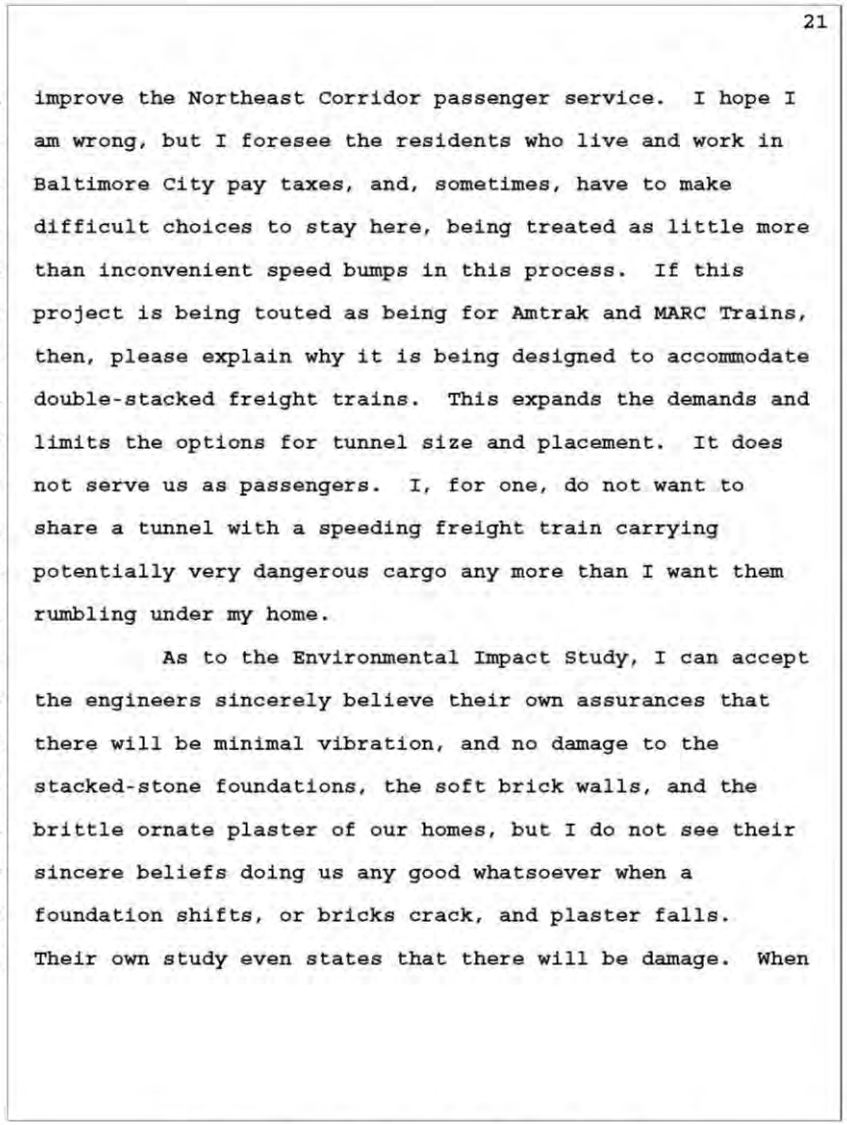
FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

The number of variables involved makes it virtually impossible to accurately forecast freight usage through the tunnel. Therefore, due to low probability of new freight customers and the high cost of interconnecting freight lines with the NEC, Amtrak anticipates that the number of freight trains using the new tunnel will remain unchanged for the foreseeable future.

The tunnel will be equipped with Automatic Train Control (ATC) and Positive Train Control (PTC) systems, which use computer systems to control the speed of both passenger and freight trains within the tunnel.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and

COMMENTS



21

improve the Northeast Corridor passenger service. I hope I am wrong, but I foresee the residents who live and work in Baltimore City pay taxes, and, sometimes, have to make difficult choices to stay here, being treated as little more than inconvenient speed bumps in this process. If this project is being touted as being for Amtrak and MARC Trains, then, please explain why it is being designed to accommodate double-stacked freight trains. This expands the demands and limits the options for tunnel size and placement. It does not serve us as passengers. I, for one, do not want to share a tunnel with a speeding freight train carrying potentially very dangerous cargo any more than I want them rumbling under my home.

As to the Environmental Impact Study, I can accept the engineers sincerely believe their own assurances that there will be minimal vibration, and no damage to the stacked-stone foundations, the soft brick walls, and the brittle ornate plaster of our homes, but I do not see their sincere beliefs doing us any good whatsoever when a foundation shifts, or bricks crack, and plaster falls. Their own study even states that there will be damage. When

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

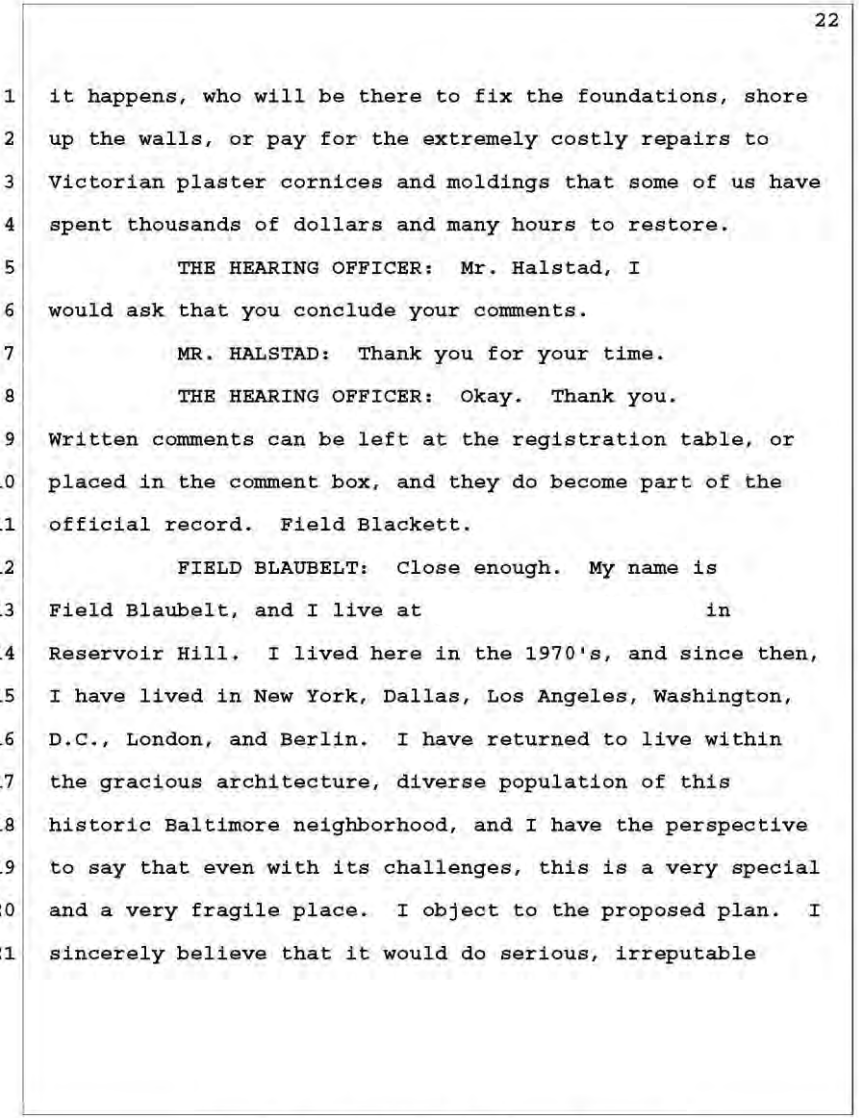
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 3:
The Project Team has engaged the community in extensive public outreach throughout the development of the project including three Public Open Houses, as well as 10 community meetings where the public was given the opportunity to learn about the project development in-person and directly ask questions and engage in discussion with the Project Team. In addition to these meetings, Mitigation Working Groups comprising community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI** as well as **Chapter VIII.**

Response to Comment 4:
Amtrak design practices require new NEC infrastructure meet current standards, including Plate H (double stack) clearances. However, the new tunnel could not be used by double stack freight trains unless certain factors are met. These factors include:

- Substantial improvements, such as extensive additional vertical clearance improvements north and south of the B&P Tunnel to other NEC infrastructure; these improvements are not being designed as part of the B&P Project;
- Federal, state, local and regional support for aforementioned improvements including funding and policy;
- Increasing the bridge and catenary clearance on the NEC where double stack/high dimension trains are to travel;
- Construction of new or modified Union tunnel to Plate H/K (double stack) clearances; without a high dimension Union tunnel, double stack freight service using the B&P Tunnel is not possible;
- NS currently favors the Harrisburg-Perryville route for intermodal service;
- Freight schedules limited to off peak/night time periods which affects the scheduling flexibility and transit time for high priority (Intermodal) shipments for which time is absolutely critical; and
- Construction of track connection/s between the CSX and the NEC if CSX chooses to use the NEC.

COMMENTS



22

it happens, who will be there to fix the foundations, shore up the walls, or pay for the extremely costly repairs to Victorian plaster cornices and moldings that some of us have spent thousands of dollars and many hours to restore.

THE HEARING OFFICER: Mr. Halstad, I would ask that you conclude your comments.

MR. HALSTAD: Thank you for your time.

THE HEARING OFFICER: Okay. Thank you. Written comments can be left at the registration table, or placed in the comment box, and they do become part of the official record. Field Blackett.

FIELD BLAUBELT: Close enough. My name is Field Blaubelt, and I live at in Reservoir Hill. I lived here in the 1970's, and since then, I have lived in New York, Dallas, Los Angeles, Washington, D.C., London, and Berlin. I have returned to live within the gracious architecture, diverse population of this historic Baltimore neighborhood, and I have the perspective to say that even with its challenges, this is a very special and a very fragile place. I object to the proposed plan. I sincerely believe that it would do serious, irreputable

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

6

RESPONSES

In the short-term, there is no indication of any significant increase in freight movements through the B&P Tunnel.

CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the B&P Tunnel Project.

Amtrak's first priority is to its passenger services. Therefore, although Amtrak must accommodate requests from NS or other freight operators with trackage rights agreements for additional train moves on the NEC, Amtrak need only schedule such moves as space between passenger trains can be made available. Where the freight operator and Amtrak have a dispute about scheduling of freight moves, the Surface Transportation Board (STB) adjudicates trackage rights agreements.

Response to Comment 5:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using analysis procedures from the *FTA Transit Noise and Vibration Impact Assessment.* Construction vibration levels were also evaluated using both FTA guidelines and standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

COMMENTS

RESPONSES

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI**.

Response to Comment 6:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

COMMENTS

RESPONSES

DEIS Comment 145:

it happens, who will be there to fix the foundations, shore up the walls, or pay for the extremely costly repairs to Victorian plaster cornices and moldings that some of us have spent thousands of dollars and many hours to restore.

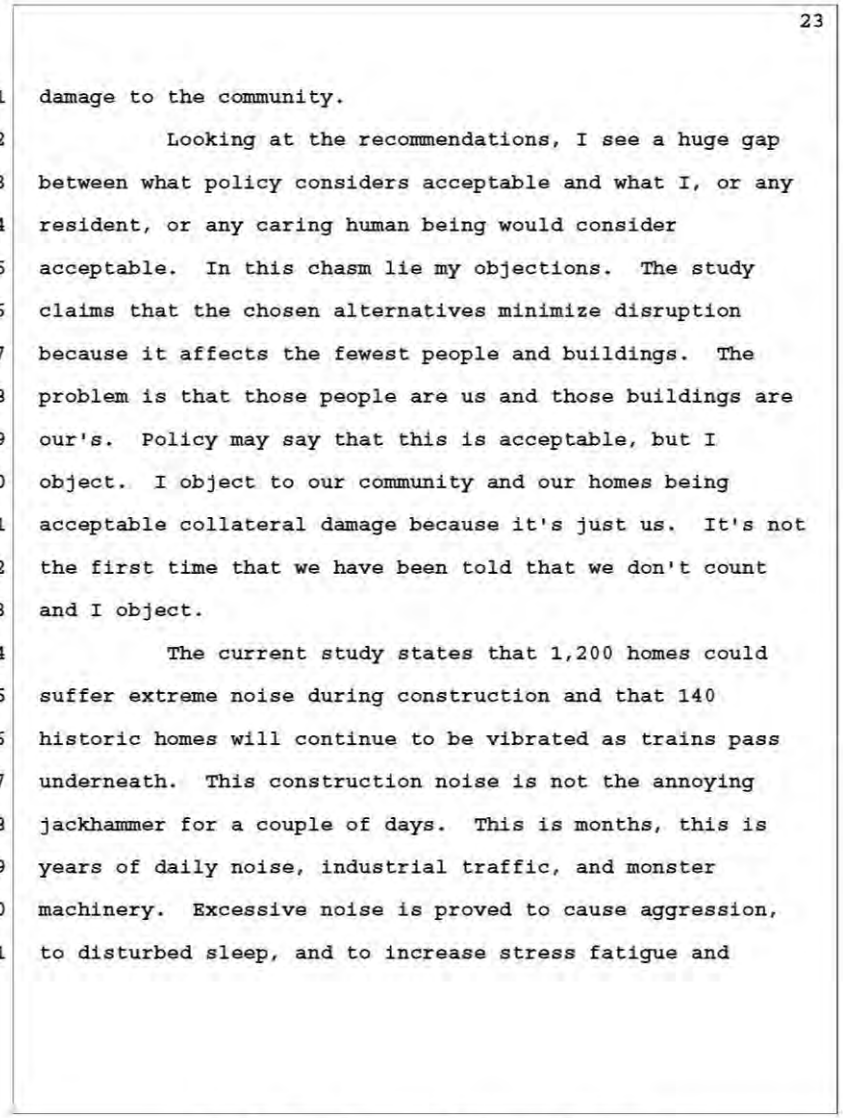
THE HEARING OFFICER: Mr. Halstad, I would ask that you conclude your comments.

MR. HALSTAD: Thank you for your time.

THE HEARING OFFICER: Okay. Thank you. Written comments can be left at the registration table, or placed in the comment box, and they do become part of the official record. Field Blackett.

FIELD BLAUBELT: Close enough. My name is Field Blaubelt, and I live at in Reservoir Hill. I lived here in the 1970's, and since then, I have lived in New York, Dallas, Los Angeles, Washington, D.C., London, and Berlin. I have returned to live within the gracious architecture, diverse population of this historic Baltimore neighborhood, and I have the perspective to say that even with its challenges, this is a very special and a very fragile place. I object to the proposed plan. I sincerely believe that it would do serious, irreputable

COMMENTS



23

damage to the community.

Looking at the recommendations, I see a huge gap between what policy considers acceptable and what I, or any resident, or any caring human being would consider acceptable. In this chasm lie my objections. The study claims that the chosen alternatives minimize disruption because it affects the fewest people and buildings. The problem is that those people are us and those buildings are our's. Policy may say that this is acceptable, but I object. I object to our community and our homes being acceptable collateral damage because it's just us. It's not the first time that we have been told that we don't count and I object.

The current study states that 1,200 homes could suffer extreme noise during construction and that 140 historic homes will continue to be vibrated as trains pass underneath. This construction noise is not the annoying jackhammer for a couple of days. This is months, this is years of daily noise, industrial traffic, and monster machinery. Excessive noise is proved to cause aggression, to disturbed sleep, and to increase stress fatigue and

1

2

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

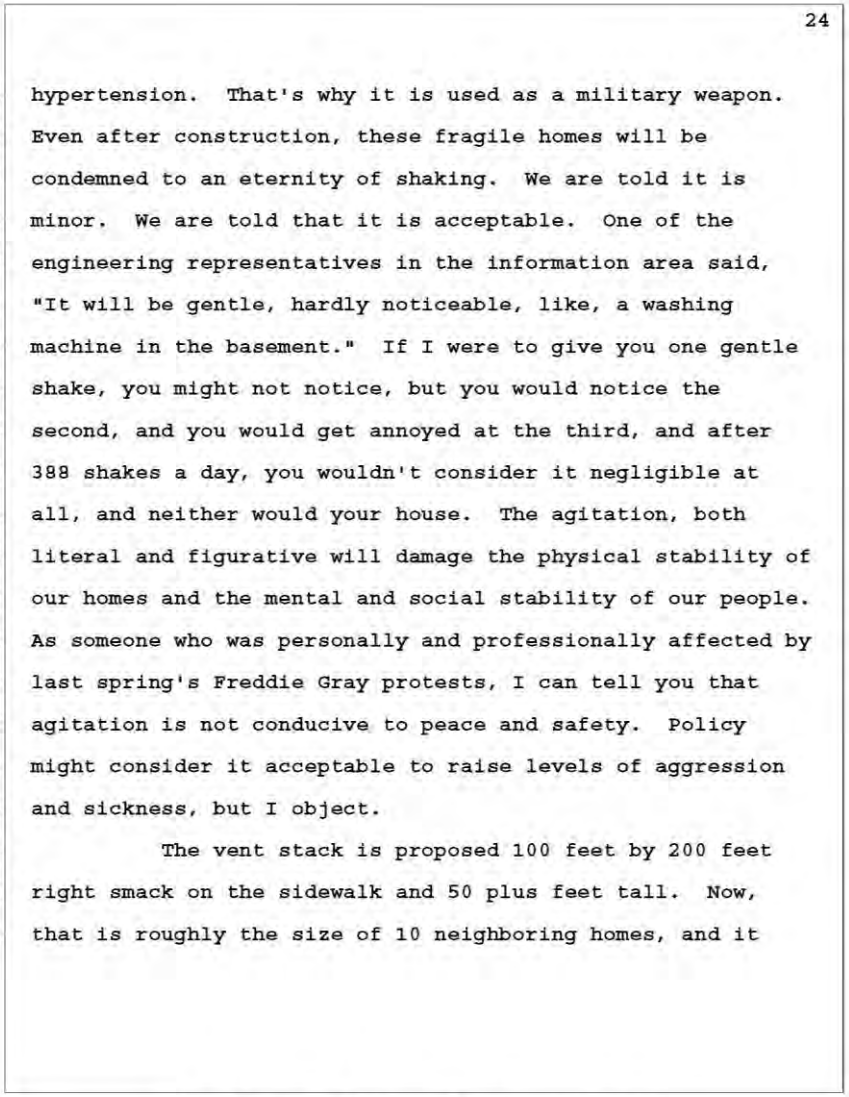
RESPONSES

Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

The Preferred Alternative would displace 22 residential buildings in the Midtown-Edmondson neighborhood, Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings. Executive Order 12898 requires federal agencies to 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 Project Team has engaged in extensive public outreach throughout the development of the Project, including three public open houses and ten community meetings. In addition to these meetings, Mitigation Working Groups comprised of community organization representatives and members of the Project Team were established to determine the most effective mitigation for the Project. Details of this outreach are described in **Chapter VI** and **Chapter VIII**.

Response to Comment 2:
Alternative 3A is estimated to have 254 Moderate noise impacts, Alternative 3 B is estimated to have 141 Severe and 296 Moderate noise impacts, and Alternative 3C is estimated to have 111 Severe and 979 Moderate noise impacts. The severe impacts were predicted at residential areas nearest the railroad between the West Baltimore station and the south portal. The duration of the construction period will be six years; 2020 to 2025. Measures will be implemented to lessen noise during construction, which could potentially include erection of temporary walls or earth berms between the noise source and the sensitive receptor, the identification of haul routes that avoid sensitive receptors to the maximum extent possible, and location of stationary noise generating equipment at a distance from sensitive receptors. In addition, construction activities can be planned to avoid prolonged noise generating activities and to minimize construction activities during the most sensitive time of day or night. **Chapter VI** of this FEIS further details noise construction mitigation.

COMMENTS



24

hypertension. That's why it is used as a military weapon. Even after construction, these fragile homes will be condemned to an eternity of shaking. We are told it is minor. We are told that it is acceptable. One of the engineering representatives in the information area said, "It will be gentle, hardly noticeable, like, a washing machine in the basement." If I were to give you one gentle shake, you might not notice, but you would notice the second, and you would get annoyed at the third, and after 388 shakes a day, you wouldn't consider it negligible at all, and neither would your house. The agitation, both literal and figurative will damage the physical stability of our homes and the mental and social stability of our people. As someone who was personally and professionally affected by last spring's Freddie Gray protests, I can tell you that agitation is not conducive to peace and safety. Policy might consider it acceptable to raise levels of aggression and sickness, but I object.

The vent stack is proposed 100 feet by 200 feet right smack on the sidewalk and 50 plus feet tall. Now, that is roughly the size of 10 neighboring homes, and it

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

3

4

RESPONSES

Response to Comment 3:
A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

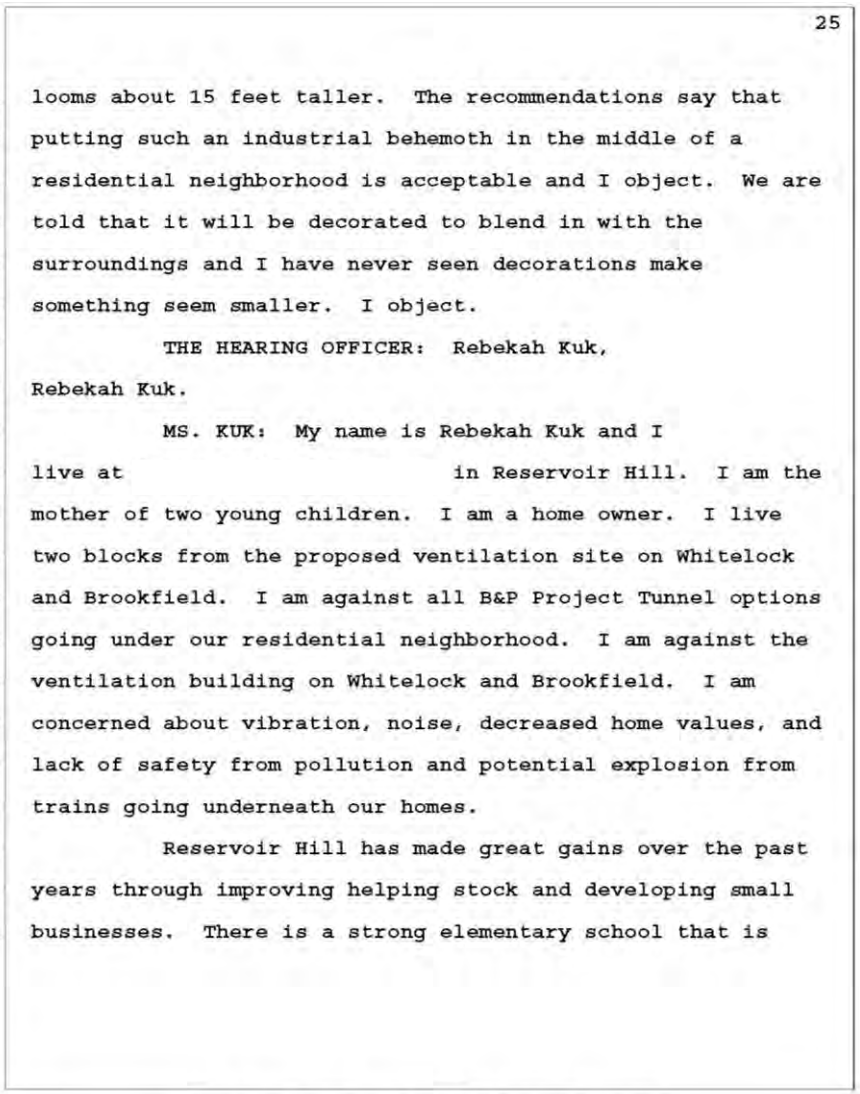
Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

COMMENTS



25

looms about 15 feet taller. The recommendations say that putting such an industrial behemoth in the middle of a residential neighborhood is acceptable and I object. We are told that it will be decorated to blend in with the surroundings and I have never seen decorations make something seem smaller. I object.

