



**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]*

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**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:



## Project Purpose and Need

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 based on the following needs:

- The existing B&P Tunnel is approaching the end of its useful life in regard to its general physical condition;
- The existing B&P Tunnel does not provide enough capacity to support existing and projected demands for regional and commuter **passenger service** along the NEC;
- The existing B&P Tunnel is not suited for modern high-speed usage due to the current horizontal and vertical track alignment, which limits **passenger train speeds** through the tunnel to 30 mph; and
- The existing B&P Tunnel is a valuable resource. The disposition of the existing tunnel needs to be considered in the Project.



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.

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### 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. ...

• 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,

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](http://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

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

More than two-thirds of Northeast counties with rail service experienced population growth 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

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.]

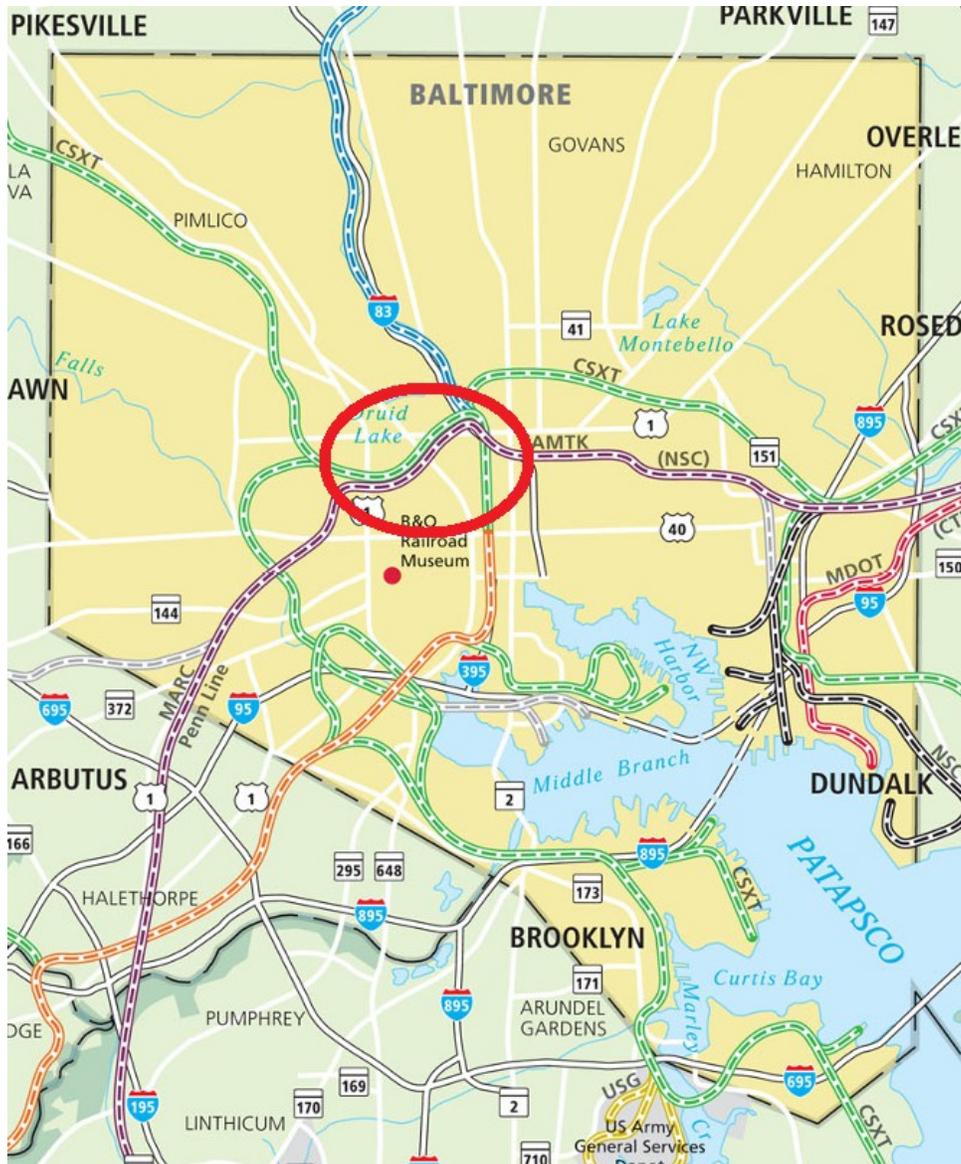
Based on all of the above, there can be little dispute about the need to replace the current B&P Tunnel in Baltimore, which is 143 years old.

