

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 1



National Gateway

[Background](#)
[Benefits](#)
[Projects](#)
[Support the Effort](#)
[News & Resources](#)

CSX Announces National Gateway to Improve Flow of Freight

Program Launched at Ohio Offices of Pacer International, a CSX Customer
Dublin, Ohio - May 1, 2008 - CSX Corporation today launched the National Gateway, a \$700 million public-private infrastructure initiative to create a highly efficient freight transportation link between the Mid-Atlantic ports and the Midwest.

When completed, the National Gateway would provide greater capacity for product shipments in and out of the Midwest, reduce truck traffic on already crowded highways, and create thousands of jobs that directly or indirectly support the National Gateway.

CSX has already committed \$300 million to the National Gateway, and will work with several states and the federal government to secure additional funding.

The National Gateway incorporates two primary parts. First, CSX would build or expand several high-capacity, job-producing intermodal terminals where product shipments are exchanged between trucks and trains. At the same time, CSX would work together with state and federal government agencies to create double-stack clearances beneath public overpasses along the railroad. Double-stack clearances allow rail carriers to stack intermodal containers atop each other, enabling each train to carry about twice as many cargo boxes. Currently many overpasses only accommodate single-stack trains.

"More and more, the nation is becoming aware of the tremendous safety, economic and environmental benefits that railroads create. Our trains can move a ton of freight 423 miles on a single gallon of fuel, and one train can carry the load of more than 280 trucks," said Michael J. Ward, chairman, president and chief executive officer of CSX. "The National Gateway leverages those benefits to the fullest by combining the resources and expertise of the public and private sectors."

The National Gateway was launched at the offices of Pacer International, a CSX customer, in Dublin, Ohio with Governor Ted Strickland. The governor has pledged to work with state and federal officials to support the initiative, which calls for two new intermodal terminals in Wood County and Columbus at a cost of \$130 million to CSX. The terminals will ultimately spur the development of related businesses and thousands of jobs to support them.

"In Ohio, this initiative helps solidify our state's position as a transportation gateway for the country," said the Governor. "This is a major competitive advantage that can greatly benefit the citizens of Ohio, and the state of Ohio is committed to doing its part to help build this sort of needed infrastructure. In doing so, we'll also be setting an example for other states around the nation."

"We are delighted that CSX and Governor Strickland are taking these important steps to ensure the future viability of our transportation system," said Michael E. Uremovich, Chairman and CEO, Pacer International.

The National Gateway will enhance three existing rail corridors that run through Maryland, Virginia, North Carolina, Pennsylvania, Ohio and West Virginia. Those corridors include:

The I-70/I-76 Corridor between Washington, D.C. and northwest Ohio via Pittsburgh;
The I-95 Corridor between North Carolina and Baltimore via Washington, D.C.; and
The Carolina Corridor between Wilmington and Charlotte, North Carolina.

The U.S. Department of Transportation forecasts that by 2020, overall freight tonnage hauled in the United States will have grown by 70% from 1998 levels. The National Gateway infrastructure initiative is designed to address the ever-increasing demands placed on the nation's capacity strained freight network.

A study of the National Gateway project by Cambridge Systematics, a nationally recognized transportation research firm

Fast Facts

The National Gateway will create more than 50,000 jobs overall, and 10,000 jobs during construction.

Featured Project

[Northwest Ohio Terminal Facility](#)

[\(/projects/project/69\)](/projects/project/69)
North Baltimore, Ohio

Construct Terminal

[View all projects >> \(/projects\)](/projects)

Contact the National Gateway

[Comment on projects](#)

[\(/questions-comments\)](/questions-comments)

[Sign a letter of support](#)

[\(/support/contact-officials\)](/support/contact-officials)

Get Updates

based in Cambridge, MA found that every \$1 of public money invested in rail infrastructure improvements will lead to \$1.50 in public benefits. The study noted that by improving the flow of freight and shifting freight transportation from the highway to the railway, the initiative will improve safety, relieve congestion, benefit the environment and reduce highway maintenance costs. For more information, visit www.nationalgateway.org (<http://www.nationalgateway.org>).