THE HEARING OFFICER: Rebekah Kuk, Rebekah Kuk.

MS. KUK: My name is Rebekah Kuk and I live at in Reservoir Hill. I am the mother of two young children. I am a home owner. I live two blocks from the proposed ventilation site on Whitelock and Brookfield. I am against all B&P Project Tunnel options going under our residential neighborhood. I am against the ventilation building on Whitelock and Brookfield. I am concerned about vibration, noise, decreased home values, and lack of safety from pollution and potential explosion from trains going underneath our homes.

Reservoir Hill has made great gains over the past years through improving helping stock and developing small businesses. There is a strong elementary school that is

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

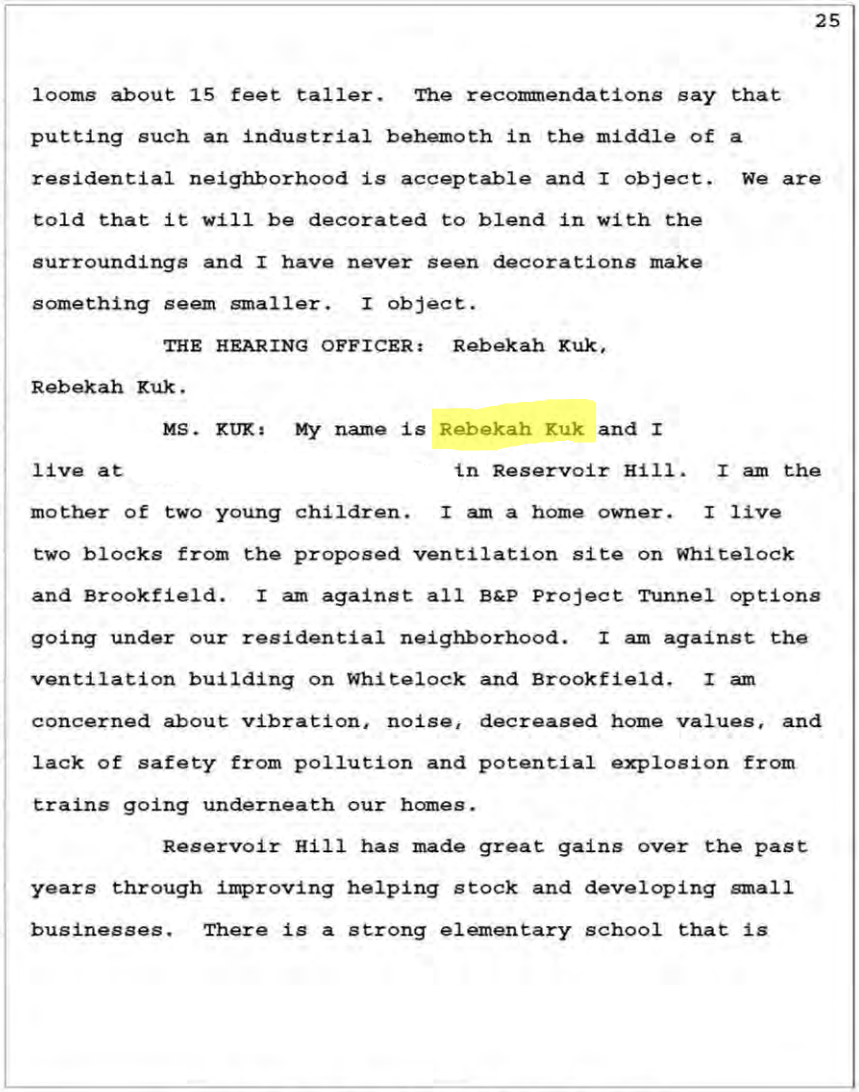
RESPONSES

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 4:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 146:



25

looms about 15 feet taller. The recommendations say that putting such an industrial behemoth in the middle of a residential neighborhood is acceptable and I object. We are told that it will be decorated to blend in with the surroundings and I have never seen decorations make something seem smaller. I object.

THE HEARING OFFICER: Rebekah Kuk, Rebekah Kuk.

MS. KUK: My name is Rebekah Kuk and I live at in Reservoir Hill. I am the mother of two young children. I am a home owner. I live two blocks from the proposed ventilation site on Whitelock and Brookfield. I am against all B&P Project Tunnel options going under our residential neighborhood. I am against the ventilation building on Whitelock and Brookfield. I am concerned about vibration, noise, decreased home values, and lack of safety from pollution and potential explosion from trains going underneath our homes.

Reservoir Hill has made great gains over the past years through improving helping stock and developing small businesses. There is a strong elementary school that is

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

2

RESPONSES

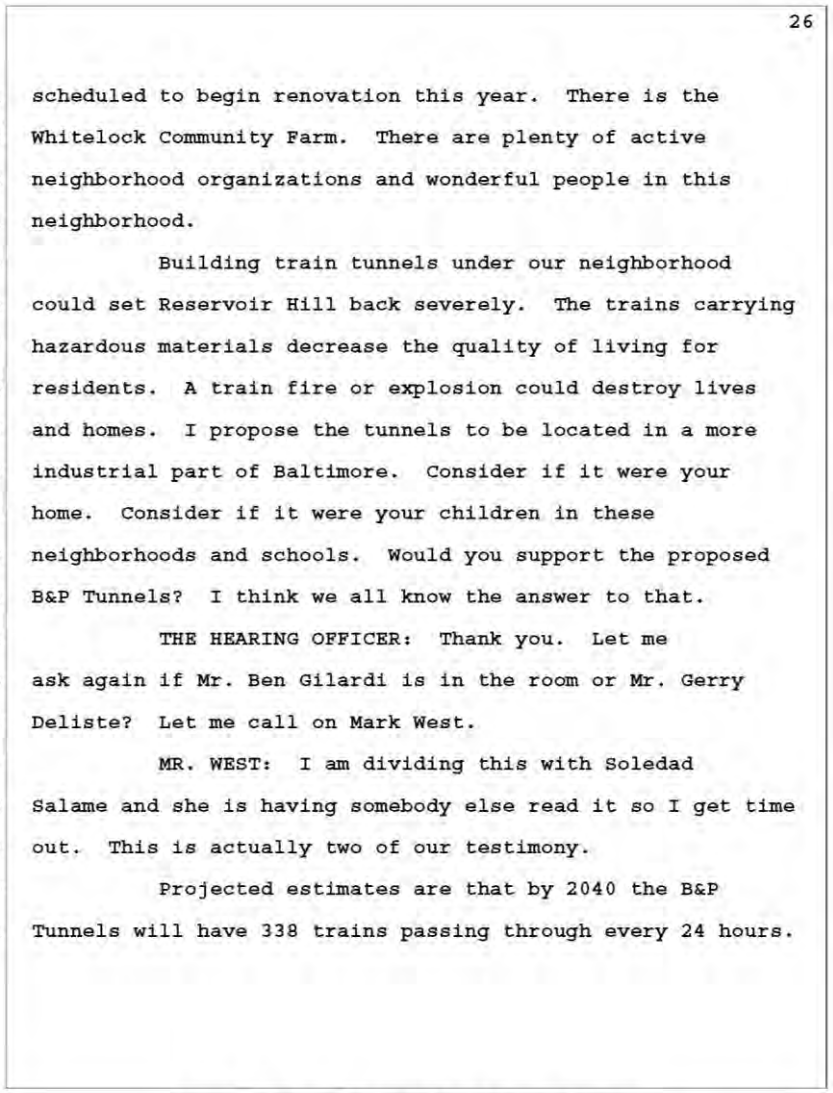
Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
Regarding vibration, a general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

COMMENTS



26

scheduled to begin renovation this year. There is the Whitelock Community Farm. There are plenty of active neighborhood organizations and wonderful people in this neighborhood.

Building train tunnels under our neighborhood could set Reservoir Hill back severely. The trains carrying hazardous materials decrease the quality of living for residents. A train fire or explosion could destroy lives and homes. I propose the tunnels to be located in a more industrial part of Baltimore. Consider if it were your home. Consider if it were your children in these neighborhoods and schools. Would you support the proposed B&P Tunnels? I think we all know the answer to that.

THE HEARING OFFICER: Thank you. Let me ask again if Mr. Ben Gilardi is in the room or Mr. Gerry Deliste? Let me call on Mark West.

MR. WEST: I am dividing this with Soledad Salame and she is having somebody else read it so I get time out. This is actually two of our testimony.

Projected estimates are that by 2040 the B&P Tunnels will have 338 trains passing through every 24 hours.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

3

RESPONSES

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

Alternative 3A is estimated to have 254 Moderate noise impacts, Alternative 3 B is estimated to have 141 Severe and 296 Moderate noise impacts, and Alternative 3C is estimated to have 111 Severe and 979 Moderate noise impacts. The severe impacts were predicted at residential areas nearest the railroad between the West Baltimore station and the south portal. The duration of the construction period will be six years; 2020 to 2025. Measures will be implemented to lessen noise during construction, which could potentially include erection of temporary walls or earth berms between the noise source and the sensitive receptor, the identification of haul routes that avoid sensitive receptors to the maximum extent possible, and location of stationary noise generating equipment at a distance from sensitive receptors. In addition, construction activities can be planned to avoid prolonged noise generating activities and to minimize construction activities during the most sensitive time of day or night. **Chapter VI** of this FEIS further details noise construction mitigation.

Regarding home values, the economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm

COMMENTS

RESPONSES

to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

Trains are among the safest form of transportation available on an accident per passenger-mile basis. In the unlikely event of an accident, local responders receive training for a variety of incidents related to specific facilities, including the B&P Tunnel. The tunnel would be constructed to meet current standards for fire protection. Additionally, the Project sponsor will develop and implement a Hazardous Spill Prevention Plan and a Hazardous Materials Remediation Plan, as well as an Emergency Management Plan to be implemented in the event of a tunnel emergency.

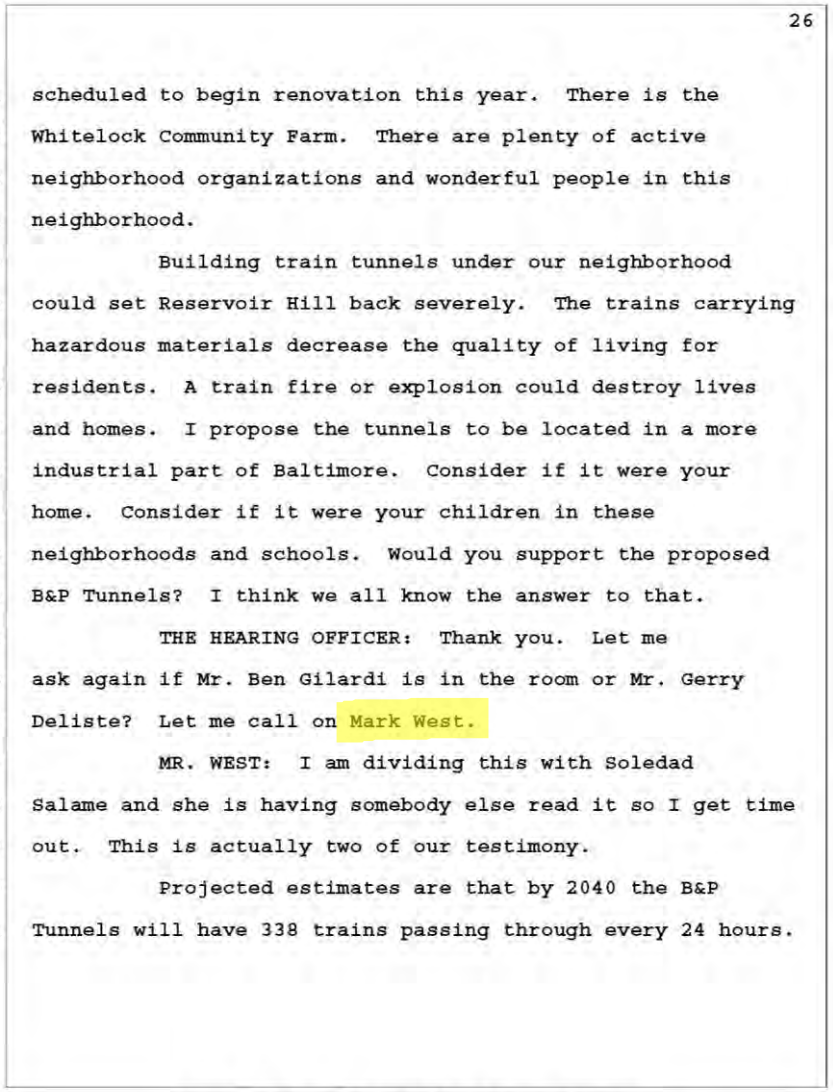
Response to Comment 3:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

> *Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.*

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

COMMENTS | **RESPONSES**

DEIS Comment 147:



26

scheduled to begin renovation this year. There is the Whitelock Community Farm. There are plenty of active neighborhood organizations and wonderful people in this neighborhood.

Building train tunnels under our neighborhood could set Reservoir Hill back severely. The trains carrying hazardous materials decrease the quality of living for residents. A train fire or explosion could destroy lives and homes. I propose the tunnels to be located in a more industrial part of Baltimore. Consider if it were your home. Consider if it were your children in these neighborhoods and schools. Would you support the proposed B&P Tunnels? I think we all know the answer to that.

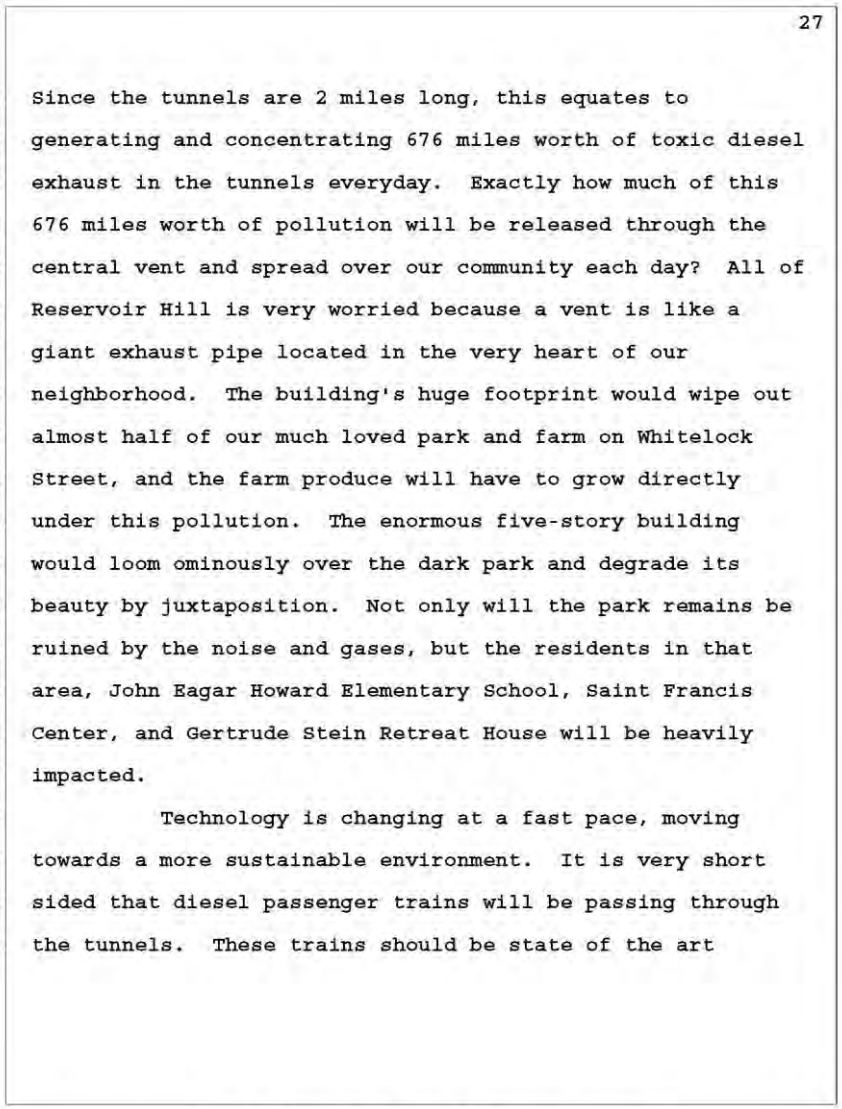
THE HEARING OFFICER: Thank you. Let me ask again if Mr. Ben Gilardi is in the room or Mr. Gerry Deliste? Let me call on Mark West.

MR. WEST: I am dividing this with Soledad Salame and she is having somebody else read it so I get time out. This is actually two of our testimony.

Projected estimates are that by 2040 the B&P Tunnels will have 338 trains passing through every 24 hours.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



27

Since the tunnels are 2 miles long, this equates to generating and concentrating 676 miles worth of toxic diesel exhaust in the tunnels everyday. Exactly how much of this 676 miles worth of pollution will be released through the central vent and spread over our community each day? All of Reservoir Hill is very worried because a vent is like a giant exhaust pipe located in the very heart of our neighborhood. The building's huge footprint would wipe out almost half of our much loved park and farm on Whitelock Street, and the farm produce will have to grow directly under this pollution. The enormous five-story building would loom ominously over the dark park and degrade its beauty by juxtaposition. Not only will the park remains be ruined by the noise and gases, but the residents in that area, John Eagar Howard Elementary School, Saint Francis Center, and Gertrude Stein Retreat House will be heavily impacted.

Technology is changing at a fast pace, moving towards a more sustainable environment. It is very short sided that diesel passenger trains will be passing through the tunnels. These trains should be state of the art

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

2

3

RESPONSES

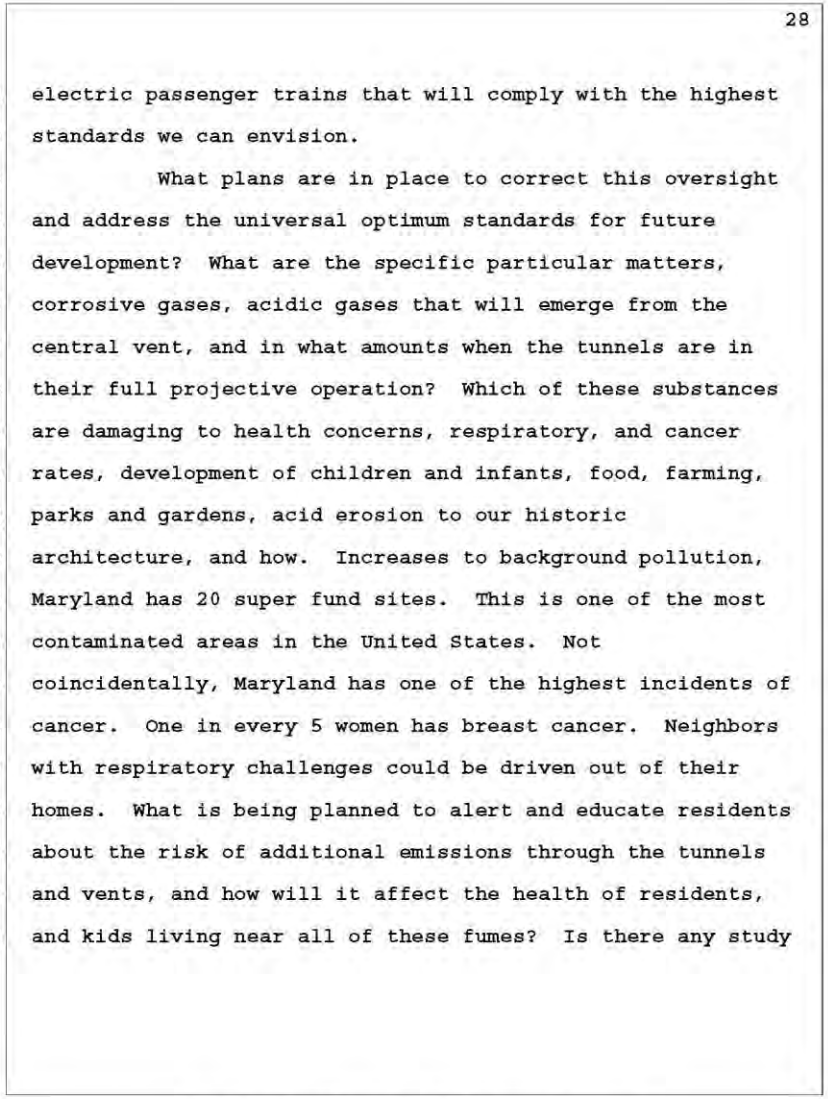
Response to Comment 1:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



28

electric passenger trains that will comply with the highest standards we can envision.

What plans are in place to correct this oversight and address the universal optimum standards for future development? What are the specific particular matters, corrosive gases, acidic gases that will emerge from the central vent, and in what amounts when the tunnels are in their full projective operation? Which of these substances are damaging to health concerns, respiratory, and cancer rates, development of children and infants, food, farming, parks and gardens, acid erosion to our historic architecture, and how. Increases to background pollution, Maryland has 20 super fund sites. This is one of the most contaminated areas in the United States. Not coincidentally, Maryland has one of the highest incidents of cancer. One in every 5 women has breast cancer. Neighbors with respiratory challenges could be driven out of their homes. What is being planned to alert and educate residents about the risk of additional emissions through the tunnels and vents, and how will it affect the health of residents, and kids living near all of these fumes? Is there any study

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

5

RESPONSES

Response to Comment 3:
The type of locomotive traveling through the tunnel is determined by the train service operator. As per the 2040 projections, of the 388 daily vehicles running through the Tunnel, 222 will be electric (Acela, NE Regional, and Metropolitan), and 166 will be diesel (2 freight and 164 MARC). Please refer to **Chapter VI** for additional information.

Response to Comment 4:
Analysis of ventilation facility emissions included an air dispersion modeling analysis, which followed the latest US Environmental Protection Agency modeling guidelines for predicting air quality effects for regulated pollutants. The results of the analysis were compared to the stringent 1- hour NO_2 National Ambient Air Quality Standards (NAAQS) of 100 parts per billion (ppb) as opposed to the annual standard of 53 ppb. Emission studies have demonstrated that if NO_2 concentrations are maintained within acceptable levels, then other pollutant concentrations associated with diesel exhaust emissions will also be within acceptable limits. The maximum predicted 1-hour NO_2 concentration from the three ventilation facilities as well as north and south portals was 12.8 ppb. When added to the NO_2 background concentration of 51 ppb, the total predicted 1-hour concentration amounted to 63.8 ppb, which is below the NAAQS of 100 ppb. The maximum predicted 1-hour NO_2 concentration of the Intermediate Ventilation Facility is 2.9 ppb and when combined with NO_2 background concentration of 51 ppb the total NO_2 concentration would be 53.9 ppb, below the NAAQS threshold limits of 100 ppb.