## 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:



[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.

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.

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

Types of Service	Number of Trains (2014)		Number of Passengers (2014)	
	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
<u>NS Freight</u>	2	0	N/A	N/A
TOTAL	145	35	21,600	5,300

Source: (Amtrak, December 2012 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

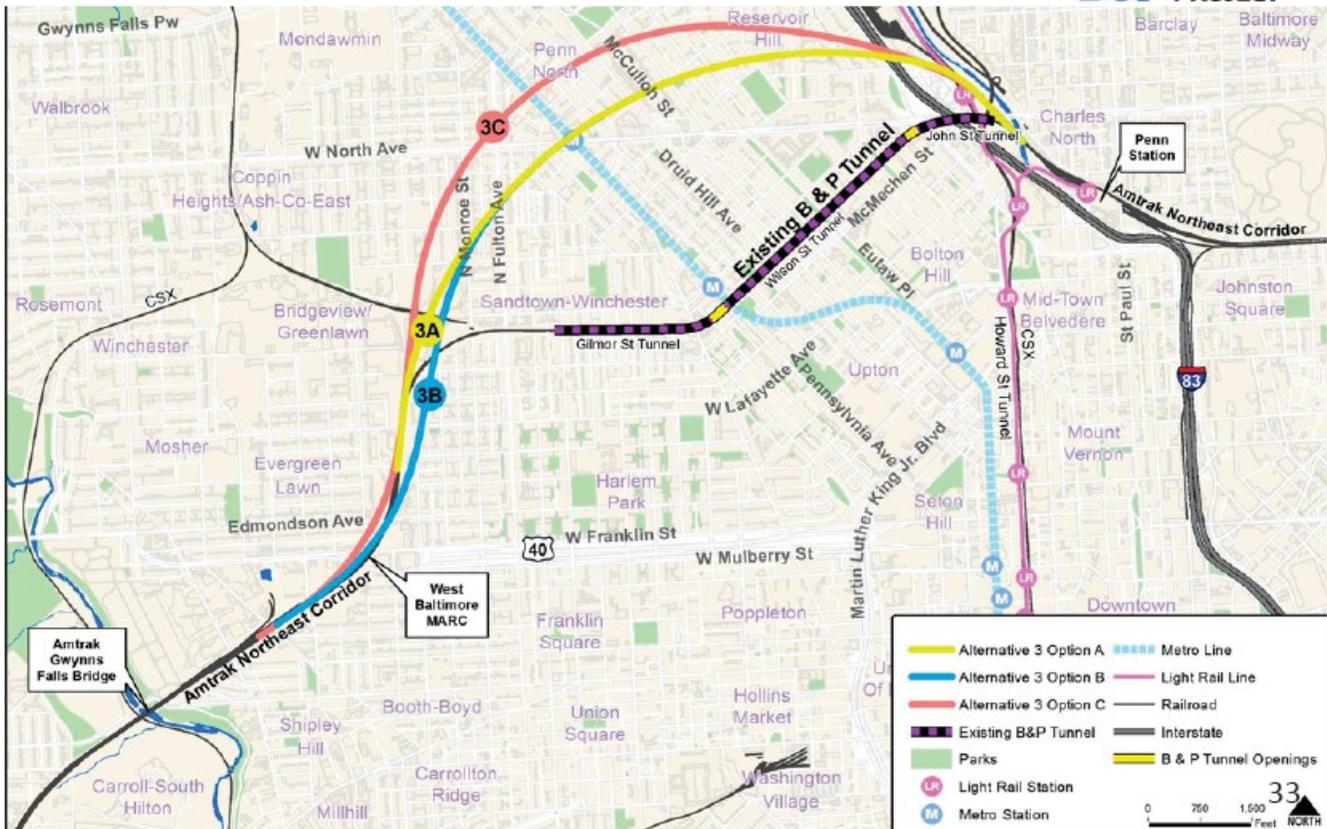
constraints, all rail freight movements between the northeast and southwest parts of the Port of Baltimore are difficult and costly to accomplish. **Due to clearance limitations in the B&P Tunnel, NS cannot route many types of shipments to the southwest part of the Port and CSX cannot route many shipments 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:

# ALTERNATIVES RETAINED



[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

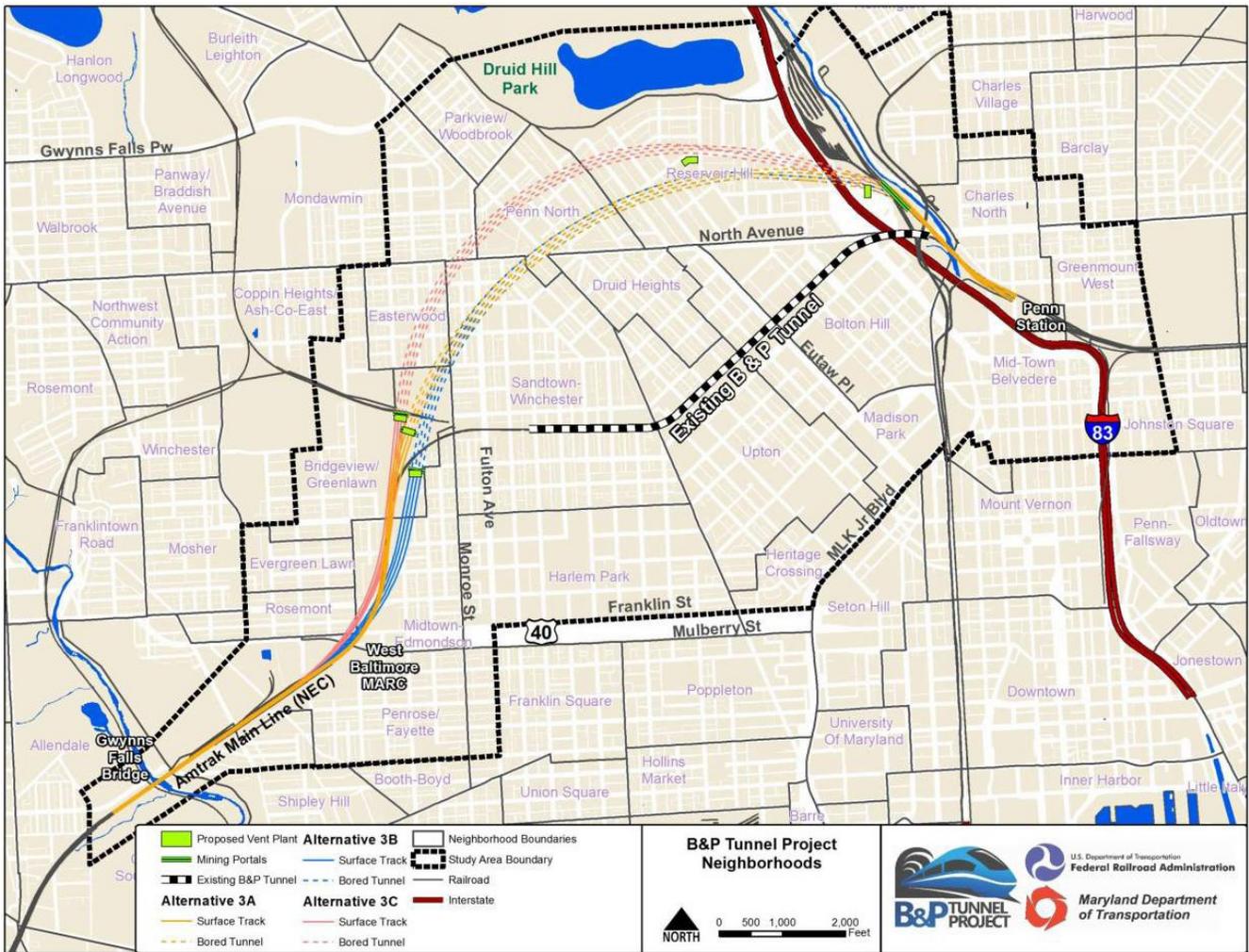
Circle Passenger Tunnel (GCPT) broached earlier.”

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.