CSX Corporation, based in Jacksonville, Fla., is a leading transportation company providing rail, intermodal and rail-to-truck transload services. The company's transportation network spans approximately 21,000 miles with service to 23 eastern states and the District of Columbia, and connects to more than 70 ocean, river and lake ports. More information about CSX Corporation and its subsidiaries is available at the company's web site, www.csx.com. (<http://nationalgateway.org/content/resources/www.csx.com>)

ABOUT PACER INTERNATIONAL (www.pacer-international.com) Pacer International, a leading asset-light North American third-party logistics and freight transportation provider, through its intermodal and logistics operating segments, offers a broad array of services to facilitate the movement of freight from origin to destination. The intermodal segment offers wholesale services provided by Pacer Stacktrain (cost-efficient, two-tiered rail transportation for containerized shipments) and Pacer Cartage (local trucking), as well as retail services through its Rail Brokerage group (intermodal marketing). The logistics segment provides retail truck brokerage, trucking, warehousing and distribution, international freight forwarding, and supply-chain management services. Pacer International is headquartered in Concord, California. Its intermodal and logistics operating segments are headquartered in Concord, California, and in Dublin, Ohio, respectively.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 2

Chapter 1

Introduction

Chapter 1 Introduction

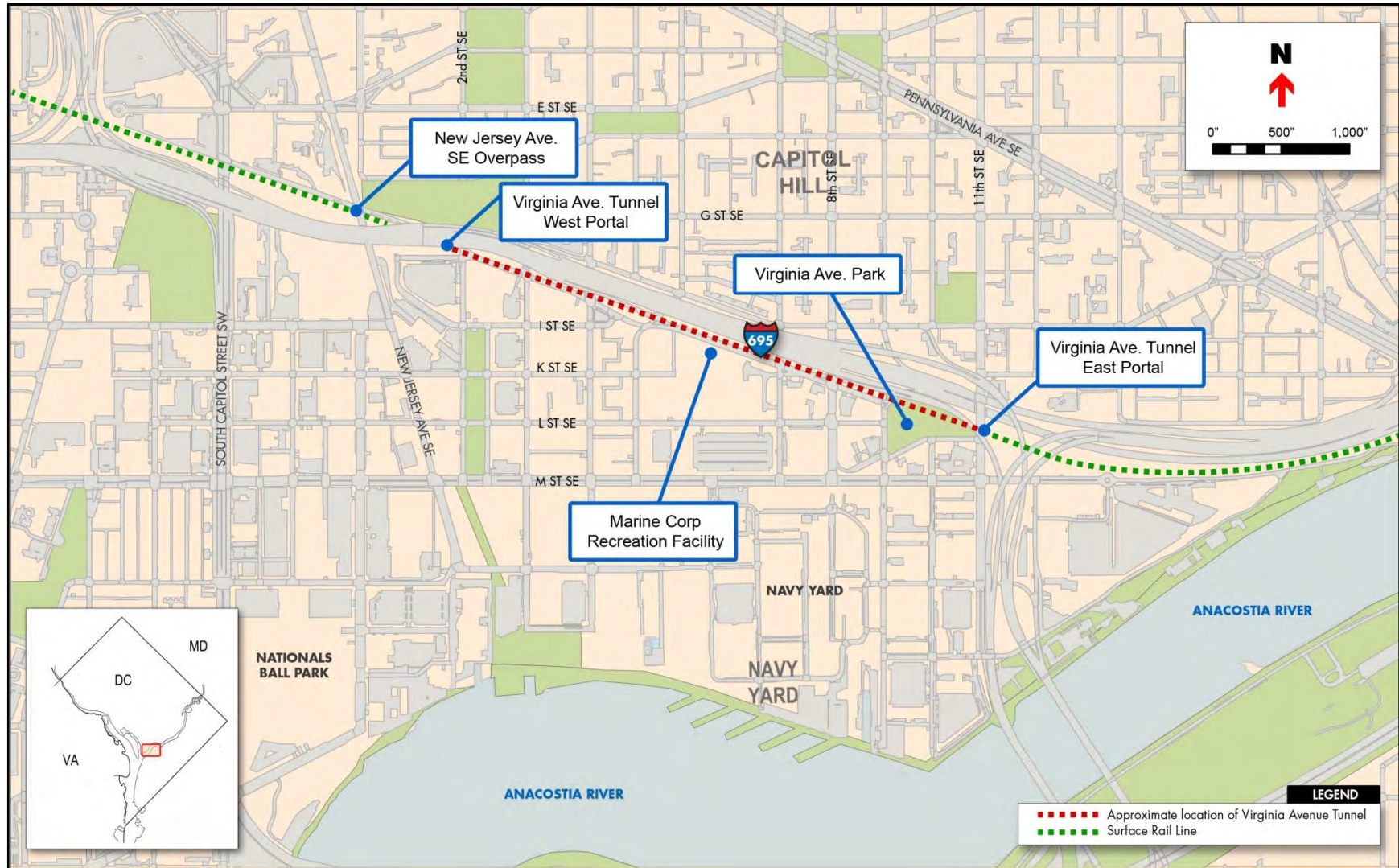
The Federal Highway Administration (FHWA) in conjunction with the District of Columbia Department of Transportation (DDOT) is issuing this Final Environmental Impact Statement (Final EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed reconstruction of the Virginia Avenue Tunnel (the Project). This Final EIS also contains a Final Section 4(f) Evaluation in accordance with the U.S. Department of Transportation Act of 1966. FHWA is the lead federal agency in the development of the EIS. DDOT is the local lead agency. The Federal Railroad Administration (FRA), the National Park Service (NPS), the National Capital Planning Commission (NCPC) and the U.S. Marine Corps are cooperating agencies for the EIS. CSX Transportation, Inc. (CSX), the owner of Virginia Avenue Tunnel, is the project sponsor. The tunnel is located in the Capitol Hill neighborhood of the District of Columbia (DC or District) beneath eastbound Virginia Avenue SE from 2nd Street SE to 9th Street SE; Virginia Avenue Park between 9th and 11th Streets; and the 11th Street Bridge right-of-way (Figure 1-1). The tunnel is also aligned on the south side of Interstate 695 (I-695) previously known as Interstate 295 (I-295). The tunnel portals are located a short distance west of 2nd Street SE and a short distance east of 11th Street SE. The tunnel and rail lines running through the District are part of CSX's eastern seaboard freight rail corridor, which connects Mid-Atlantic and Midwest states.