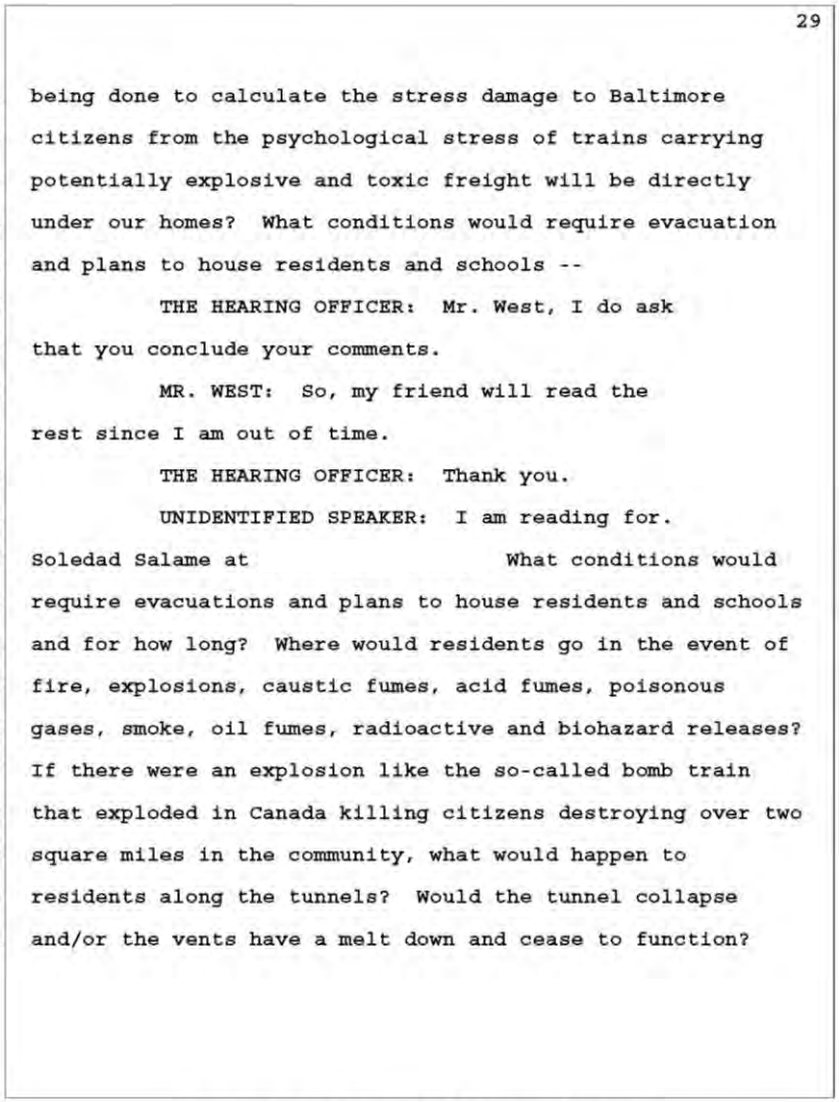
Response to Comment 5:
The Project meets air quality standards; therefore, public alerts regarding emissions will not be required.

Please refer to **Chapter VI** for issues pertaining to public health.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns

Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs,

COMMENTS



29

being done to calculate the stress damage to Baltimore citizens from the psychological stress of trains carrying potentially explosive and toxic freight will be directly under our homes? What conditions would require evacuation and plans to house residents and schools --

THE HEARING OFFICER: Mr. West, I do ask that you conclude your comments.

MR. WEST: So, my friend will read the rest since I am out of time.

THE HEARING OFFICER: Thank you.

UNIDENTIFIED SPEAKER: I am reading for.

Soledad Salame at What conditions would require evacuations and plans to house residents and schools and for how long? Where would residents go in the event of fire, explosions, caustic fumes, acid fumes, poisonous gases, smoke, oil fumes, radioactive and biohazard releases? If there were an explosion like the so-called bomb train that exploded in Canada killing citizens destroying over two square miles in the community, what would happen to residents along the tunnels? Would the tunnel collapse and/or the vents have a melt down and cease to function?

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

or wells are located near the Project. The Project will have no impact to potable water. Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

The Project would design and implement vertically-oriented fans at ventilation facilities to facilitate dispersion and avoid violation of air quality regulations. For information regarding mitigation measures, please see **Chapter VII**.

To prevent accidents and fires, FRA requires a range of measures that minimize the risk to the public, including emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. The build alternatives would be designed and constructed in compliance with all current standards relative to Fire Life and Safety, which includes compliance with the National Fire Protection Association (NFPA).

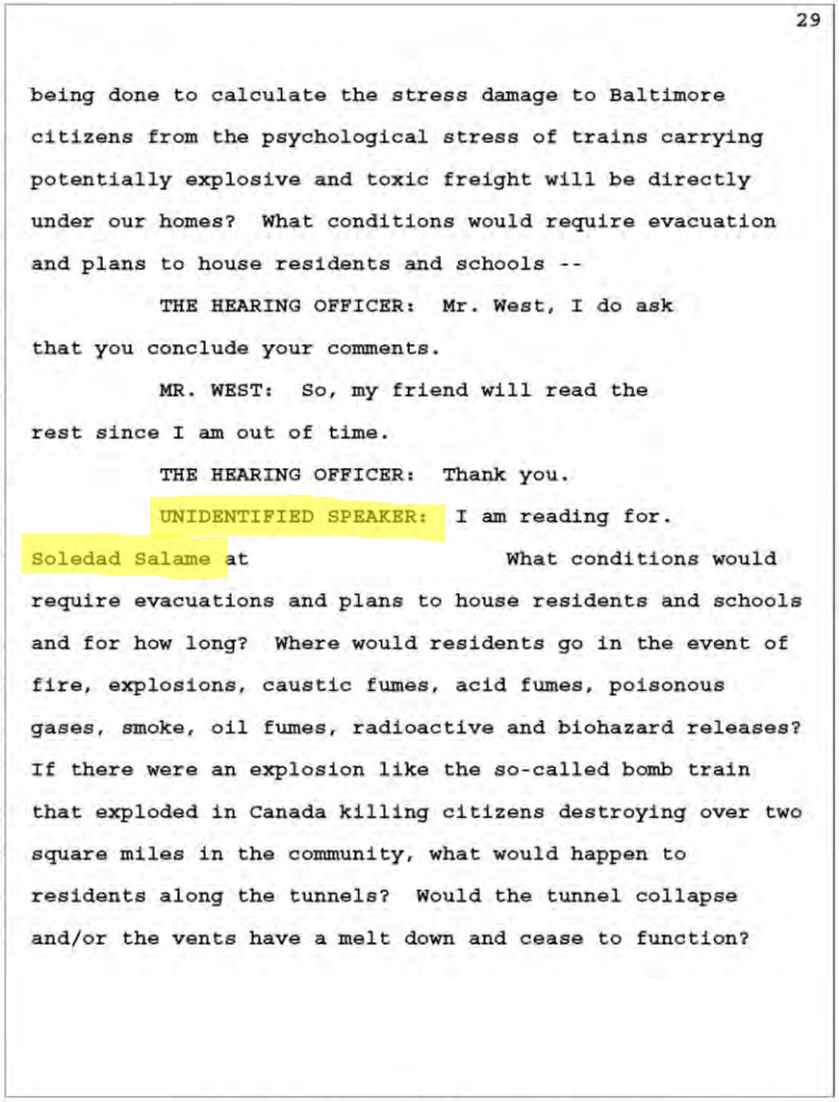
The ventilation facilities would be an essential Life/Safety component of the build alternatives, beyond their function of providing emergency access/egress for the tunnels. The ventilation facilities would include an above-ground structure housing fans and ancillary equipment, operations and control equipment, fire protection equipment, and silencers and dampers. In the unlikely event of a fire, smoke could emerge from the vents, as is the case with any structural fire. The ventilation facilities and fans are built so that smoke emerging from the Tunnel would be projected up and away from the community. 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 reduce the ability of particles to travel through the fans and louvers.

The tunnel would be constructed to meet current standards for fire protection. Emergency access/egress for pedestrians would be accomplished via emergency exits no farther than 2,500 feet apart or cross-passages between tunnels every 800 feet or less, or in some situations, a combination of both. For the Preferred Alternative, three locations would be provided for emergency egress to the surface, working with cross-passages in the tunnels. The emergency egress to ground level would be provided at the south portal Ventilation Facility, via the Intermediate Ventilation Facility, and at the north portal Ventilation Facility. Additionally, the Project sponsor will develop and implement a Hazardous Spill Prevention Plan, a Hazardous Materials Remediation Plan, and an Emergency Management Plan.

Please refer to responses to **DEIS Comment 85** for responses to the RATT questions.

COMMENTS

DEIS Comment 148:



29

being done to calculate the stress damage to Baltimore citizens from the psychological stress of trains carrying potentially explosive and toxic freight will be directly under our homes? What conditions would require evacuation and plans to house residents and schools --

THE HEARING OFFICER: Mr. West, I do ask that you conclude your comments.

MR. WEST: So, my friend will read the rest since I am out of time.

THE HEARING OFFICER: Thank you.

UNIDENTIFIED SPEAKER: I am reading for. Soledad Salame at What conditions would require evacuations and plans to house residents and schools and for how long? Where would residents go in the event of fire, explosions, caustic fumes, acid fumes, poisonous gases, smoke, oil fumes, radioactive and biohazard releases? If there were an explosion like the so-called bomb train that exploded in Canada killing citizens destroying over two square miles in the community, what would happen to residents along the tunnels? Would the tunnel collapse and/or the vents have a melt down and cease to function?

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

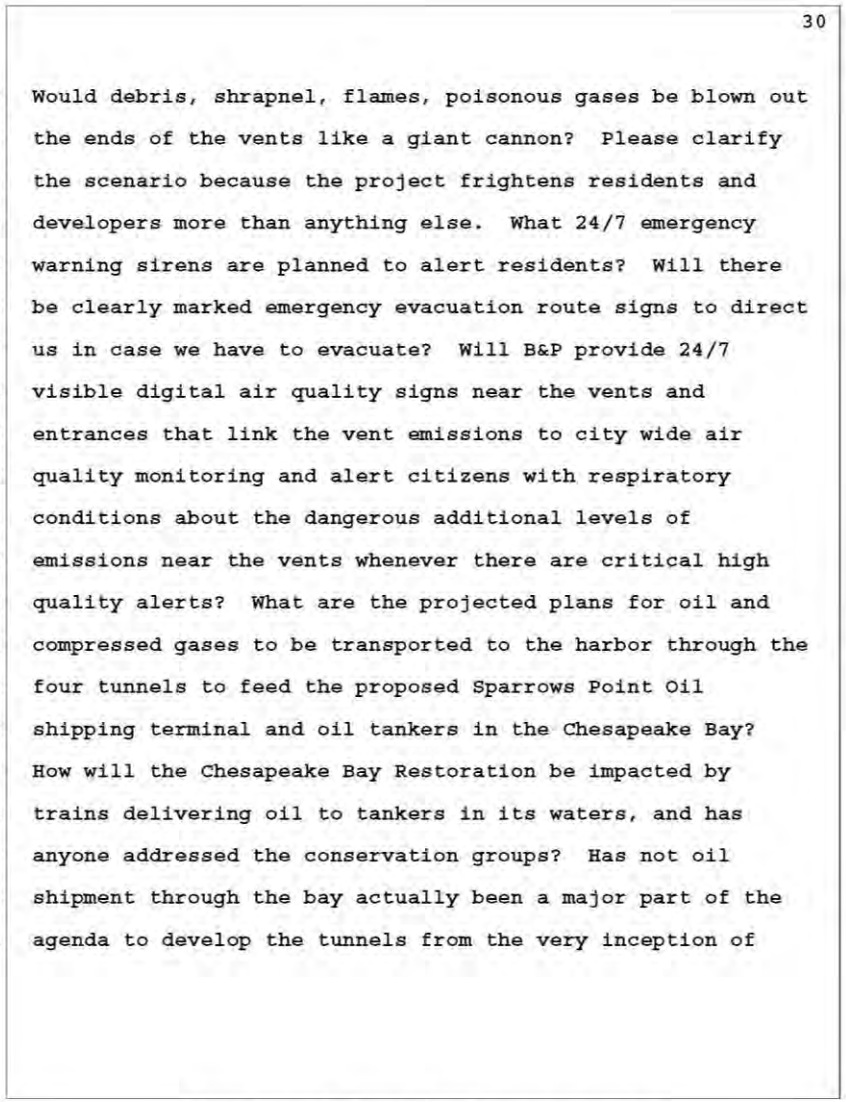
RESPONSES

Response to Comment 1:
Local, state, and federal fire and rescue officials are prepared to respond to situations such as the ones you've described. The B&P Tunnel would not create conditions that do not already exist elsewhere in the City and State.

The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than an above-ground track running through the neighborhood. The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

In terms of structural integrity, all of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

COMMENTS



30

Would debris, shrapnel, flames, poisonous gases be blown out the ends of the vents like a giant cannon? Please clarify the scenario because the project frightens residents and developers more than anything else. What 24/7 emergency warning sirens are planned to alert residents? Will there be clearly marked emergency evacuation route signs to direct us in case we have to evacuate? Will B&P provide 24/7 visible digital air quality signs near the vents and entrances that link the vent emissions to city wide air quality monitoring and alert citizens with respiratory conditions about the dangerous additional levels of emissions near the vents whenever there are critical high quality alerts? What are the projected plans for oil and compressed gases to be transported to the harbor through the four tunnels to feed the proposed Sparrows Point Oil shipping terminal and oil tankers in the Chesapeake Bay? How will the Chesapeake Bay Restoration be impacted by trains delivering oil to tankers in its waters, and has anyone addressed the conservation groups? Has not oil shipment through the bay actually been a major part of the agenda to develop the tunnels from the very inception of

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

3

RESPONSES

Response to Comment 2:
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 reduce the ability of particles to travel through the fans and louvers.

In the event of an emergency, local first responders will alert the community. Evacuation routes, if needed, would be established following an event. Evacuation routes cannot be established prior to knowledge of the location of the event.

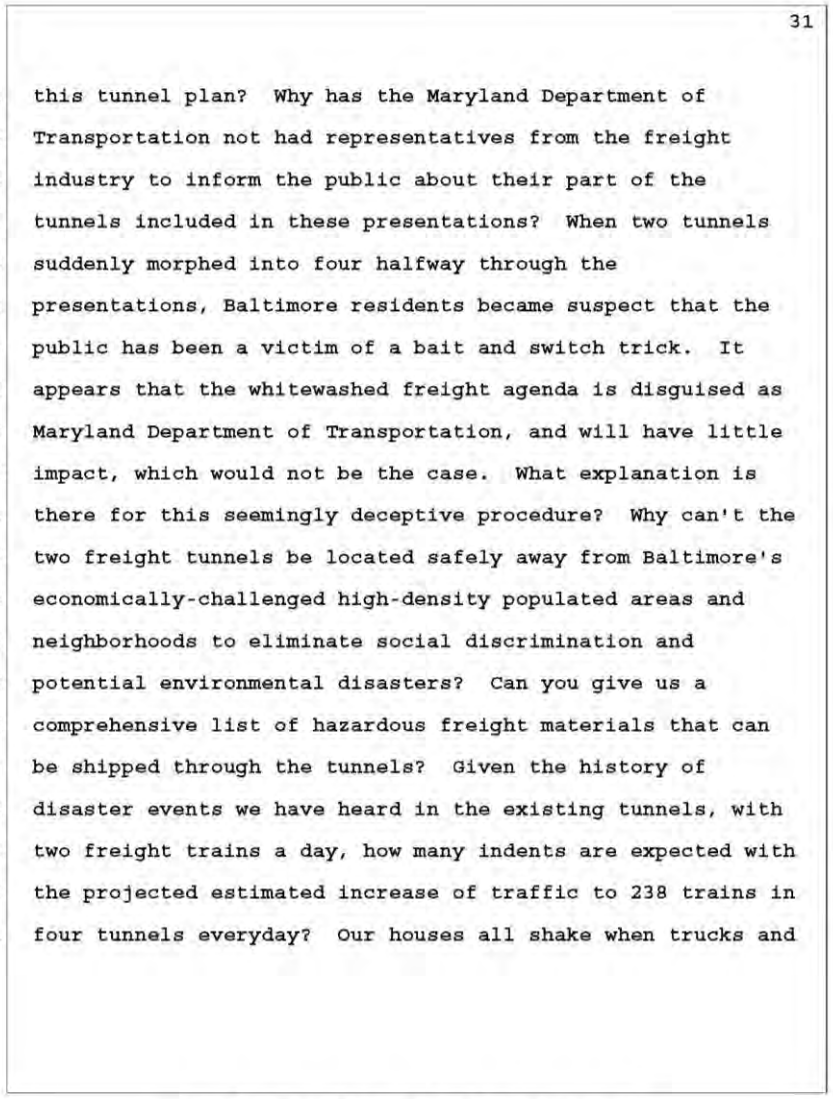
The Project meets air quality standards; therefore, public alerts regarding emissions will not be required.

Response to Comment 3:
For the past several years, only one local freight train (Norfolk Southern) has been operating through the B&P Tunnel daily, serving customers south of the B&P Tunnel between Baltimore and Washington, DC. Currently, 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.

The build alternatives could increase throughput capacity for freight traffic through the Study Area. CSX freight lines do not currently connect with the NEC in a manner that would allow CSX trains to travel through the tunnel without construction of additional connections as part of a separate project from the Project. While no specific increase in freight traffic are planned or proposed with the Project, increased capacity and operational flexibility on the NEC could allow more freight trains through the Study Area without impeding their passenger operations. At present, there are no indications from the freight railroads that existing freight traffic levels through the B&P Tunnel are to change in the near future. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces on rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

The Project was initiated because the B&P Tunnel is more than 140 years old and is approaching the end of its useful life with regard to its physical condition. While the existing Tunnel remains safe for rail transportation, it requires substantial maintenance and repairs, and does not meet current design standards. The Tunnel is considered to be structurally deficient due to its age, the original design, and wear and tear. The Tunnel is

COMMENTS



31

this tunnel plan? Why has the Maryland Department of Transportation not had representatives from the freight industry to inform the public about their part of the tunnels included in these presentations? When two tunnels suddenly morphed into four halfway through the presentations, Baltimore residents became suspect that the public has been a victim of a bait and switch trick. It appears that the whitewashed freight agenda is disguised as Maryland Department of Transportation, and will have little impact, which would not be the case. What explanation is there for this seemingly deceptive procedure? Why can't the two freight tunnels be located safely away from Baltimore's economically-challenged high-density populated areas and neighborhoods to eliminate social discrimination and potential environmental disasters? Can you give us a comprehensive list of hazardous freight materials that can be shipped through the tunnels? Given the history of disaster events we have heard in the existing tunnels, with two freight trains a day, how many indents are expected with the projected estimated increase of traffic to 238 trains in four tunnels everyday? Our houses all shake when trucks and

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

also functionally obsolete and unable to meet current and future rail demands. The Purpose and Need of the B&P Tunnel Project is further defined in **Chapter II** of this FEIS.

The Project Team has conducted extensive research with special interest groups such as the Chesapeake Bay Foundation. Any comments received from conservation groups during the DEIS review time period are included in this FEIS.

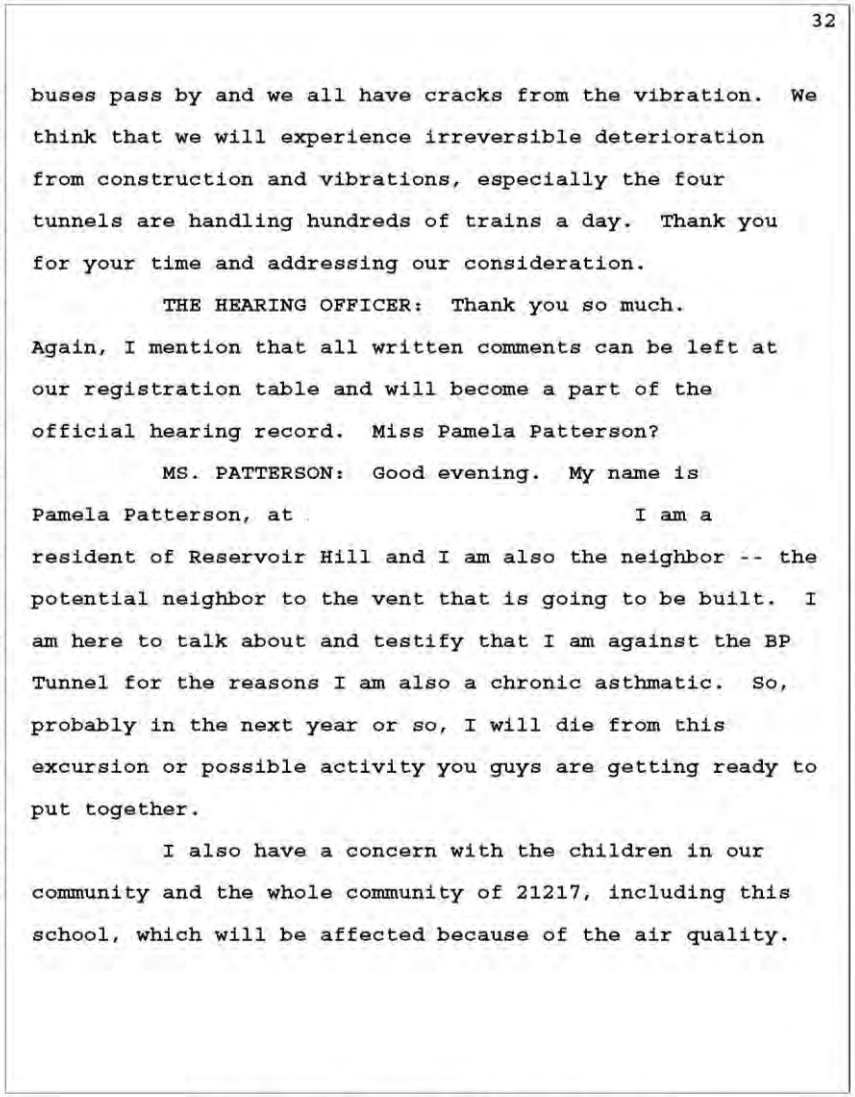
Response to Comment 4:
Representatives from the Maryland Department of Transportation (MDOT) and the Federal Railroad Administration were present at various meetings on 10/15/2014, 05/20/2015, 06/17/2015, 04/20/2016, and 06/17/2015, respectively. MDOT tracks the movement of freight within the State and works with the local jurisdictions to ensure that plans are in place in the event of an accident.

Response to Comment 5:
The Northeast Corridor (NEC) faces serious challenges to meet current and projected travel demand. Responding to these pressing issues, the FRA initiated the NEC FUTURE Environmental Impact Statement as a comprehensive planning process for future investment in the corridor. The NEC FUTURE identified the B&P Tunnel as one of the segments along the NEC that faces capacity constraints and reliability challenges due to multiple chokepoints and state-of-good-repair needs.

Consistent with NEC long-range planning needs identified in the NEC FUTURE Program, the Project proposes a total of four tracks through Baltimore. The increased number of tracks will eliminate a chokepoint and expand capacity to accommodate future high-frequency, high-speed passenger train service anticipated on the NEC by 2040. Four tracks provide the resiliency/redundancy needed to maintain rail traffic between the West Baltimore MARC Station and Baltimore Penn Station and NEC connectivity in the event of interruptions to service on any of the tracks. Four tracks also provide the ability for conflict-free operation and separation of traffic types (intercity vs. commuter) which further improves operations, reduces travel time, and accommodates over-takes of slower trains by faster trains.