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

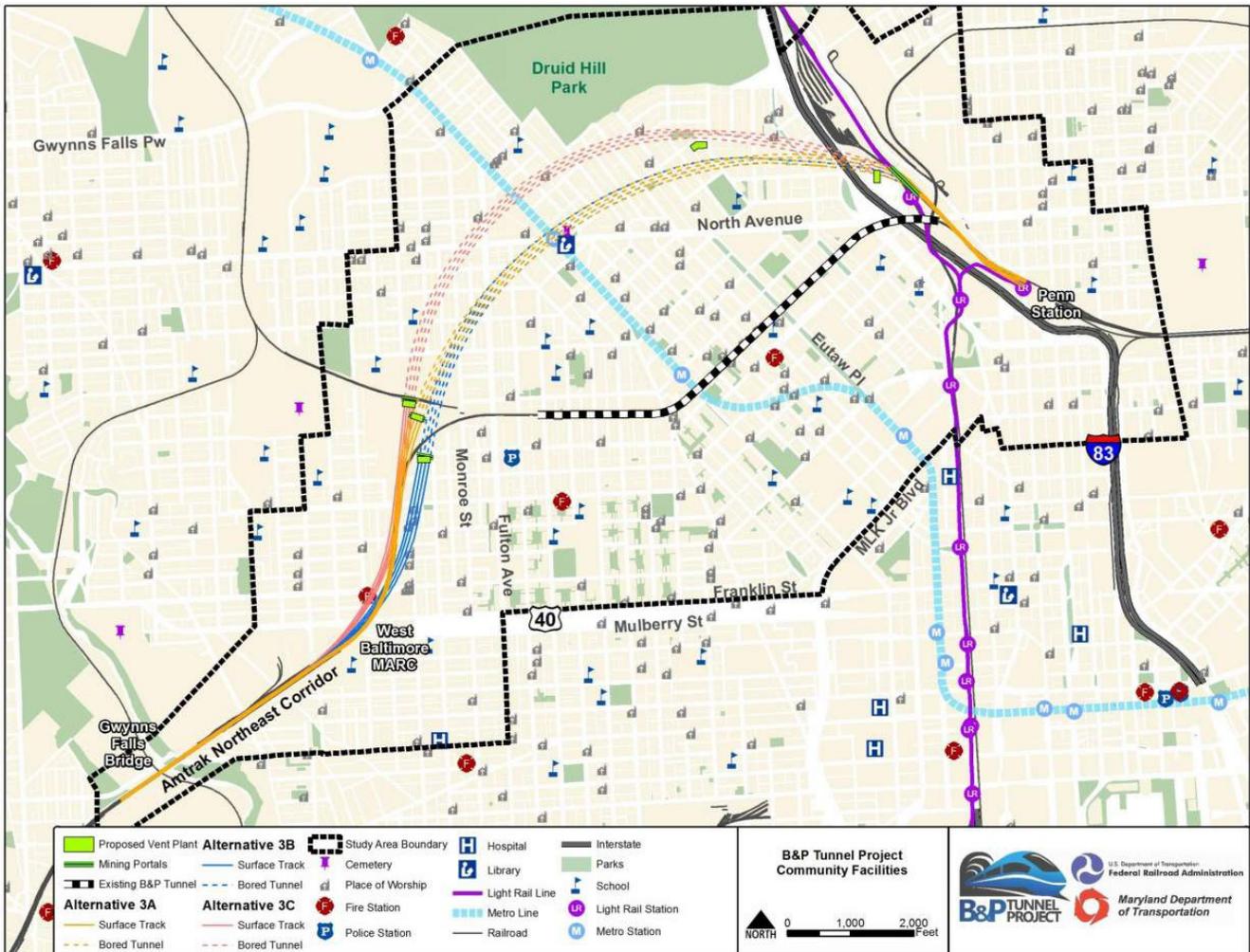
Public Recreation Centers - 6

Public Pools - 3

City Park and Reservoir - 1

Major Passenger Railroad Station - 1

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.

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]:

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
<u>Freight</u>	Diesel	2	0	1	30	30/30
<b>Total</b>	<b>All</b>	<b>194</b>	<b>14</b>			

\*Note: Average train speed entering and exiting the North Portal (N) and South Portal (S).  
 Source: Federal Railroad Administration NEC FUTURE Project, Tier I EIS 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
<u>Freight</u>	Diesel	2	0	1	30	30/70
<b>Total</b>	<b>All</b>	<b>388</b>	<b>35</b>			

\*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 is 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.]

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,

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.

... 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/](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

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 CSX<sub>1</sub> 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

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<sup>17</sup> 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.]

<sup>17</sup> 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.

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
<b><u>CSX</u></b>																
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
<b><u>NORFOLK SOUTHERN</u></b>																
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

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

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](https://en.wikipedia.org/wiki/Lac-M%C3%A9gantic_rail_disaster) ]

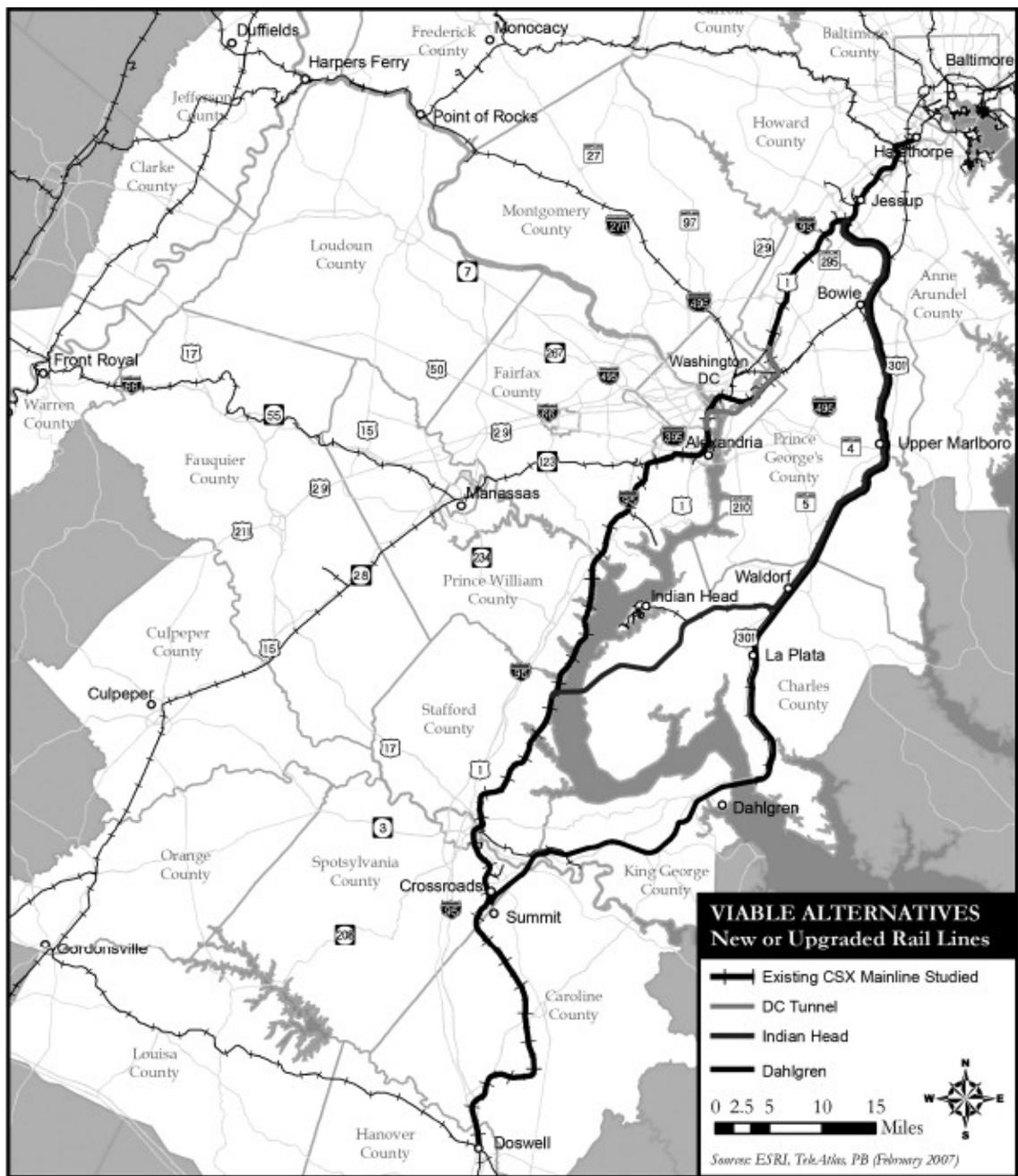
So, here in Baltimore City, Maryland, there is growing public concern and sensitivity about the hazard and risks attendant from freight rail transportation of crude oil and other hazardous cargoes.