Response to Comment 6:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2:

COMMENTS



32

buses pass by and we all have cracks from the vibration. We think that we will experience irreversible deterioration from construction and vibrations, especially the four tunnels are handling hundreds of trains a day. Thank you for your time and addressing our consideration.

THE HEARING OFFICER: Thank you so much. Again, I mention that all written comments can be left at our registration table and will become a part of the official hearing record. Miss Pamela Patterson?

MS. PATTERSON: Good evening. My name is Pamela Patterson, at I am a resident of Reservoir Hill and I am also the neighbor -- the potential neighbor to the vent that is going to be built. I am here to talk about and testify that I am against the BP Tunnel for the reasons I am also a chronic asthmatic. So, probably in the next year or so, I will die from this excursion or possible activity you guys are getting ready to put together.

I also have a concern with the children in our community and the whole community of 21217, including this school, which will be affected because of the air quality.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

8

RESPONSES

Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since the publication of the DEIS, Alternative 3B was selected as the Preferred Alternative. Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

The Environmental Justice (EJ) analysis in **Chapter VI** of this FEIS describes the methodology for determining disproportionate impact to minority or economically disadvantaged communities. EJ populations would experience impacts as a result of the Project, including property acquisition; impacts to housing, land use/zoning, and community facilities; changes in visual quality, and noise impacts as described in **Chapter VI**. The Project Team has engaged extensively with the community throughout the development of the Project, detailed in **Chapter VIII**. Mitigation efforts are ongoing with community members and organizations and are documented in this FEIS.

Response to Comment 7:
As described above, currently, 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. Railroad freight traffic is subject to numerous variables, including government regulation, as well as market forces on rail transported materials such as coal, which represents 20-25 percent of total railroad car loads, crude oil/crude industrials sands and ethanol. As an example of this variability, the Department of Energy reported that for the first five months of 2016, crude oil by rail transportation decreased 45 percent compared to the same period in 2015. The combination of these variables makes it virtually impossible to accurately forecast freight usage through the tunnel. Variability of freight traffic is further described in **Chapter V.**

COMMENTS

RESPONSES

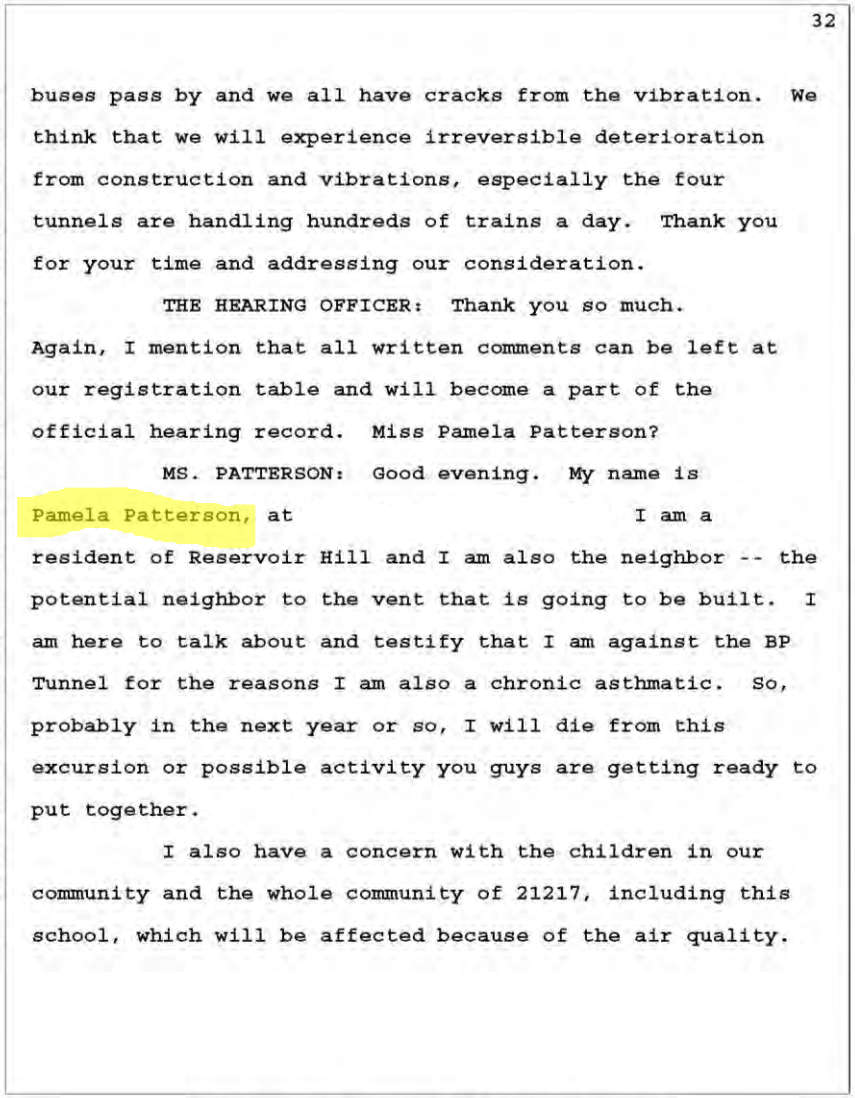
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety. These things will reduce the possibility of accidents in the new B&P Tunnel, and will also ensure the best possible protection in the unlikely event of an incident.

Response to Comment 8:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Please refer to responses to **DEIS Comment 85** for responses to the RATT questions.

COMMENTS

DEIS Comment 149:



32

buses pass by and we all have cracks from the vibration. We think that we will experience irreversible deterioration from construction and vibrations, especially the four tunnels are handling hundreds of trains a day. Thank you for your time and addressing our consideration.

THE HEARING OFFICER: Thank you so much. Again, I mention that all written comments can be left at our registration table and will become a part of the official hearing record. Miss Pamela Patterson?

MS. PATTERSON: Good evening. My name is Pamela Patterson, at I am a resident of Reservoir Hill and I am also the neighbor -- the potential neighbor to the vent that is going to be built. I 1 am here to talk about and testify that I am against the BP Tunnel for the reasons I am also a chronic asthmatic. So, 2 probably in the next year or so, I will die from this excursion or possible activity you guys are getting ready to put together.

I also have a concern with the children in our 3 community and the whole community of 21217, including this school, which will be affected because of the air quality.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

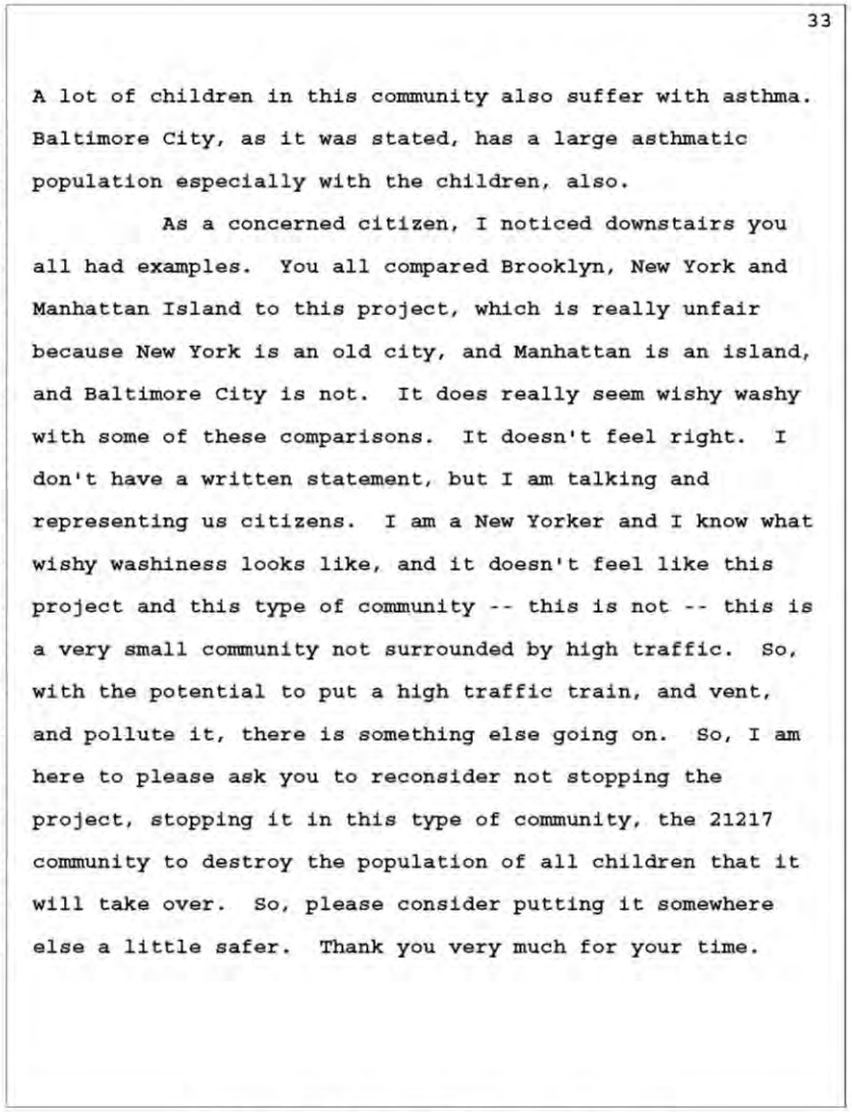
RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
The Project Team has assessed the existing air quality conditions of the Project Study Area. Any changes to air quality would be in accordance with the Clean Air Act and other applicable air quality regulations. The project team has compared emissions from diesel train traffic through the Study Area with and without a new tunnel. With additional trains made possible by the new tunnel, the emissions levels of VOC, NO_x, and $PM_{2.5}$ will change, but would be below *the de-minimis* levels that were set to safeguard public health. The proposed project would not result in adverse impacts to air quality due to operational emissions.

Response to Comment 3:
Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water. Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

COMMENTS



33

A lot of children in this community also suffer with asthma. Baltimore City, as it was stated, has a large asthmatic population especially with the children, also.

As a concerned citizen, I noticed downstairs you all had examples. You all compared Brooklyn, New York and Manhattan Island to this project, which is really unfair because New York is an old city, and Manhattan is an island, and Baltimore City is not. It does really seem wishy washy with some of these comparisons. It doesn't feel right. I don't have a written statement, but I am talking and representing us citizens. I am a New Yorker and I know what wishy washiness looks like, and it doesn't feel like this project and this type of community -- this is not -- this is a very small community not surrounded by high traffic. So, with the potential to put a high traffic train, and vent, and pollute it, there is something else going on. So, I am here to please ask you to reconsider not stopping the project, stopping it in this type of community, the 21217 community to destroy the population of all children that it will take over. So, please consider putting it somewhere else a little safer. Thank you very much for your time.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

RESPONSES

Response to Comment 4:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

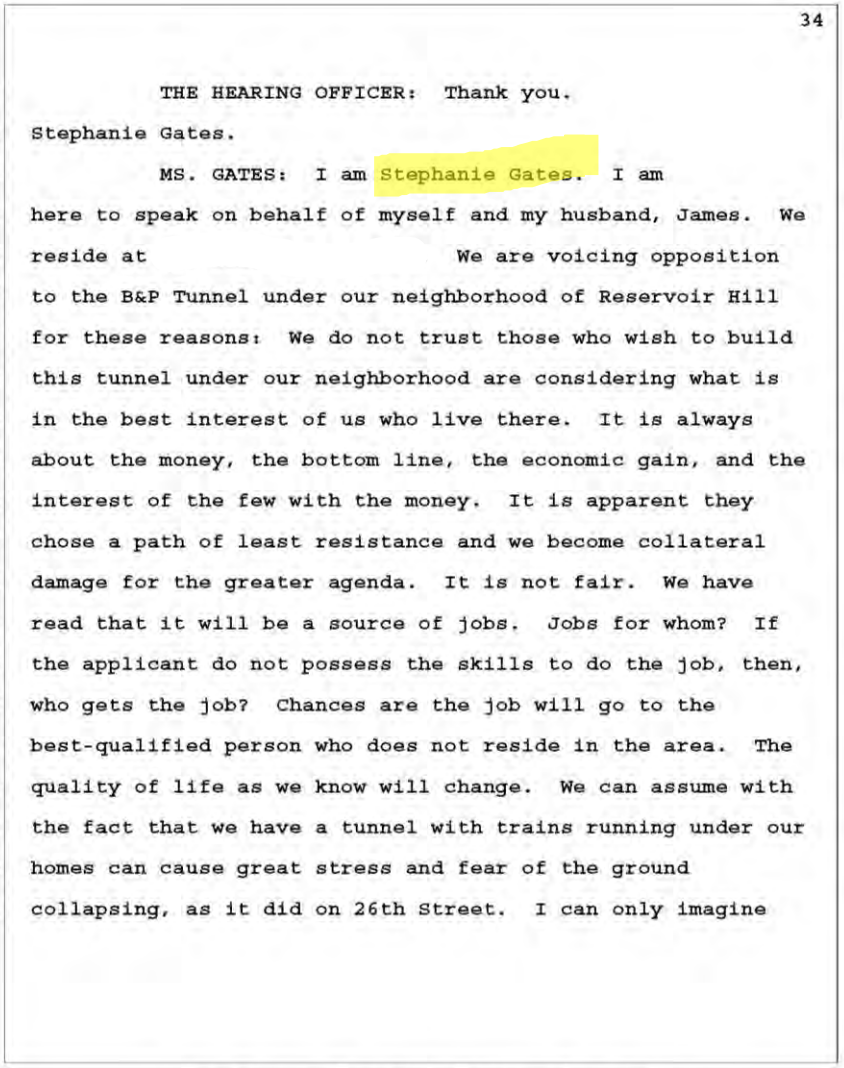
For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health, among others, as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

COMMENTS

DEIS Comment 150:



34

THE HEARING OFFICER: Thank you.
Stephanie Gates.
MS. GATES: I am Stephanie Gates. I am here to speak on behalf of myself and my husband, James. We reside at We are voicing opposition to the B&P Tunnel under our neighborhood of Reservoir Hill for these reasons: We do not trust those who wish to build this tunnel under our neighborhood are considering what is in the best interest of us who live there. It is always 1 about the money, the bottom line, the economic gain, and the interest of the few with the money. It is apparent they chose a path of least resistance and we become collateral damage for the greater agenda. It is not fair. We have read that it will be a source of jobs. Jobs for whom? If 2 the applicant do not possess the skills to do the job, then, who gets the job? Chances are the job will go to the best-qualified person who does not reside in the area. The quality of life as we know will change. We can assume with 3 the fact that we have a tunnel with trains running under our homes can cause great stress and fear of the ground collapsing, as it did on 26th Street. I can only imagine

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

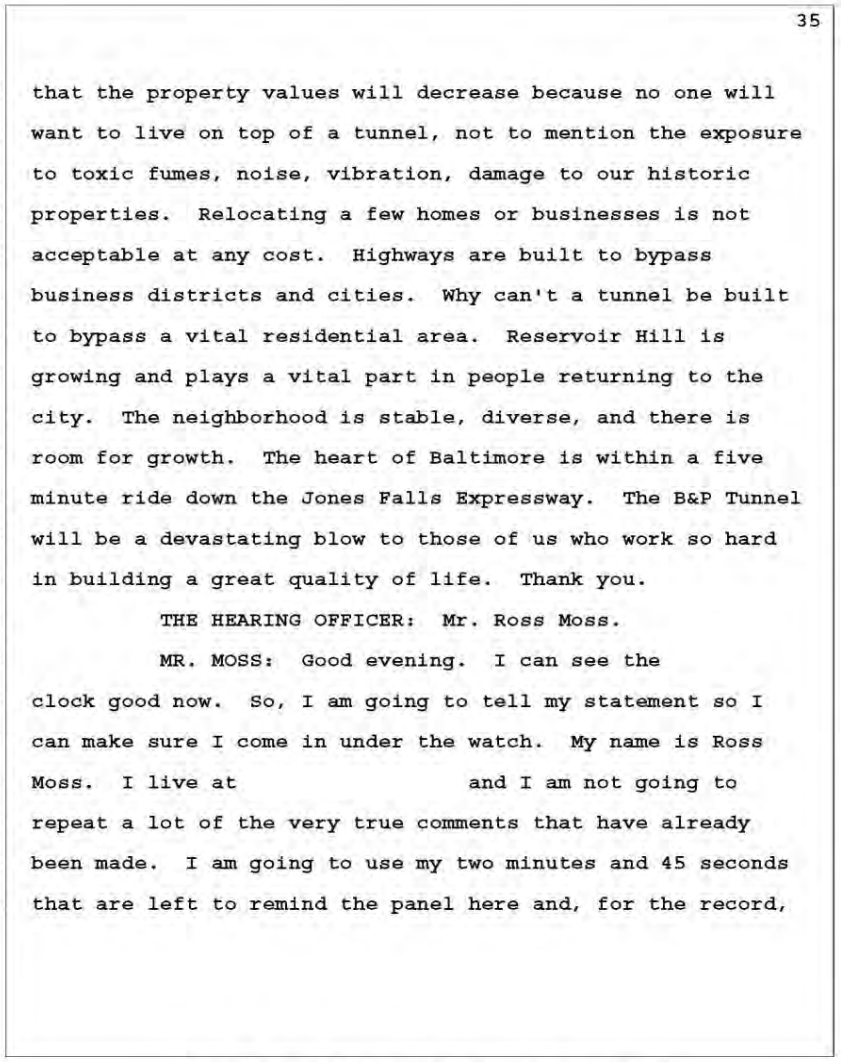
Response to Comment 1:
The Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS.

Response to Comment 2:
As part of the mitigation efforts, the Project sponsor would provide coordination with local job training organizations to 1) facilitate targeted job training by providing estimates of the type, number, and timing of jobs expected to be created by project contractors, 2) include in construction contracts goals for nationally targeted workers of social and economic disadvantage, and 3) require project contractors to report on a regular basis their progress in meeting contract goals. The Project sponsor will provide public reporting on job creation. These efforts are ongoing and are documented in this FEIS as described in **Chapter VI**.

Response to Comment 3:
All of the proposed Project infrastructure will be designed, constructed, and maintained using proven modern design and safety standards. The Project will be designed in accordance with applicable regulations, oversight agency guidance, and knowledge of safety standards to ensure optimal safety.

The housing market in Reservoir Hill is subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

COMMENTS



35

that the property values will decrease because no one will want to live on top of a tunnel, not to mention the exposure to toxic fumes, noise, vibration, damage to our historic properties. Relocating a few homes or businesses is not acceptable at any cost. Highways are built to bypass business districts and cities. Why can't a tunnel be built to bypass a vital residential area. Reservoir Hill is growing and plays a vital part in people returning to the city. The neighborhood is stable, diverse, and there is room for growth. The heart of Baltimore is within a five minute ride down the Jones Falls Expressway. The B&P Tunnel will be a devastating blow to those of us who work so hard in building a great quality of life. Thank you.

THE HEARING OFFICER: Mr. Ross Moss.

MR. MOSS: Good evening. I can see the clock good now. So, I am going to tell my statement so I can make sure I come in under the watch. My name is Ross Moss. I live at and I am not going to repeat a lot of the very true comments that have already been made. I am going to use my two minutes and 45 seconds that are left to remind the panel here and, for the record,

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 4:
The Project Team has assessed the existing air quality conditions of the Project Study Area. Any changes to air quality would be in accordance with the Clean Air Act and other applicable air quality regulations. The project team has compared emissions from diesel train traffic through the Study Area with and without a new tunnel. With additional trains made possible by the new tunnel, the emissions levels of VOC, NO_x, and $PM_{2.5}$ will change, but would be below *the de-minimis* levels that were set to safeguard public health. The proposed project would not result in adverse impacts to air quality due to operational emissions.

Alternative 3A is estimated to have 254 Moderate noise impacts, Alternative 3 B is estimated to have 141 Severe and 296 Moderate noise impacts, and Alternative 3C is estimated to have 111 Severe and 979 Moderate noise impacts. The severe impacts were predicted at residential areas nearest the railroad between the West Baltimore station and the south portal. The duration of the construction period will be six years; 2020 to 2025. Measures will be implemented to lessen noise during construction, which could potentially include erection of temporary walls or earth berms between the noise source and the sensitive receptor, the identification of haul routes that avoid sensitive receptors to the maximum extent possible, and location of stationary noise generating equipment at a distance from sensitive receptors. In addition, construction activities can be planned to avoid prolonged noise generating activities and to minimize construction activities during the most sensitive time of day or night. **Chapter VI** of this FEIS further details noise construction mitigation.

A general vibration assessment was conducted to assess the potential for impacts at sensitive receptors within the Study Area. Operational impacts were evaluated using FTA *Transit Noise and Vibration Impact Assessment* and construction vibration levels were also evaluated using both FTA guidelines as well as standard industry practices for evaluating vibration due to tunnel boring and other tunnel excavation activities.

Operational levels under the build alternatives due to ground-borne vibration from train passbys are not predicted to exceed the FTA 'frequent' impact criteria at any residences (FTA Category 2 land-uses) or institutional receptors (FTA Category 3 land-uses). However, under the Preferred Alternative, impacts due to ground-borne noise from Acela train passbys are predicted at 444 residences and 5 institutional receptors. No FTA Category 1 land-uses (highly-sensitive equipment) were identified along the Project corridor.

Heavy machinery is the major source of vibration during construction. Heavy machinery could include tunnel boring machines (TBM), earth-moving equipment, and heavy-duty impulsive equipment. The TBM induced ground-borne vibrations are frequently discussed as Peak Particle Velocity (PPV) at a given location. PPVs generally use units of inches per second (ips) as a unit of measurement. TBM vibrations during construction would generally be between 0.04 and 0.2 ips, and thus are not likely to damage buildings near or above the proposed tunnels. The TBM would advance around 30 feet per day, meaning the vibration

COMMENTS

RESPONSES

source would likely only be felt for a short duration before the vibration source moves away from a given location. This means that someone may sense the TBM vibrations for a day or two when tunneling is continuous. One could describe the perceived vibrations by common activities such as traffic or construction equipment. The range of PPVs estimated here would be comparable to the vibration (but not the noise) of a truck traveling 20 to 30 feet away from an observer.

Another major source of vibration during construction is Drill and Blast tunnel excavation. This technique produces two types of disturbing vibrations, ground-borne vibrations and air vibrations, which are described **in Chapter VI.** Drill and Blast excavation would take place at the north and south portals, cross passages, sump pump stations, the North Ventilation Facility, the Intermediate Ventilation Facility, the Intermediate Ventilation Facility cavern, plenum tunnel and shaft, and the egress cavern and tunnel. The portals could be configured to contain or block the overpressures so as not to disturb the surrounding portal areas, and ground-borne blasting vibrations are generally less than 2 inches/second, which is a generally accepted building damage threshold.

All construction activities would need to comply with the FTA limits and guidelines to minimize vibration in the community. Details of vibration impacts and minimization are discussed in **Chapter VI.**

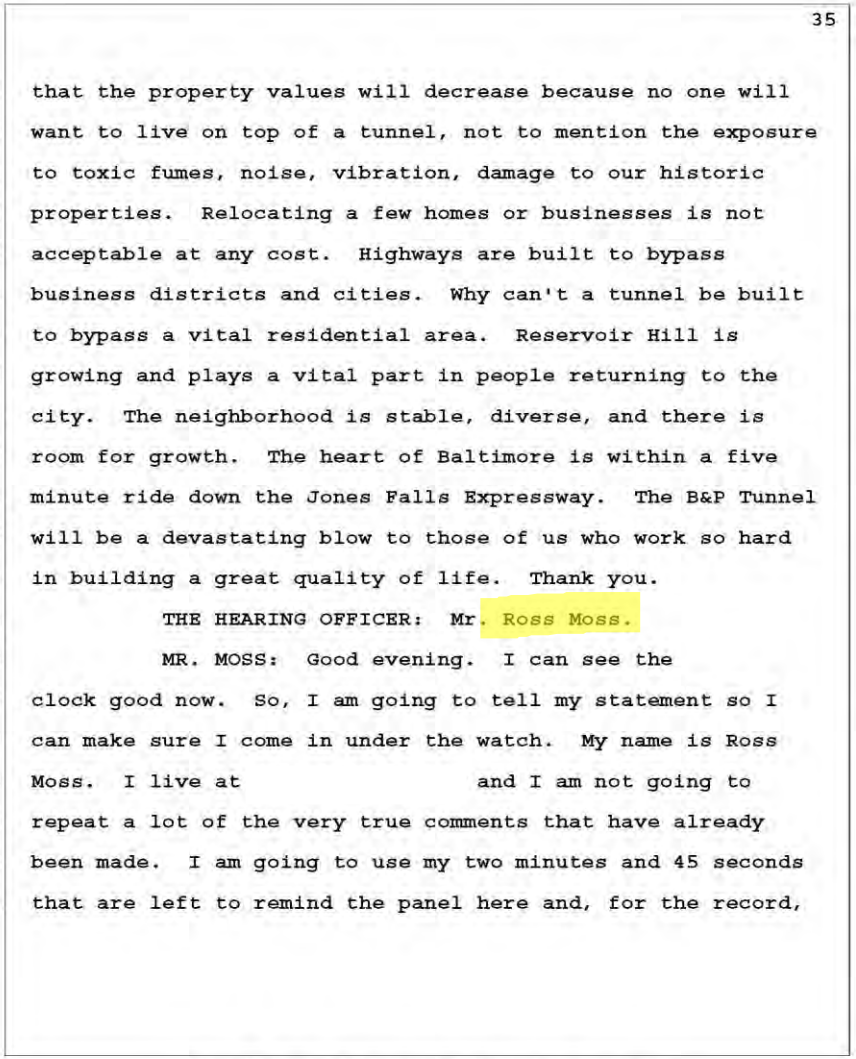
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include: sites where vibration or ground-borne noise impacts are predicted or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities, rather than other factors (such as normal deterioration due to old age) the property owner would be compensated for the cost of repairs.

The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. As the Project is advanced to the design phase and if funding is available, the Project Team would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include

COMMENTS	RESPONSES
	construction contract goals for workers of social and economic disadvantage. The Project will also provide relocation benefits to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS. **Response to Comment 5:** The Project has been planned mostly underground in order to avoid greater impacts to the community.

COMMENTS | **RESPONSES**

DEIS Comment 151:



35

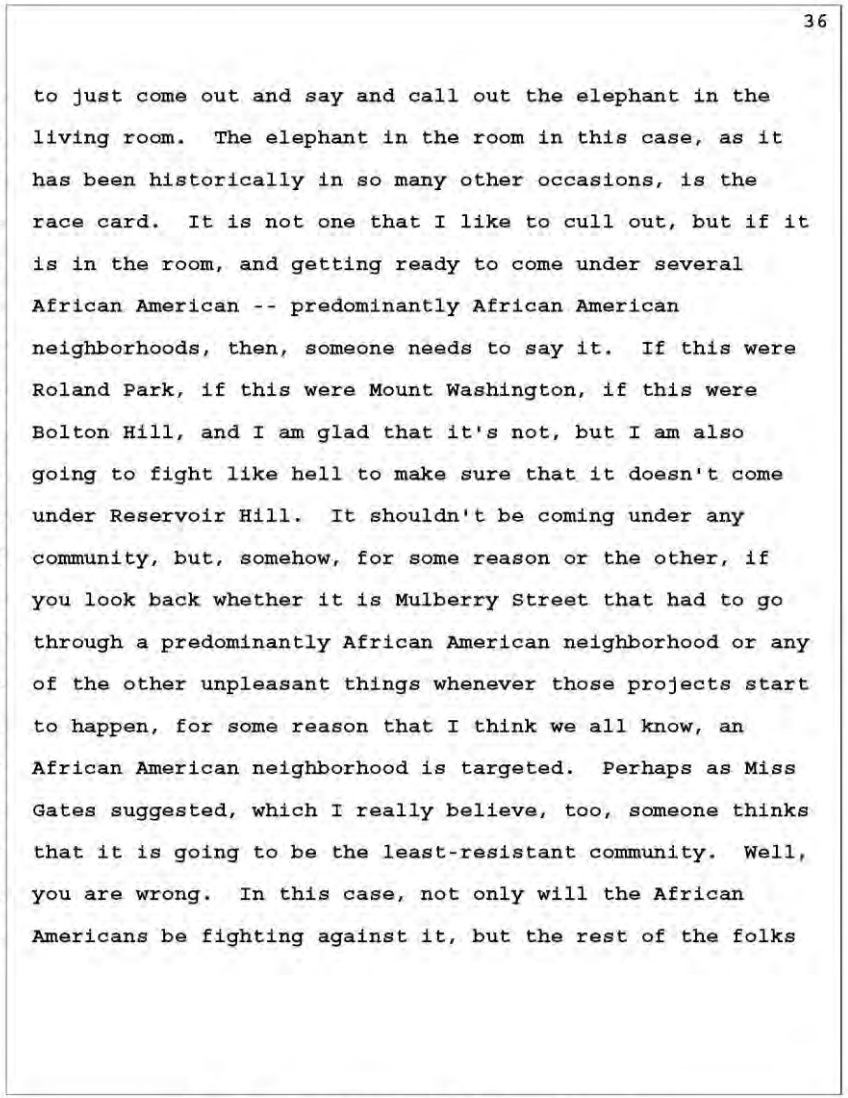
that the property values will decrease because no one will want to live on top of a tunnel, not to mention the exposure to toxic fumes, noise, vibration, damage to our historic properties. Relocating a few homes or businesses is not acceptable at any cost. Highways are built to bypass business districts and cities. Why can't a tunnel be built to bypass a vital residential area. Reservoir Hill is growing and plays a vital part in people returning to the city. The neighborhood is stable, diverse, and there is room for growth. The heart of Baltimore is within a five minute ride down the Jones Falls Expressway. The B&P Tunnel will be a devastating blow to those of us who work so hard in building a great quality of life. Thank you.

THE HEARING OFFICER: Mr. Ross Moss.

MR. MOSS: Good evening. I can see the clock good now. So, I am going to tell my statement so I can make sure I come in under the watch. My name is Ross Moss. I live at and I am not going to repeat a lot of the very true comments that have already been made. I am going to use my two minutes and 45 seconds that are left to remind the panel here and, for the record,

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



36

to just come out and say and call out the elephant in the living room. The elephant in the room in this case, as it has been historically in so many other occasions, is the race card. It is not one that I like to cull out, but if it is in the room, and getting ready to come under several African American -- predominantly African American neighborhoods, then, someone needs to say it. If this were Roland Park, if this were Mount Washington, if this were Bolton Hill, and I am glad that it's not, but I am also going to fight like hell to make sure that it doesn't come under Reservoir Hill. It shouldn't be coming under any community, but, somehow, for some reason or the other, if you look back whether it is Mulberry Street that had to go through a predominantly African American neighborhood or any of the other unpleasant things whenever those projects start to happen, for some reason that I think we all know, an African American neighborhood is targeted. Perhaps as Miss Gates suggested, which I really believe, too, someone thinks that it is going to be the least-resistant community. Well, you are wrong. In this case, not only will the African Americans be fighting against it, but the rest of the folks

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The existing B&P Tunnel tracks are in Bolton Hill. Options as to where the new B&P Tunnel should reside are limited. Due to the geography and the shallowness of the area beneath Bolton Hill, this area was not a feasible option for the proposed Tunnel, whereas the area underneath Reservoir Hill is deeper and more practicable.

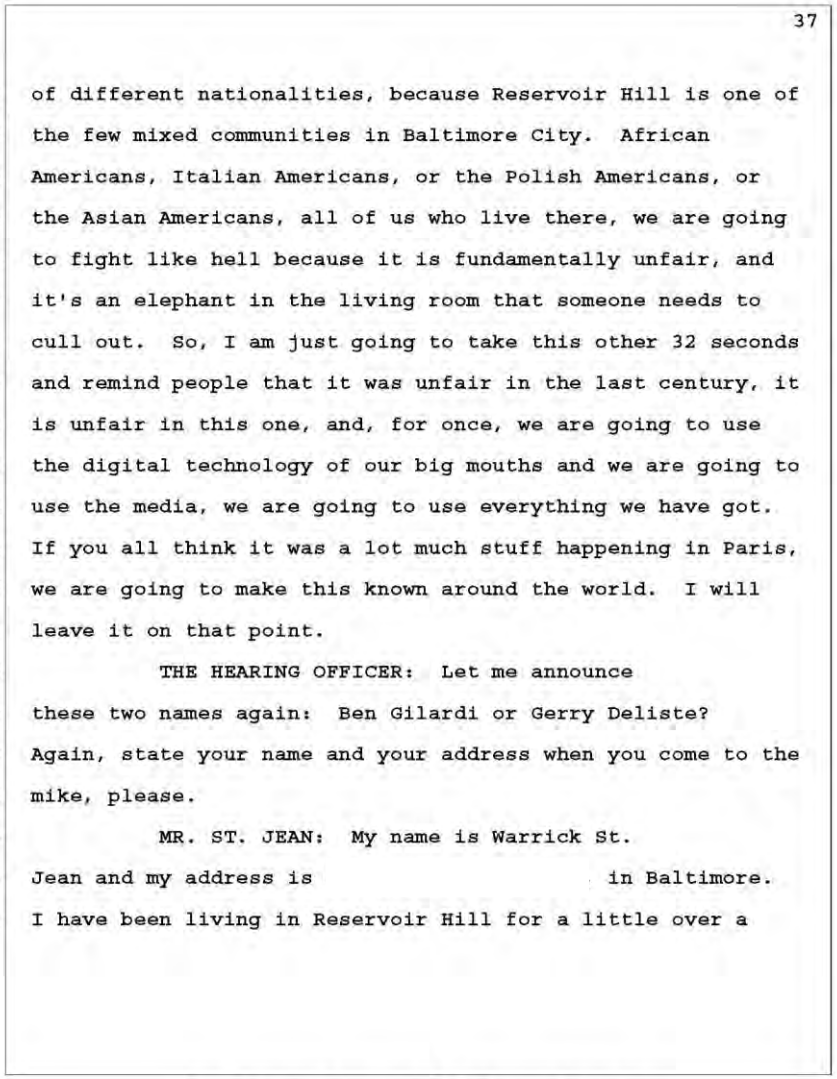
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the Executive Order on environmental justice is public outreach. The Project Team has conducted extensive engagement with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the Project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77

COMMENTS



37

of different nationalities, because Reservoir Hill is one of the few mixed communities in Baltimore City. African Americans, Italian Americans, or the Polish Americans, or the Asian Americans, all of us who live there, we are going to fight like hell because it is fundamentally unfair, and it's an elephant in the living room that someone needs to cull out. So, I am just going to take this other 32 seconds and remind people that it was unfair in the last century, it is unfair in this one, and, for once, we are going to use the digital technology of our big mouths and we are going to use the media, we are going to use everything we have got. If you all think it was a lot much stuff happening in Paris, we are going to make this known around the world. I will leave it on that point.

THE HEARING OFFICER: Let me announce these two names again: Ben Gilardi or Gerry Deliste? Again, state your name and your address when you come to the mike, please.

MR. ST. JEAN: My name is Warrick St. Jean and my address is in Baltimore. I have been living in Reservoir Hill for a little over a

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

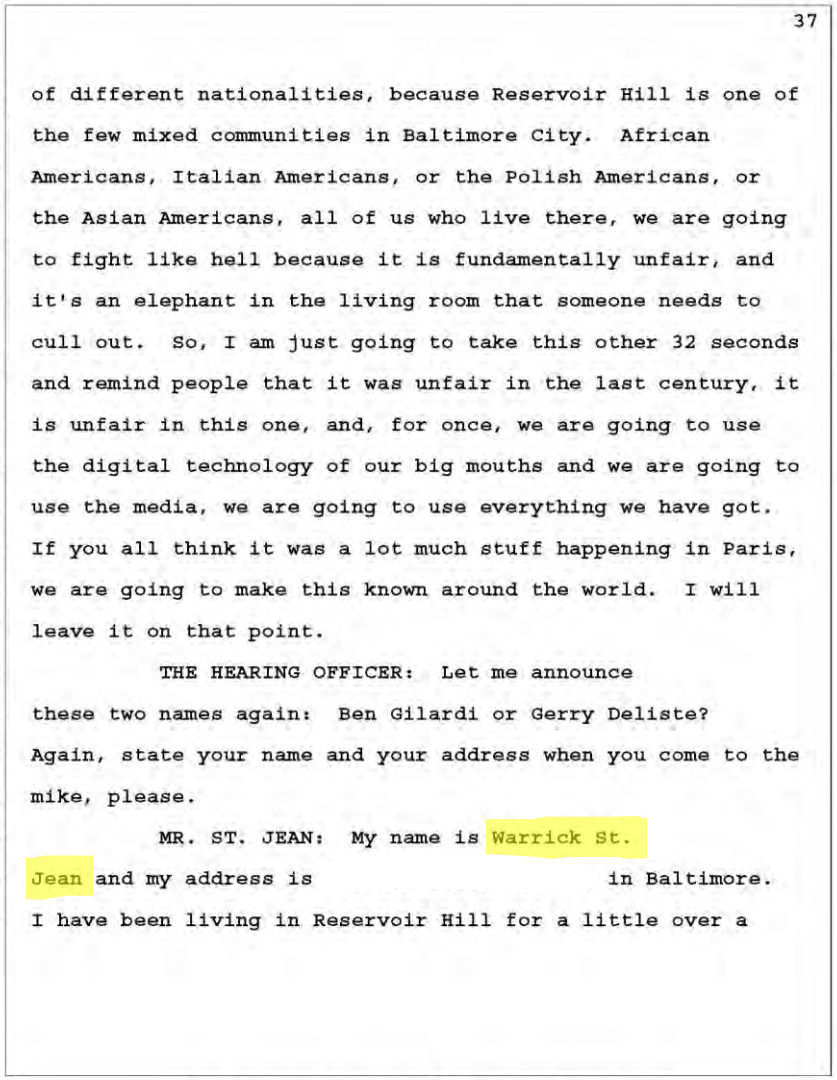
Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations. For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

COMMENTS

RESPONSES

DEIS Comment 152:



37

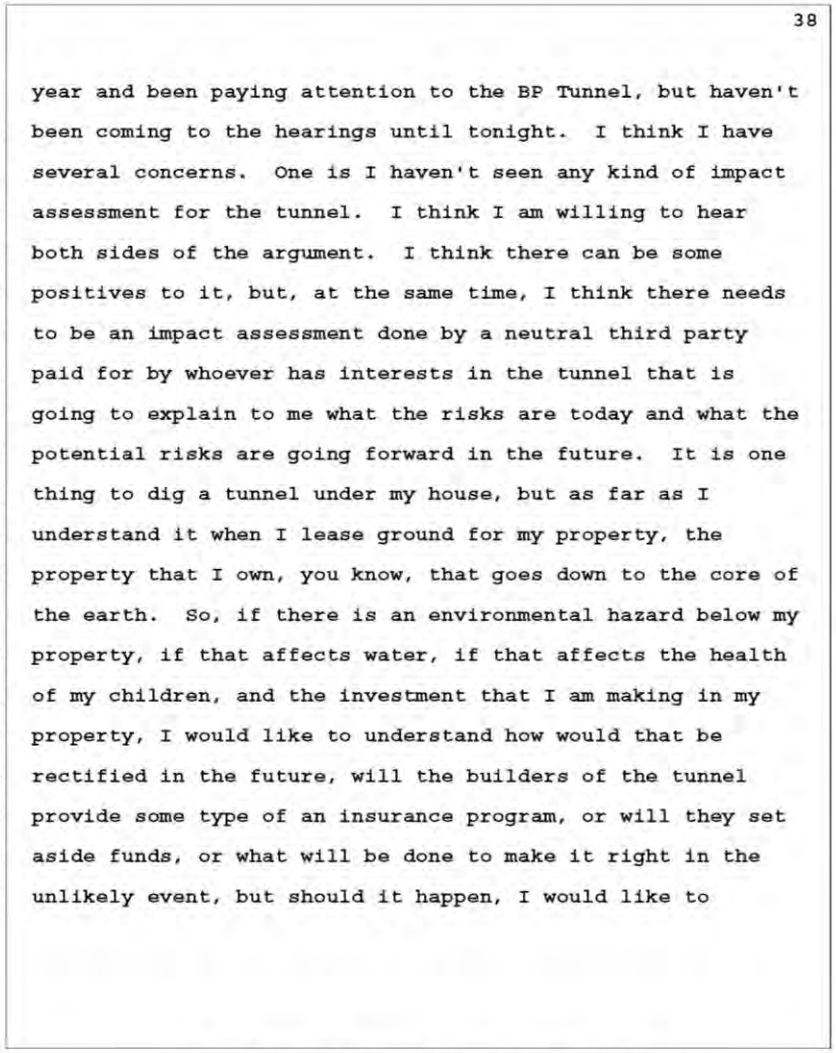
of different nationalities, because Reservoir Hill is one of the few mixed communities in Baltimore City. African Americans, Italian Americans, or the Polish Americans, or the Asian Americans, all of us who live there, we are going to fight like hell because it is fundamentally unfair, and it's an elephant in the living room that someone needs to cull out. So, I am just going to take this other 32 seconds and remind people that it was unfair in the last century, it is unfair in this one, and, for once, we are going to use the digital technology of our big mouths and we are going to use the media, we are going to use everything we have got. If you all think it was a lot much stuff happening in Paris, we are going to make this known around the world. I will leave it on that point.

THE HEARING OFFICER: Let me announce these two names again: Ben Gilardi or Gerry Deliste? Again, state your name and your address when you come to the mike, please.

MR. ST. JEAN: My name is Warrick St. Jean and my address is in Baltimore. I have been living in Reservoir Hill for a little over a

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



38

year and been paying attention to the BP Tunnel, but haven't been coming to the hearings until tonight. I think I have several concerns. One is I haven't seen any kind of impact assessment for the tunnel. I think I am willing to hear both sides of the argument. I think there can be some positives to it, but, at the same time, I think there needs to be an impact assessment done by a neutral third party paid for by whoever has interests in the tunnel that is going to explain to me what the risks are today and what the potential risks are going forward in the future. It is one thing to dig a tunnel under my house, but as far as I understand it when I lease ground for my property, the property that I own, you know, that goes down to the core of the earth. So, if there is an environmental hazard below my property, if that affects water, if that affects the health of my children, and the investment that I am making in my property, I would like to understand how would that be rectified in the future, will the builders of the tunnel provide some type of an insurance program, or will they set aside funds, or what will be done to make it right in the unlikely event, but should it happen, I would like to

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

2

RESPONSES

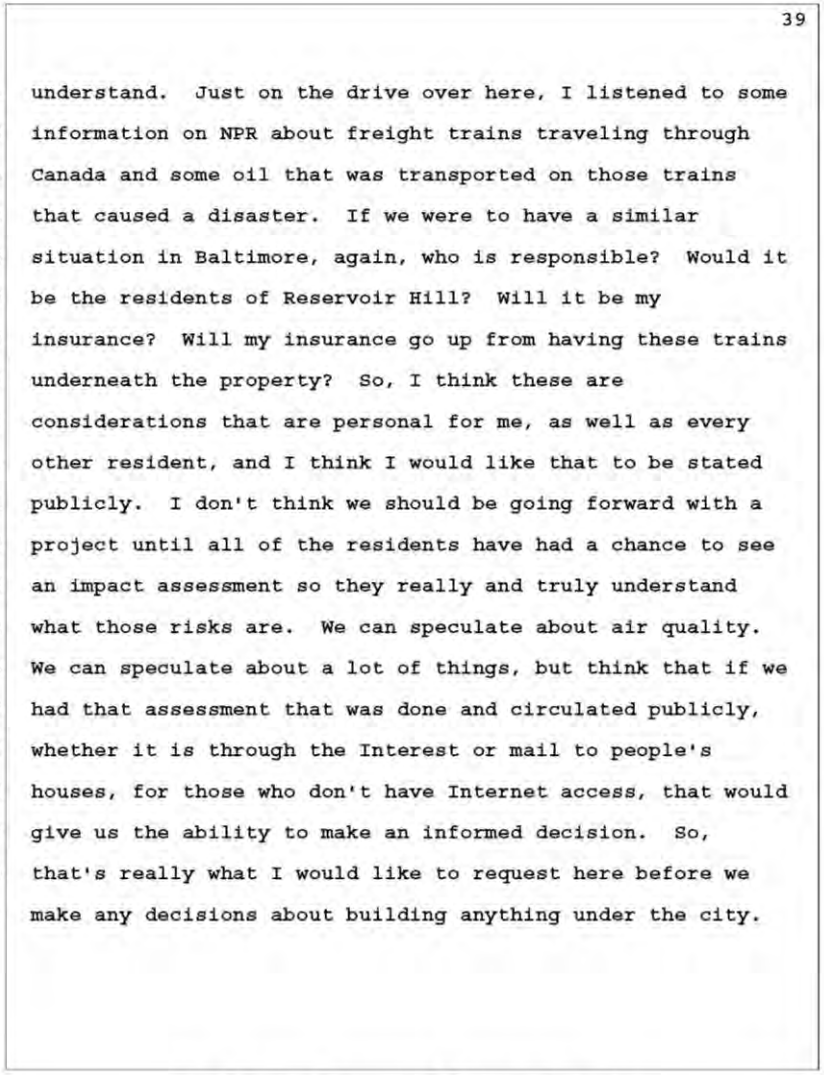
Response to Comment 1:
Since publication of the DEIS, Alternative 3B was advanced and modified through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. The FEIS identifies Alternative 3B as the Preferred Alternative. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the identification of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

Response to Comment 2:
No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses including even those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

COMMENTS



39

understand. Just on the drive over here, I listened to some information on NPR about freight trains traveling through Canada and some oil that was transported on those trains that caused a disaster. If we were to have a similar situation in Baltimore, again, who is responsible? Would it be the residents of Reservoir Hill? Will it be my insurance? Will my insurance go up from having these trains underneath the property? So, I think these are considerations that are personal for me, as well as every other resident, and I think I would like that to be stated publicly. I don't think we should be going forward with a project until all of the residents have had a chance to see an impact assessment so they really and truly understand what those risks are. We can speculate about air quality. We can speculate about a lot of things, but think that if we had that assessment that was done and circulated publicly, whether it is through the Interest or mail to people's houses, for those who don't have Internet access, that would give us the ability to make an informed decision. So, that's really what I would like to request here before we make any decisions about building anything under the city.

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

3

4

RESPONSES

Response to Comment 3:
The Project has been planned mostly underground in order to avoid greater impacts to the community. Fire in a tunnel is much less damaging to a community than a fire or other emergency event on an above-ground track running through the neighborhood. The new B&P Tunnel will be designed to be better equipped and prepared than the current B&P Tunnel.