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.



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

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.

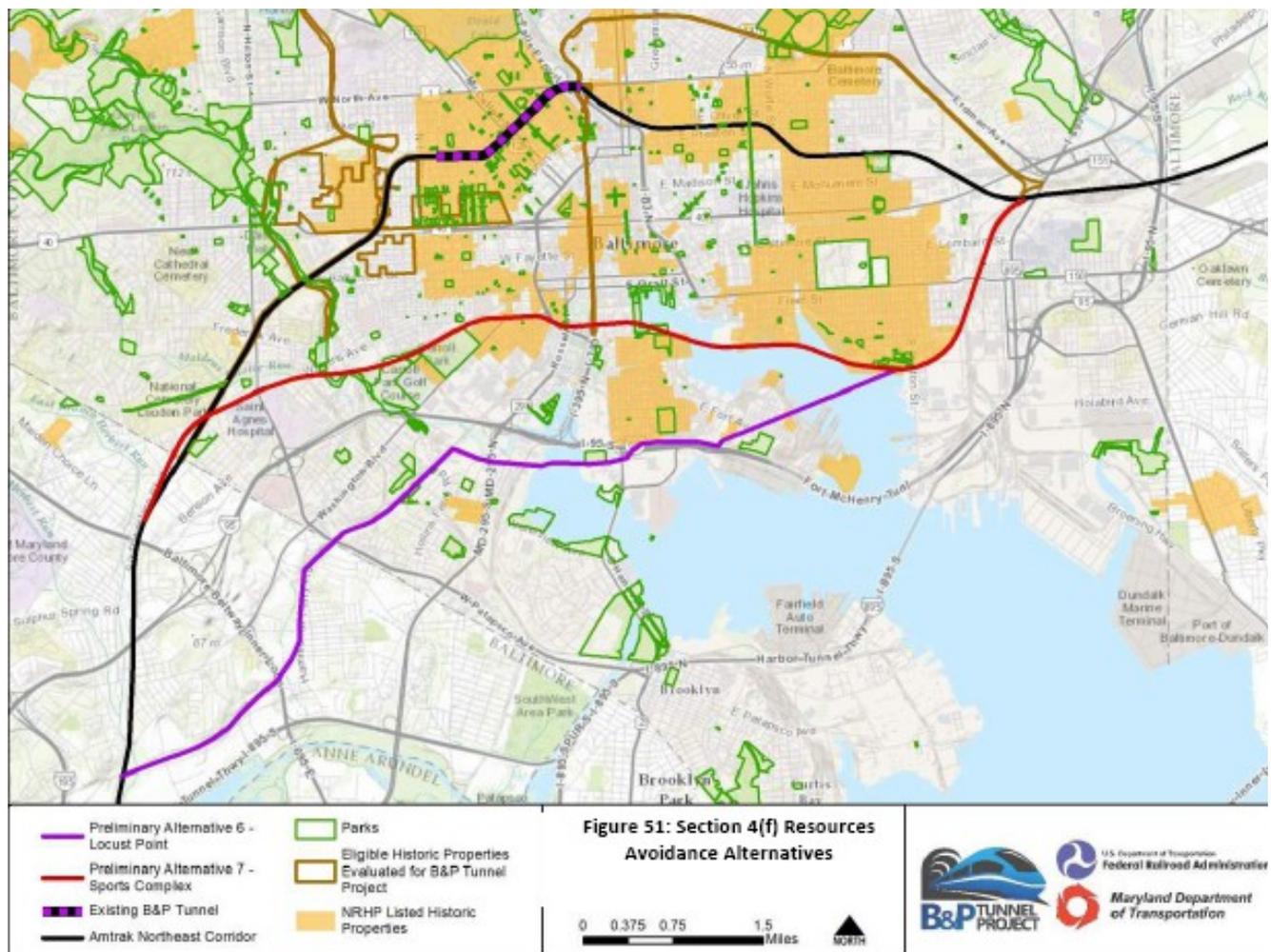
However, that same possibility should be clearly and permanently eliminated for freight trains carrying any kind of cargo. Even if freight trains were permitted only to carry non-hazardous cargo through the new B&P tunnels, under competitive market conditions, the temptation would be too great to also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

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

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.]

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!**

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