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

Response to Comment 4:
Regarding diesel emissions, when NO_2 levels are below applicable standards, other pollutants of concern are also within the appropriate range. As a result, when the Project Team analyzed predicted emissions from Ventilation Facilities, it focused on evaluating NO_2.

The American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) was used to evaluate the potential 1-hour NO_2 emissions from the Project. AERMOD is the US Environmental Protection Agency's preferred and recommended air dispersion model. For the AERMOD analysis, a "worst case" scenario was analyzed assuming an average of ten diesel trains per hour operating between the hours of 6:00 am to 7:00 pm (peak hours of operation). No diesel operations were assumed from 10:00 pm to 3:00 am and partial operations (i.e., five diesel trains per hour) were assumed for the remaining time. Air emissions from the diesel train operations were assumed to exit through the north and south portals and from all three ventilation facilities. The emissions associated with the proposed portals and ventilation facilities would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards threshold levels that were set to safeguard public health. Air dispersion modeling results are found in **Chapter VI**.

COMMENTS | **RESPONSES**

DEIS Comment 153:

That's it.

THE HEARING OFFICER: Thank you. Again, persons who would like to testify for the hearing should register at our registration table on the level below us. We will be here until 8:00 o'clock tonight. You can register up until 7:55 and the display area is open until 8:00 o'clock, so those displays, if you want to go look at those. If you are interested in registering, sign up, and we will hear your testimony here. Thank you.

(Recess taken -- 6:17 p.m.)

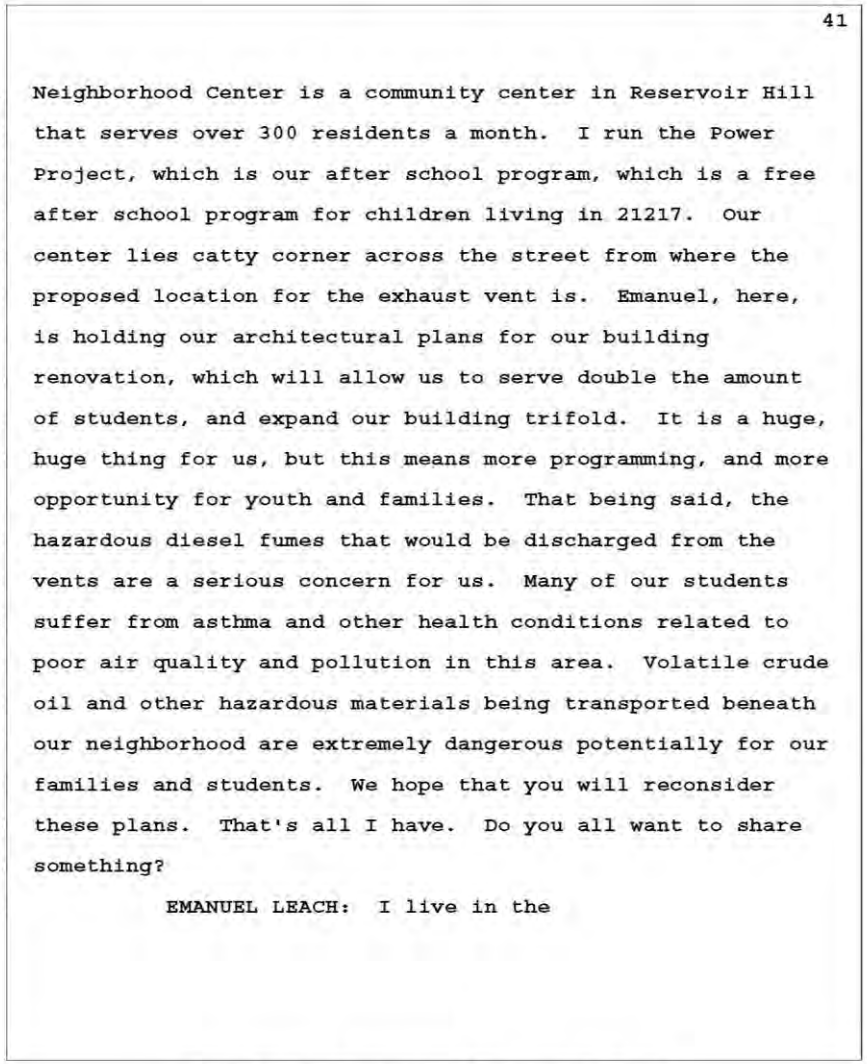
(After recess -- 6:21 p.m.)

THE HEARING OFFICER: I will remind all persons who are testifying you should state your name, and address, and association with the organization, and remind you that you have three minutes to testify, and we welcome the St. Francis neighborhood.

MS. CHILDRESS: We are at

My name is Jessica Childress. I am here representing St. Francis Neighborhood Center. I am here with Tara Thompson, Jenna Gray, Emanuel Leach, and Darnell Timons. These are students in our upper school program. St. Francis

COMMENTS



41

Neighborhood Center is a community center in Reservoir Hill that serves over 300 residents a month. I run the Power Project, which is our after school program, which is a free after school program for children living in 21217. Our center lies catty corner across the street from where the proposed location for the exhaust vent is. Emanuel, here, is holding our architectural plans for our building renovation, which will allow us to serve double the amount of students, and expand our building trifold. It is a huge, huge thing for us, but this means more programming, and more opportunity for youth and families. That being said, the hazardous diesel fumes that would be discharged from the vents are a serious concern for us. Many of our students suffer from asthma and other health conditions related to poor air quality and pollution in this area. Volatile crude oil and other hazardous materials being transported beneath our neighborhood are extremely dangerous potentially for our families and students. We hope that you will reconsider these plans. That's all I have. Do you all want to share something?

EMANUEL LEACH: I live in the

1

2

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

Response to Comment 3:
Norfolk Southern has a Common Carrier Obligation, which prohibits it from refusing reasonable requests for their service, including transportation of hazardous materials. Hazardous/flammable materials can be transported along the Northeast Corridor and through the B&P Tunnel subject to the US Department of Transportation (USDOT) regulations governing the proper labeling/placarding and transportation of such regulated materials or wastes. The rules are explained at *https://www.fra.dot.gov/Page/P0444*. From that text:

COMMENTS

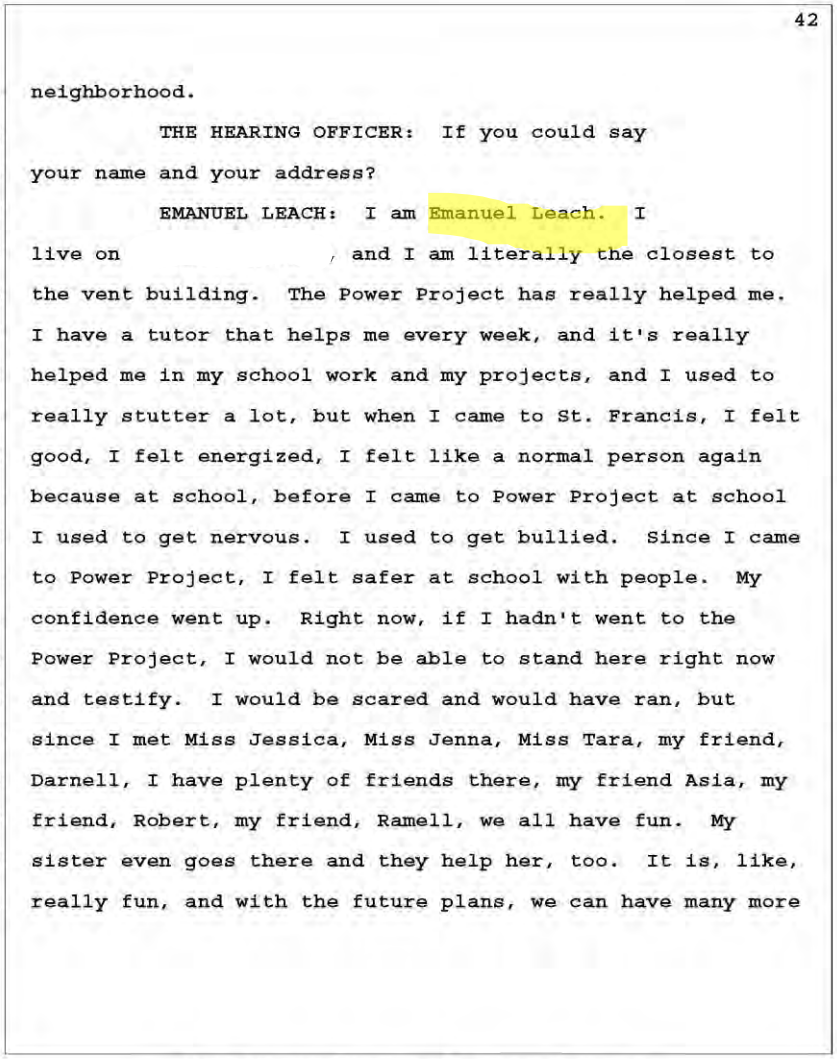
RESPONSES

Under authority delegated to FRA by the Secretary of Transportation, the Hazardous Materials Division administers a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum, chemical, and nuclear products, throughout the Nation's rail transportation system, including shipments transported to and from international organizations. The Division also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international hazardous materials standard, even if such a package does not contain a hazardous material.

FRA requires a range of measures that minimize the risk to the public, including container labeling, container durability standards, emergency response information and safety and security plans. Local first responders receive training in hazardous materials incidents for specific facilities, including the B&P Tunnel. Build alternatives would be constructed to meet current standards for fire protection.

COMMENTS

DEIS Comment 154:



42

neighborhood.

THE HEARING OFFICER: If you could say your name and your address?

EMANUEL LEACH: I am Emanuel Leach. I live on , and I am literally the closest to the vent building. The Power Project has really helped me. I have a tutor that helps me every week, and it's really helped me in my school work and my projects, and I used to really stutter a lot, but when I came to St. Francis, I felt good, I felt energized, I felt like a normal person again because at school, before I came to Power Project at school I used to get nervous. I used to get bullied. Since I came to Power Project, I felt safer at school with people. My confidence went up. Right now, if I hadn't went to the Power Project, I would not be able to stand here right now and testify. I would be scared and would have ran, but since I met Miss Jessica, Miss Jenna, Miss Tara, my friend, Darnell, I have plenty of friends there, my friend Asia, my friend, Robert, my friend, Ramell, we all have fun. My sister even goes there and they help her, too. It is, like, really fun, and with the future plans, we can have many more

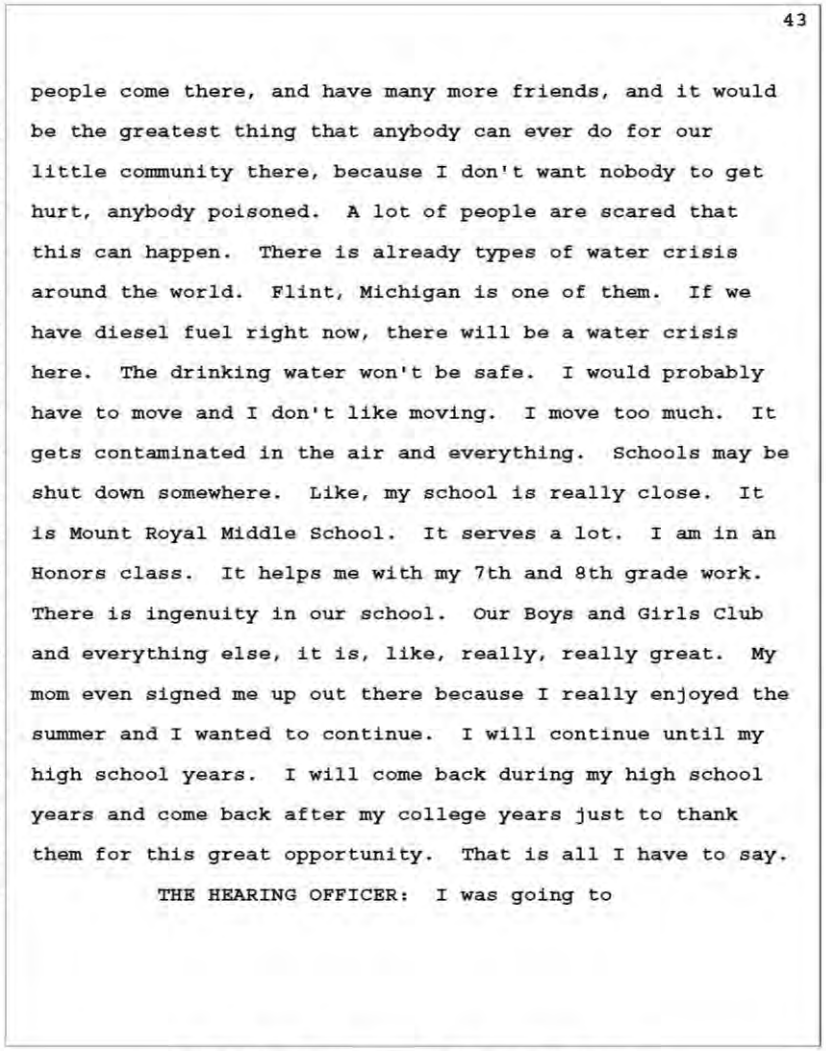
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



43

people come there, and have many more friends, and it would be the greatest thing that anybody can ever do for our little community there, because I don't want nobody to get hurt, anybody poisoned. A lot of people are scared that this can happen. There is already types of water crisis around the world. Flint, Michigan is one of them. If we have diesel fuel right now, there will be a water crisis here. The drinking water won't be safe. I would probably have to move and I don't like moving. I move too much. It gets contaminated in the air and everything. Schools may be shut down somewhere. Like, my school is really close. It is Mount Royal Middle School. It serves a lot. I am in an Honors class. It helps me with my 7th and 8th grade work. There is ingenuity in our school. Our Boys and Girls Club and everything else, it is, like, really, really great. My mom even signed me up out there because I really enjoyed the summer and I wanted to continue. I will continue until my high school years. I will come back during my high school years and come back after my college years just to thank them for this great opportunity. That is all I have to say.

THE HEARING OFFICER: I was going to

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

3

4

RESPONSES

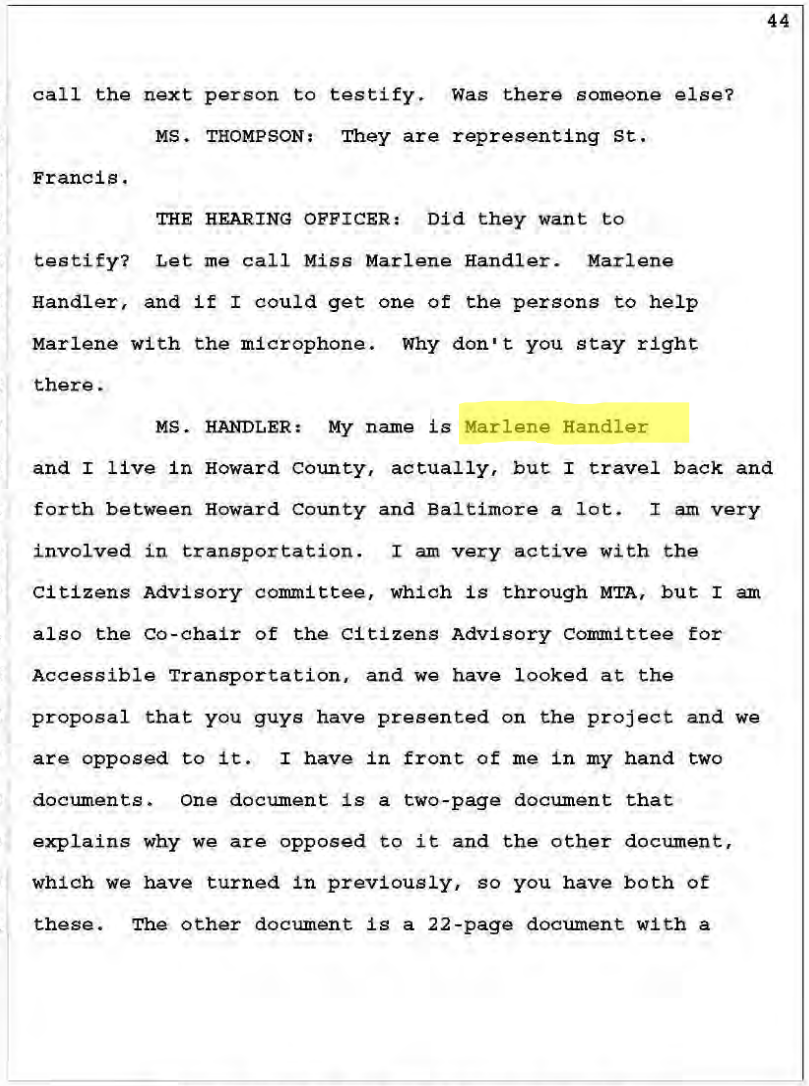
Response to Comment 2:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 3:
No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

Response to Comment 4:
Chapter VI of this FEIS specifically reviewed Air Quality, Water, Soil, and Hazardous Material impacts on Children's Health. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation facilities would cause, or substantially contribute to a violation of NAAQS, established by the USEPA.

COMMENTS

DEIS Comment 155:



44

call the next person to testify. Was there someone else?

MS. THOMPSON: They are representing St. Francis.

THE HEARING OFFICER: Did they want to testify? Let me call Miss Marlene Handler. Marlene Handler, and if I could get one of the persons to help Marlene with the microphone. Why don't you stay right there.

MS. HANDLER: My name is Marlene Handler and I live in Howard County, actually, but I travel back and forth between Howard County and Baltimore a lot. I am very involved in transportation. I am very active with the Citizens Advisory committee, which is through MTA, but I am also the Co-chair of the Citizens Advisory Committee for Accessible Transportation, and we have looked at the proposal that you guys have presented on the project and we are opposed to it. I have in front of me in my hand two documents. One document is a two-page document that explains why we are opposed to it and the other document, which we have turned in previously, so you have both of these. The other document is a 22-page document with a

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The report provided, *A Proposal to Unravel Baltimore's Tangled Rail Lines*, argues for a comprehensive system approach to rail planning in Baltimore and the mid-Atlantic region. It describes a list of projects and the order in which they should be completed. The report takes into consideration local, state, and regional transportation routes, and recommends new construction at a number of locations in order to relieve congestion and create opportunities for expanding rail service in the future.

While recommendations in the report focus on resolving issues at a regional level, they would not address or resolve the specific needs of the B&P Tunnel; therefore, the improvements suggested in the report would be beyond the purview of the Project. The existing B&P Tunnel is more than 140 years old and is approaching the end of its useful life. It is considered to be structurally deficient due to its age, the original design, and wear and tear. The Tunnel is also functionally obsolete and unable to meet current and future rail demands. For additional information regarding the purpose and need of the Project, please see **Chapter II** of this FEIS.

To review the September 2015 report in its entirety, please refer to **DEIS Comment #11**.

COMMENTS | **RESPONSES**

cover sheet of an Alternative Proposal that the members of the CAC, the CACAT, and another transportation committee that we work with put together for you guys to look at. It explains why we are opposed and an alternative that we think might work.

THE HEARING OFFICER: Okay.

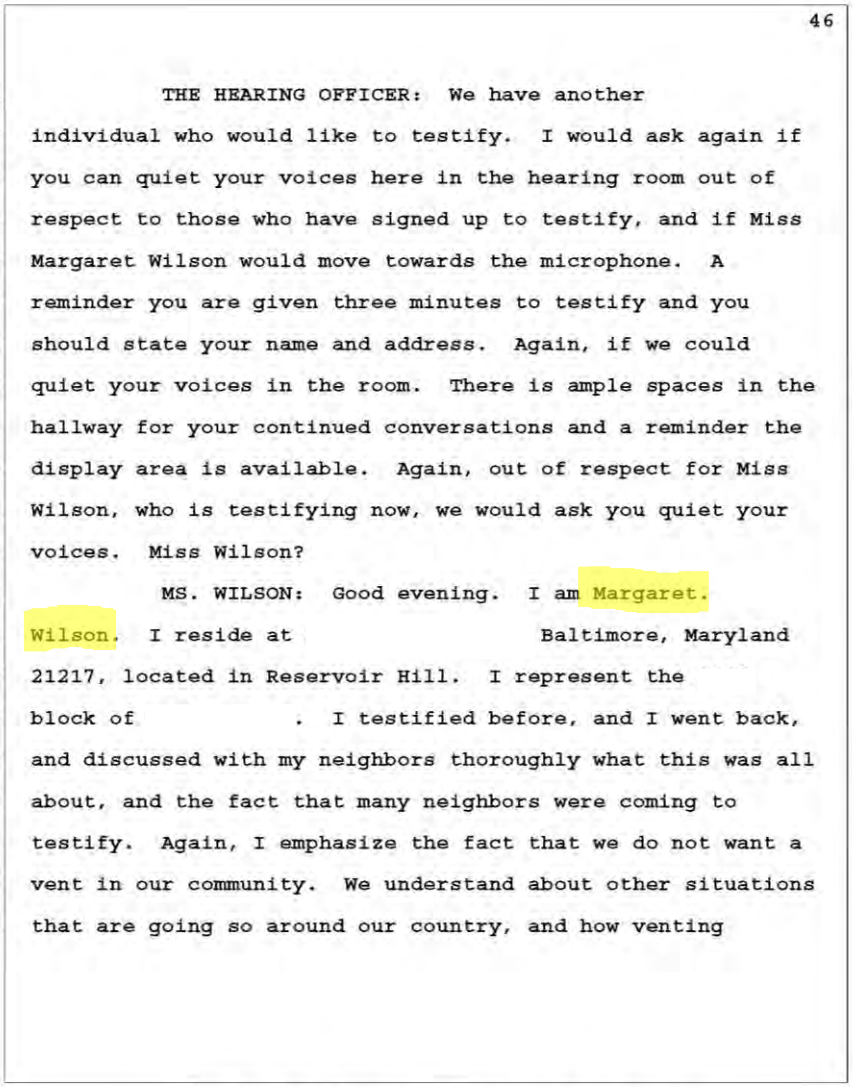
MS. HANDLER: Because it would be too much for me to read this whole thing. I am only given three minutes.

THE HEARING OFFICER: Thank you so much. Written comments can be left at the registration table. They do become a part of the official record. We will accept comments until the 26th, at 5:00 p.m. You can mail those comments to the address that has been provided or go on the web site and provide a comment on-line. We will be hearing testimony until 8:00 p.m. tonight if you want to testify, you should register at the registration table on the level right below you, and the display area remains open if you want to go there and ask the project team questions. Thank you.

(Whereupon, there was a brief recess.)

COMMENTS

DEIS Comment 156:



46

THE HEARING OFFICER: We have another individual who would like to testify. I would ask again if you can quiet your voices here in the hearing room out of respect to those who have signed up to testify, and if Miss Margaret Wilson would move towards the microphone. A reminder you are given three minutes to testify and you should state your name and address. Again, if we could quiet your voices in the room. There is ample spaces in the hallway for your continued conversations and a reminder the display area is available. Again, out of respect for Miss Wilson, who is testifying now, we would ask you quiet your voices. Miss Wilson?

MS. WILSON: Good evening. I am Margaret. Wilson. I reside at Baltimore, Maryland 21217, located in Reservoir Hill. I represent the block of . I testified before, and I went back, and discussed with my neighbors thoroughly what this was all about, and the fact that many neighbors were coming to testify. Again, I emphasize the fact that we do not want a vent in our community. We understand about other situations that are going so around our country, and how venting

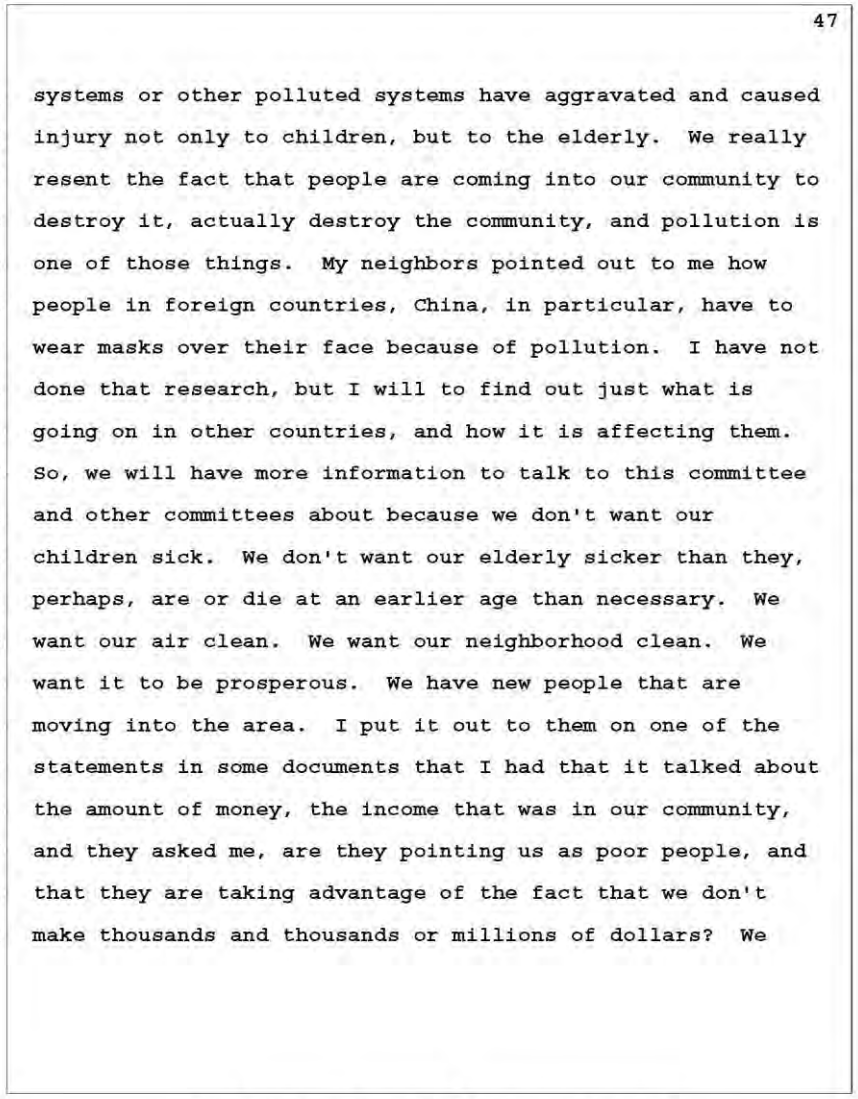
Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

1

RESPONSES

Response to Comment 1:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS



47

systems or other polluted systems have aggravated and caused injury not only to children, but to the elderly. We really resent the fact that people are coming into our community to destroy it, actually destroy the community, and pollution is one of those things. My neighbors pointed out to me how people in foreign countries, China, in particular, have to wear masks over their face because of pollution. I have not done that research, but I will to find out just what is going on in other countries, and how it is affecting them. So, we will have more information to talk to this committee and other committees about because we don't want our children sick. We don't want our elderly sicker than they, perhaps, are or die at an earlier age than necessary. We want our air clean. We want our neighborhood clean. We want it to be prosperous. We have new people that are moving into the area. I put it out to them on one of the statements in some documents that I had that it talked about the amount of money, the income that was in our community, and they asked me, are they pointing us as poor people, and that they are taking advantage of the fact that we don't make thousands and thousands or millions of dollars? We

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

3

RESPONSES

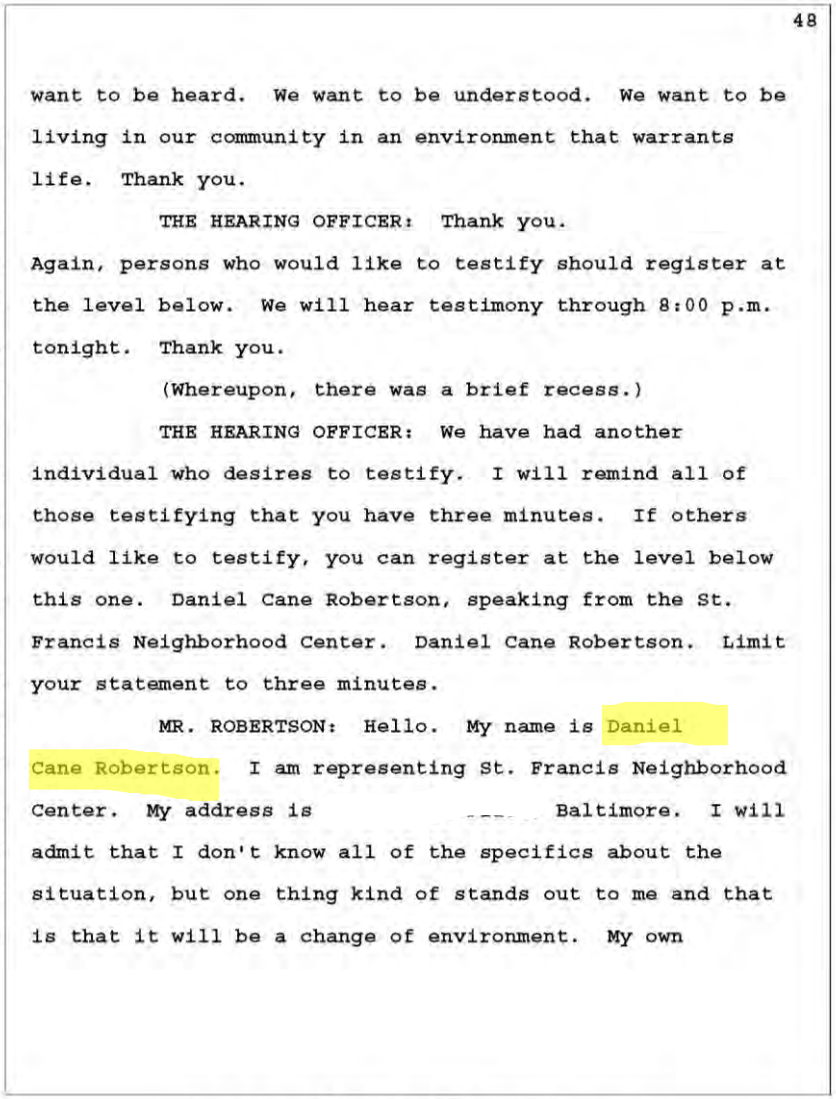
Response to Comment 2:
The emissions associated with the proposed ventilation facilities and the air exiting the portals would not result in adverse impacts to air quality. The maximum 1-hour NO_2 concentrations were predicted to be below the National Ambient Air Quality Standards (NAAQS) threshold, set to safeguard public health. Because the concentrations of NO_2 were within acceptable levels, all other criteria pollutant concentrations would be within acceptable levels of the NAAQS. **Chapter VI** provides details of the air quality analysis, including ventilation facility air dispersion modeling.

Response to Comment 3:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water. Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

COMMENTS

DEIS Comment 157:



48

want to be heard. We want to be understood. We want to be living in our community in an environment that warrants life. Thank you.

THE HEARING OFFICER: Thank you.

Again, persons who would like to testify should register at the level below. We will hear testimony through 8:00 p.m. tonight. Thank you.

(Whereupon, there was a brief recess.)

THE HEARING OFFICER: We have had another individual who desires to testify. I will remind all of those testifying that you have three minutes. If others would like to testify, you can register at the level below this one. Daniel Cane Robertson, speaking from the St. Francis Neighborhood Center. Daniel Cane Robertson. Limit your statement to three minutes.

MR. ROBERTSON: Hello. My name is Daniel Cane Robertson. I am representing St. Francis Neighborhood Center. My address is [redacted] Baltimore. I will admit that I don't know all of the specifics about the situation, but one thing kind of stands out to me and that is that it will be a change of environment. My own

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

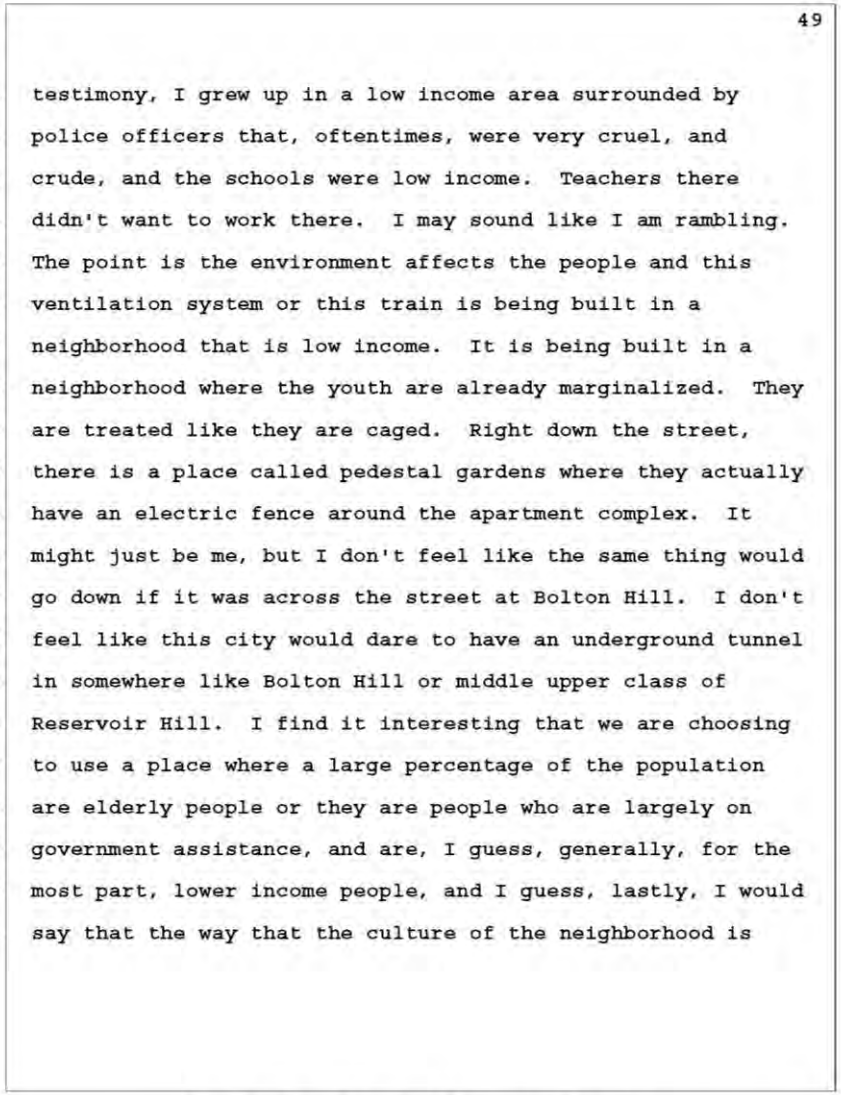
1

RESPONSES

Response to Comment 1:
Potential environmental impacts to the Study Area communities as a result of the Project are documented in **Chapter VI** of the FEIS. For all build alternatives, the majority of the Project would be constructed underground, and north portal construction (including north ventilation facilities) would take place within existing transportation land uses. Impacts would primarily occur due to the construction of the south portal and the Intermediate Ventilation Facility.

For Alternative 3A, community impact would occur due to the estimated displacement of nine businesses. For the Preferred Alternative, community impacts would be due to the estimated displacement of 22 residential buildings, 13 businesses, and four places of worship. For Alternative 3C, community impacts would be due to the estimated displacement of 12 residential buildings, 16 businesses, and 1 fire station. The Project Team is working with community groups and community members to determine the most effective mitigation measures. These efforts are ongoing and are found in **Chapter VII**.

COMMENTS



49

testimony, I grew up in a low income area surrounded by police officers that, oftentimes, were very cruel, and crude, and the schools were low income. Teachers there didn't want to work there. I may sound like I am rambling. The point is the environment affects the people and this ventilation system or this train is being built in a neighborhood that is low income. It is being built in a neighborhood where the youth are already marginalized. They are treated like they are caged. Right down the street, there is a place called pedestal gardens where they actually have an electric fence around the apartment complex. It might just be me, but I don't feel like the same thing would go down if it was across the street at Bolton Hill. I don't feel like this city would dare to have an underground tunnel in somewhere like Bolton Hill or middle upper class of Reservoir Hill. I find it interesting that we are choosing to use a place where a large percentage of the population are elderly people or they are people who are largely on government assistance, and are, I guess, generally, for the most part, lower income people, and I guess, lastly, I would say that the way that the culture of the neighborhood is

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

2

3

RESPONSES

Response to Comment 2:
Under Executive Order (12898), federal agencies are required to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The Department of Transportation's environmental justice initiatives accomplish this goal by involving the potentially affected public in developing transportation projects that fit harmoniously within their communities without sacrificing safety or mobility.

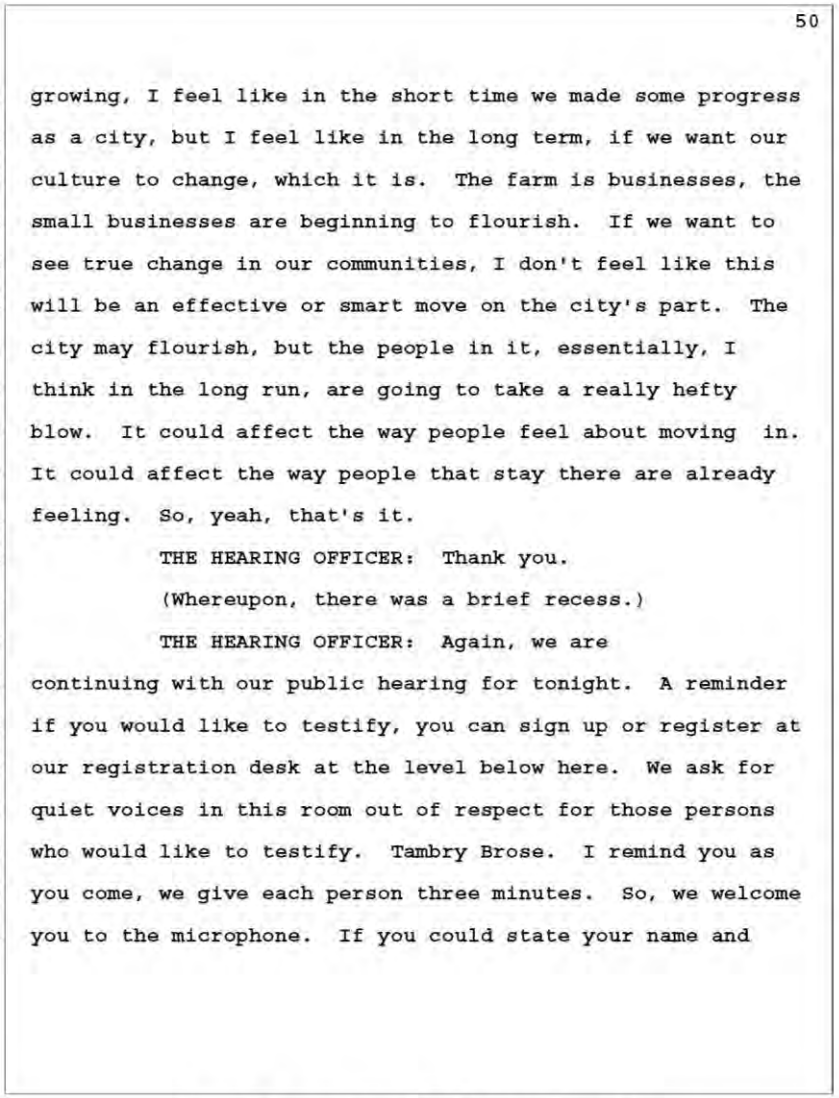
The B&P Project Team has performed an Environmental Justice (EJ) analysis consistent with EO 12898 and subsequent USDOT Orders. A critical component of the Executive Order on environmental justice is public outreach. The Project Team has conducted extensive engagement with the community throughout the development of the Project, as detailed in **Chapter VIII**. Meetings were held with local officials; public, local, and regional organizations; government agencies; and representatives of affected EJ communities along the evaluated alternative alignment. Three Public Open Houses, as well as ten community meetings, have been held where the public was given the opportunity to learn about the Project development in-person, ask questions, and engage in discussions with the Project Team. The Project Team also attended several local community association meetings with environmental justice populations to present information on the Project and respond to questions in smaller, neighborhood-focused settings. Additionally, the Project Team attended meetings at the request of the following organizations: Residents Against the Tunnel (RATT) on May 24, 2016 at the Beth AM Synagogue; No Boundaries Coalition on June 14, 2016 at St. Peter's Clavier Church; and Baltimore City Public Schools on June 16, 2016 at John Eager Howard Elementary School.

Direct mailings to residents in the Study Area included property owners within one-quarter mile of the build alternatives, as well as additional properties within the south portal area that could potentially be impacted by the Project. The Project website continues to post meeting notices, Project information, and avenues to comment. Publications including print advertisements, newsletters, and fliers have been distributed at transit hub locations, educational facilities, libraries, senior homes, shopping centers, laundromats, places of worship, and other organizations.

The Project Team studied community composition in the areas affected by the build alternatives. It reviewed data from the American Community Survey 2009-2013 for minority and low-income populations, the National Center for Educational Statistics, government-assisted housing programs, historical references, city officials, field visits, and community meetings. From this information, the Project Team learned that of the 77 Census Block Groups in the Study Area, 72 contain minority race and/or ethnicity populations of 50 percent or more. Thirty-six Census Block Groups contain 32 percent or higher low-income households. More information can be found in **Chapter V** of this FEIS.

Because the build alternatives are located almost entirely within EJ communities within the Study Area, the effects would be borne primarily by minority and low-income populations.

COMMENTS



50

growing, I feel like in the short time we made some progress as a city, but I feel like in the long term, if we want our culture to change, which it is. The farm is businesses, the small businesses are beginning to flourish. If we want to see true change in our communities, I don't feel like this will be an effective or smart move on the city's part. The city may flourish, but the people in it, essentially, I think in the long run, are going to take a really hefty blow. It could affect the way people feel about moving in. It could affect the way people that stay there are already feeling. So, yeah, that's it.

THE HEARING OFFICER: Thank you.

(Whereupon, there was a brief recess.)

THE HEARING OFFICER: Again, we are continuing with our public hearing for tonight. A reminder if you would like to testify, you can sign up or register at our registration desk at the level below here. We ask for quiet voices in this room out of respect for those persons who would like to testify. Tambry Brose. I remind you as you come, we give each person three minutes. So, we welcome you to the microphone. If you could state your name and

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

RESPONSES

For the Preferred Alternative, neighborhood and community facility impacts would primarily occur at the north portal within the Jones Falls area neighborhood, the south portal within the Midtown-Edmondson neighborhood, and the Intermediate Ventilation Facility location within the Reservoir Hill neighborhood. The Preferred Alternative would result in 22 residential and 6 commercial property displacements. Four places of worship in the Midtown-Edmondson neighborhood would be displaced. There would be high and adverse effects to EJ populations from noise, as well as medium and adverse effects to EJ populations from visual quality due to the placement of a ventilation facility. Alternative 3A would displace no residential buildings, and Alternative 3C would displace 12 residential buildings.

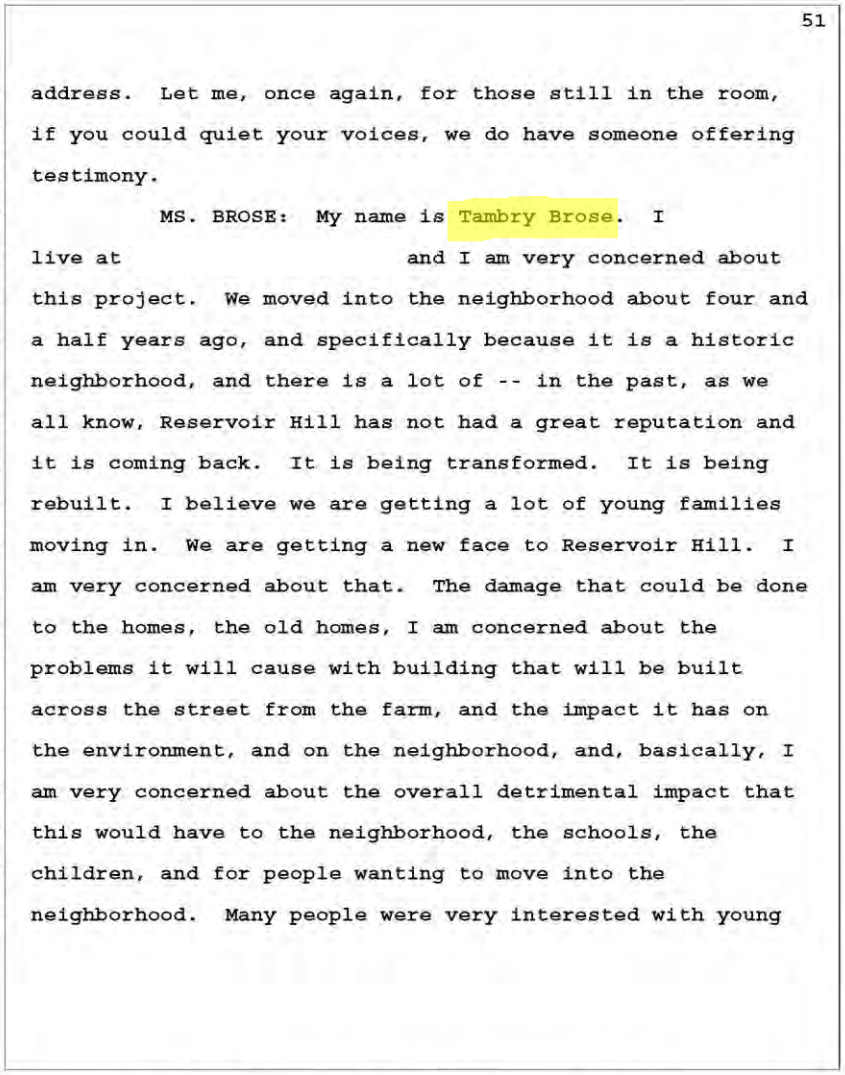
As the Project is advanced to the design phase and if funding is available, the Project sponsor would carry out mitigation measures and would continue to work with the community in order to minimize impacts. The vast majority of this Project will be underground which would reduce the overall impact to the communities. The Project sponsor will also establish a fund to support community development within affected communities, as well as a fund for maintenance of and improvement to publicly-owned parks and recreational facilities within ¼ mile of the Project alignment. The Project will coordinate with local job training organizations to facilitate targeted job training and include construction contract goals for workers of social and economic disadvantage. The Project sponsor will also provide relocation protections to property owners and tenants pursuant to the Uniform Relocation Act. For more information, please refer to **Chapter VII** of this FEIS.

Response to Comment 3:
The existing B&P Tunnel tracks are in Bolton Hill. Options as to where the new B&P Tunnel should reside are limited. Due to the geography and the shallowness of the area beneath Bolton Hill, this area was not a feasible option for the proposed Tunnel, whereas the area underneath Reservoir Hill is deeper and more practicable.

Response to Comment 4:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

COMMENTS

DEIS Comment 158:



51

address. Let me, once again, for those still in the room, if you could quiet your voices, we do have someone offering testimony.

MS. BROSE: My name is Tambry Brose. I live at and I am very concerned about this project. We moved into the neighborhood about four and a half years ago, and specifically because it is a historic neighborhood, and there is a lot of -- in the past, as we all know, Reservoir Hill has not had a great reputation and it is coming back. It is being transformed. It is being rebuilt. I believe we are getting a lot of young families moving in. We are getting a new face to Reservoir Hill. I am very concerned about that. The damage that could be done to the homes, the old homes, I am concerned about the problems it will cause with building that will be built across the street from the farm, and the impact it has on the environment, and on the neighborhood, and, basically, I am very concerned about the overall detrimental impact that this would have to the neighborhood, the schools, the children, and for people wanting to move into the neighborhood. Many people were very interested with young

1

2

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

Response to Comment 1:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 2:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

The economic and housing markets in Reservoir Hill are subject to many variables and externalities outside of the Project. This fact makes it virtually impossible to predict or measure the future economic impact of the Project on the Reservoir Hill community.

Response to Comment 3:
Children's Health was assessed for Air Quality, Water, Soil and Hazardous Material and is described in **Chapter VI** of this FEIS. The build alternatives would pose no health or safety risks that would disproportionately affect children. The build alternatives would have no significant effects on air quality, as the net change in emissions of NO_x, VOC, and $PM_{2.5}$ between 2040 No-Build and the 2040 Build scenario would be below *de minimis* levels (levels too low to measure or to have meaningful environmental or health impacts). In accordance with the General Conformity Thresholds, it is unlikely that emissions associated with the ventilation plants would cause, or substantially contribute to a violation of NAAQS, established by the USEPA. No sole source aquifers, active water supply reservoirs, or wells are located near the Project. The Project will have no impact to potable water.

COMMENTS

families moving into the neighborhood and this would extremely -- would give them reason for concern, and probably would not move to the neighborhood if this project goes forward. Thank you.

R: Thank you.

(Whereupon, there was a brief recess.)

THE HEARING OFFICER: Doctor John Azalea, if you could state your full name, and your address, and offer your testimony. Just remember, it should be focused on three minutes.

DR. AZALEA: Good evening. My name is Doctor John Azalea, I live at [redacted] Reservoir Hill. I am a relative newcomer to Baltimore City, but I am not a newcomer to common sense and critical thinking, and like many of you decision makers on this tunnel project, my ability to think critically and problem solve was acquired long before I went to school to obtain my degree in engineering. While I can understand the seemly unstoppable force of capitalism and the overwhelming pressure of the corporations and local governments to drive an overgrowing economy, I don't understand the logic behind the proposal

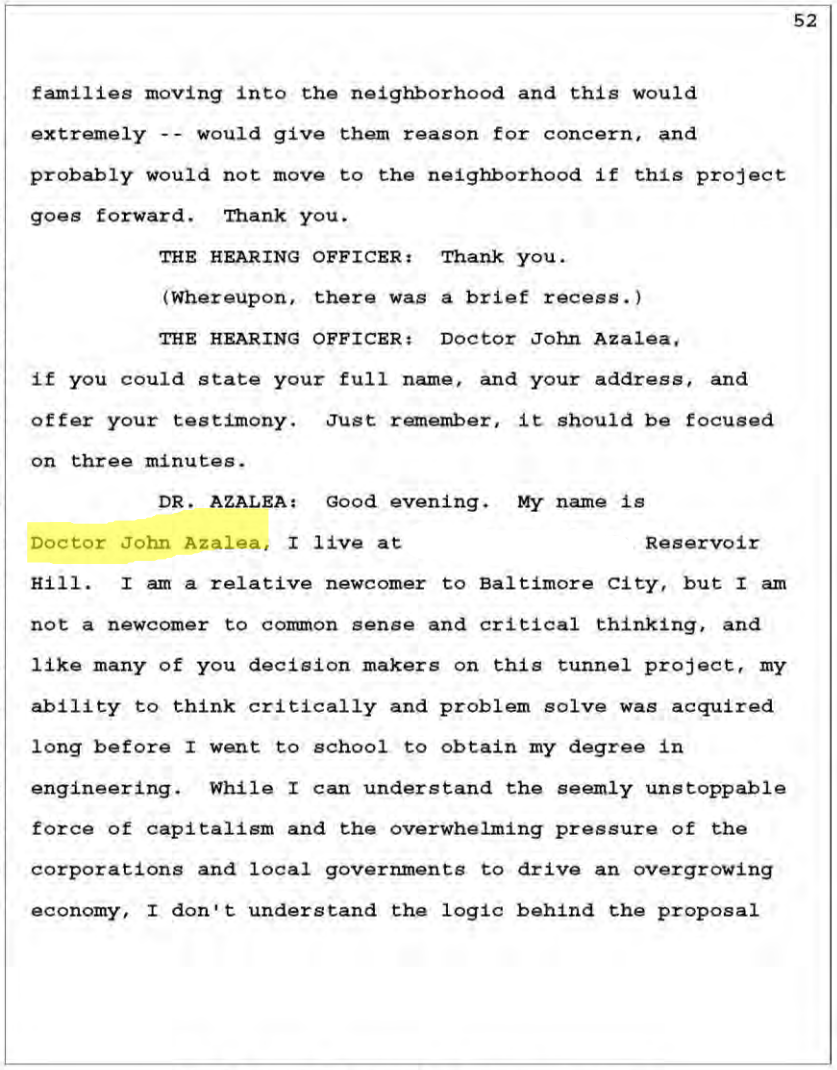
RESPONSES

Under the Preferred Alternative, 112 sites of concern were identified within 1 mile of the alignment; once type and extent of contamination and details of construction are known, potential risk and exposure can be assessed and appropriate documentation in place.

COMMENTS

RESPONSES

DEIS Comment 159:



52

families moving into the neighborhood and this would extremely -- would give them reason for concern, and probably would not move to the neighborhood if this project goes forward. Thank you.

THE HEARING OFFICER: Thank you.

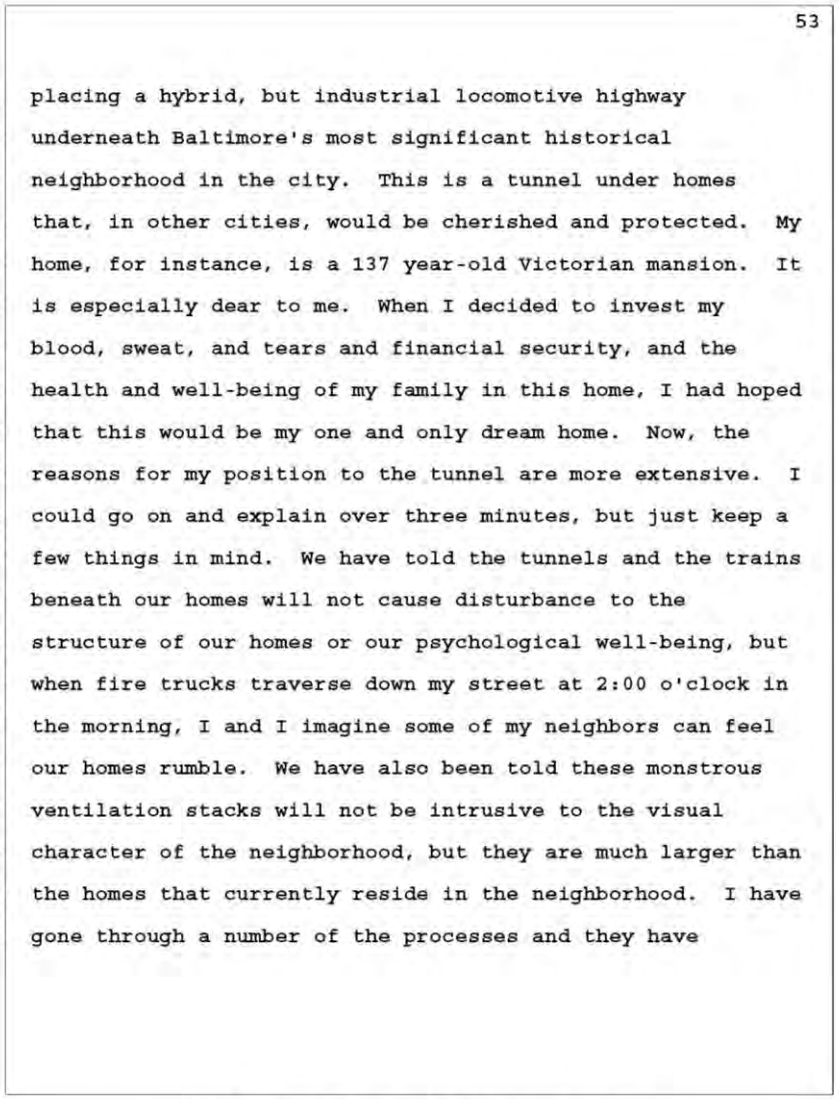
(Whereupon, there was a brief recess.)

THE HEARING OFFICER: Doctor John Azalea, if you could state your full name, and your address, and offer your testimony. Just remember, it should be focused on three minutes.

DR. AZALEA: Good evening. My name is Doctor John Azalea, I live at Reservoir Hill. I am a relative newcomer to Baltimore City, but I am not a newcomer to common sense and critical thinking, and like many of you decision makers on this tunnel project, my ability to think critically and problem solve was acquired long before I went to school to obtain my degree in engineering. While I can understand the seemly unstoppable force of capitalism and the overwhelming pressure of the corporations and local governments to drive an overgrowing economy, I don't understand the logic behind the proposal

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

COMMENTS



53

placing a hybrid, but industrial locomotive highway underneath Baltimore's most significant historical neighborhood in the city. This is a tunnel under homes that, in other cities, would be cherished and protected. My home, for instance, is a 137 year-old Victorian mansion. It is especially dear to me. When I decided to invest my blood, sweat, and tears and financial security, and the health and well-being of my family in this home, I had hoped that this would be my one and only dream home. Now, the reasons for my position to the tunnel are more extensive. I could go on and explain over three minutes, but just keep a few things in mind. We have told the tunnels and the trains beneath our homes will not cause disturbance to the structure of our homes or our psychological well-being, but when fire trucks traverse down my street at 2:00 o'clock in the morning, I and I imagine some of my neighbors can feel our homes rumble. We have also been told these monstrous ventilation stacks will not be intrusive to the visual character of the neighborhood, but they are much larger than the homes that currently reside in the neighborhood. I have gone through a number of the processes and they have

1

2

3

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

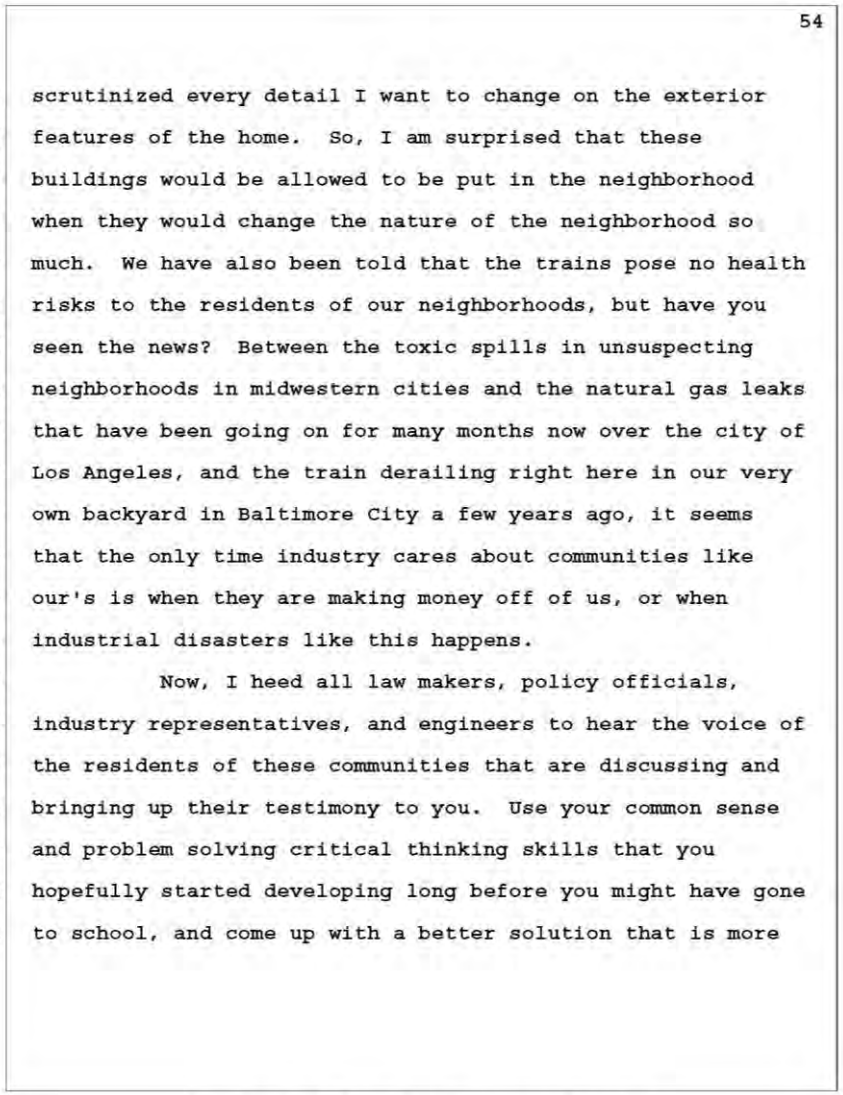
Response to Comment 1:
As described in this FEIS, the initial range of alternatives was identified based on previous studies and during the preliminary alternatives development phase of the Project. A total of 16 preliminary alternatives were identified, including Alternative 1: No-Build, Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, and 14 new location alternatives. The 14 new location alternatives included five alternatives based on previous studies (Alternatives 3 through 7), and nine additional alternatives identified by this Project (Alternatives 8 through 16). The preliminary alternatives screening process was applied to all of the 16 preliminary alternatives with the exception of Alternative 1: No-Build and Alternative 2: Restore/Rehabilitate Existing B&P Tunnel, in accordance with Council on Environmental Quality regulations (40 CFR Part 1502.14(d)).

Alternatives 3 through 16 were first screened for fatal flaws that clearly rendered the alternative not feasible or unreasonable. An alternative was considered to have a fatal flaw if it did not meet the Project's Purpose and Need, did not utilize existing infrastructure at Baltimore Penn Station and the Gwynns Falls Bridge, or would result in an unacceptable engineering issue that could not be reasonably avoided or solved during the early stages of alternatives development. Alternative 5: Route 40, along with Alternatives 6, 7, 14, 15, and 16 were all found to have a fatal flaw. **Chapter III** of the FEIS details the basis of elimination or retention for each alternative.

Since the publication of the DEIS, Alternative 3B was selected as the Preferred Alternative. Alternative 3B was advanced through a comprehensive alternatives development and evaluation process that incorporated input from the public as well as federal, state and local government agencies. These changes resulted in sizeable reductions in impacts, particularly to residences and historic resources. **Chapter III** in this FEIS provides a comparison of the Preferred Alternative to the other alternatives carried forward based on engineering and environmental evaluation criteria. Further justification for the selection of Alternative 3B as the Preferred Alternative is described in **Chapter IV** of this FEIS.

The build alternatives would impact the Midtown-Edmondson Historic District. Construction of the Preferred Alternative would require demolition of nine historic properties, located in the Midtown-Edmondson neighborhood. The build alternatives would also impact the Reservoir Hill Historic District as a result of the Intermediate Ventilation Facility. The Intermediate Ventilation Facility would be constructed along 900-940 West North Avenue (including 1000 Linden Avenue), which would constitute a Section 4(f) use resulting from demolition of a contributing resource. Further analysis of historic properties is found in **Chapter VI** of this FEIS. Potential mitigation strategies include historic property documentation, establishment of a historic properties preservation fund, and interpretive signage. More information on potential Section 4(f) mitigation measures are available in **Chapter VI and Chapter VII**.

COMMENTS



54

scrutinized every detail I want to change on the exterior features of the home. So, I am surprised that these buildings would be allowed to be put in the neighborhood when they would change the nature of the neighborhood so much. We have also been told that the trains pose no health risks to the residents of our neighborhoods, but have you seen the news? Between the toxic spills in unsuspecting neighborhoods in midwestern cities and the natural gas leaks that have been going on for many months now over the city of Los Angeles, and the train derailing right here in our very own backyard in Baltimore City a few years ago, it seems that the only time industry cares about communities like our's is when they are making money off of us, or when industrial disasters like this happens.

Now, I heed all law makers, policy officials, industry representatives, and engineers to hear the voice of the residents of these communities that are discussing and bringing up their testimony to you. Use your common sense and problem solving critical thinking skills that you hopefully started developing long before you might have gone to school, and come up with a better solution that is more

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

4

5

RESPONSES

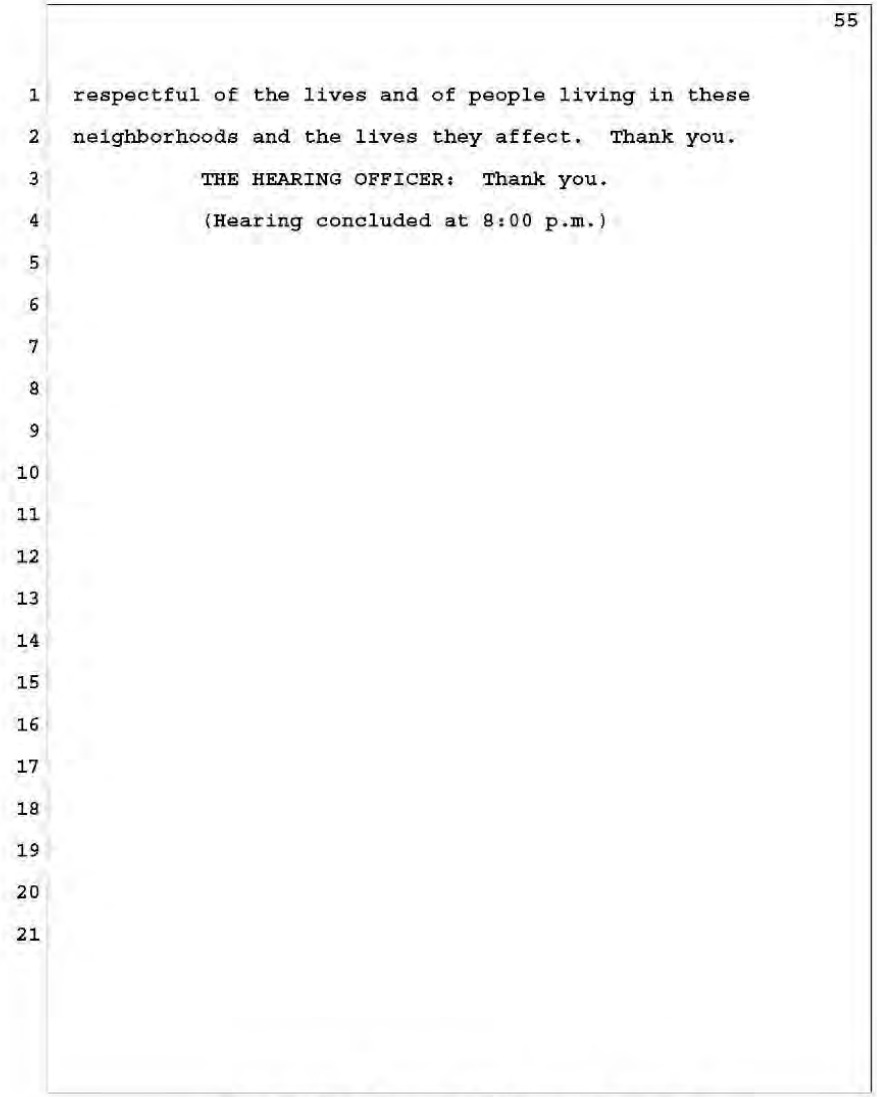
Response to Comment 2:
The Project Team has studied potential impacts to the housing stock in the Study Area and determined that the estimated vibration is not sufficient to damage fragile houses, including those constructed on rubble foundations. A pre-construction survey is proposed at select buildings in the Study Area which will be documented in written reports and photographs. These buildings would be selected based on a number of factors, which include sites where vibration or ground-borne noise impacts are predicted, or sites identified by the community as hyper-sensitive or otherwise of interest. If a property owner believes structural damage has occurred as a result of vibration during construction, he or she would be able to file a claim and the property would be compared to its pre-construction condition. If the structural damage is determined to have been caused by the Project construction activities rather than other factors (such as normal deterioration due to old age), the property owner would be compensated for the cost of repairs.

Response to Comment 3:
The preferred location of the Intermediate Ventilation Facility is 900-940 West North Avenue (including 1000 Linden Avenue), and not the Whitelock Street or Brookfield Avenue sites. The Project Team considered additional locations beyond the Whitelock Street and Brookfield Avenue sites based on community input and the need to reduce environmental impacts. The North Avenue site is more commercial in nature than the Whitelock Street site, and a ventilation facility would blend better with the land use in that corridor. The ventilation facility would be designed to fit into the aesthetic context of the surrounding area. Ventilation facility construction has the potential to affect community character with noise impacts and displacement of residences and community facilities, as described in **Chapter VI**. Mitigation efforts are ongoing with community groups and individual community members to identify potential mitigation measures, which are documented in this FEIS in **Chapter VII**.

Response to Comment 4:
No impacts to public health are anticipated from construction of the build alternatives. The build alternatives would conform to federal and state air quality standards and if a public health and safety concern is identified during hazardous materials investigations, provisions within the investigation Health and Safety Plan will be implemented and regulatory authorities notified to appropriately mitigate the hazardous material concerns.

Response to Comment 5:
The Project Team has engaged in extensive public outreach throughout the development of the project, including holding three public open houses and ten community meetings where the public was given the opportunity to learn about the project and engage in discussion with the Project Team. In addition to these meetings, the Project Team is working with community groups and individual community members to determine the most effective mitigation measures to address issues concerning community impact, noise

COMMENTS



55

respectful of the lives and of people living in these neighborhoods and the lives they affect. Thank you.

THE HEARING OFFICER: Thank you.

(Hearing concluded at 8:00 p.m.)

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com

RESPONSES

and vibration impacts, and community health (among others) as described in **Chapter VI**. The Project Team has met with community members on two occasions: May 10 and May 31, 2016, to discuss project mitigation as described in **Chapter VII**. These efforts are ongoing and are documented in this FEIS. Additional details of this outreach are described in **Chapter VI** as well as **Chapter VIII.**

COMMENTS | **RESPONSES**

State of Maryland:
County of Baltimore, to wit:

I, Susan Kambouris, a Notary Public of the State of Maryland, County of Baltimore, do hereby certify that the within-named witness personally appeared before me at the time and place herein set out, and was examined by counsel.

I further certify that the examination was recorded stenographically by me and this transcript is a true record of the proceedings.

I further certify that I am not of counsel to any of the parties, nor in any way interested in the outcome of this action.

As witness my hand this 29th day of February, 2016.

Susan A. Kambouris

SUSAN A. KAMBOURIS
Notary Public

My Commission Expires:
May 17, 2017

Gore Brothers Reporting & Videoconferencing
410 837 3027 - Worldwide - www.gorebrothers.com