The reconstruction of the tunnel will require the short-term (approximately a week or less) closure of I-695 ramps and use of Interstate Highway air rights. They require FHWA approval and both are federal actions. CSX is also seeking approval from DDOT for the temporary I-695 ramp closures, interstate highway air rights and for the occupancy, construction and traffic detours on Virginia Avenue SE and adjacent streets in the project area. DDOT has issued an occupancy permit relative to Virginia Avenue SE and adjacent streets, which is contingent on the selection of a build alternative, also known as the Preferred Alternative. The permit will have no force or effect until a build alternative is approved via a Record of Decision. The reconstruction of the tunnel will require temporary closure of Virginia Avenue SE between 2nd and 9th Streets SE, as well as other interim effects on several adjacent city streets during construction. The Project will also require sub surface use of a small portion of land in the U.S. Marine Corps recreational facility located between 5th and 7th St, SE on Virginia Avenue SE.

The tunnel is approximately 3,800 feet long and is an integral part of CSX's regional freight rail network that encompasses approximately 21,000 miles of railroad track in the District, 23 states and the Canadian provinces of Ontario and Quebec. Specifically, the tunnel is located along CSX's eastern seaboard freight rail corridor, which stretches from the southeast through the Mid-Atlantic and connecting to the Midwest, thereby making it a key link in the nation's network of major freight rail lines.

If the Virginia Avenue Tunnel were not replaced or reconstructed, it will continue to require increasingly higher levels of investment for maintenance and repair, resulting in more frequent

Figure 1-1
Location of the Existing Virginia Avenue Tunnel



service interruptions and higher risks for localized disturbances. In addition, the tunnel has notable operational deficiencies. Specifically, the tunnel has just a single railroad track, which limits the flow of freight train traffic. Virginia Avenue Tunnel was identified as a bottleneck on the east coast (District of Columbia Freight Forum, Volume 1, Issue 1 [January 2012]). Furthermore, the tunnel does not have sufficient vertical clearance to accommodate rail cars that are loaded with two intermodal containers set one on top of the other, which is called “double-stacking”.

The Project will transform the tunnel to a two-track configuration and provide the necessary vertical clearance to allow double-stack intermodal container freight train operations. Reconstruction of the tunnel will allow more efficient freight movement and reduce truck traffic (Freight Forum, January 2012). Because of its inherent efficiencies, freight rail intermodal transportation— transporting goods and equipment in shipping containers and placing them on railroad cars —is the fastest-growing major segment of the U.S. freight rail transportation industry according to the Association of American Railroads. Intermodal transportation is used for a wide variety of perishable and durable consumer goods, and is also used for agricultural and industrial products, such as grain and automobile parts. Reconstructing the tunnel to allow double-stacking will also involve lowering the grade below the rail line’s New Jersey Avenue SE Overpass (see Figure 1-1).

If the Project were completed, freight rail transportation through the District will improve substantially, meeting not only the commerce needs of the Washington Metropolitan Area, but also regional and national needs for efficient freight conveyance throughout the Eastern portion of the nation.

1.1 History

Virginia Avenue Tunnel was constructed in two phases between 1872 and 1904. The Baltimore and Potomac Railroad Company (a predecessor of CSX) built the first phase of the tunnel pursuant to authority granted by an 1869 Act of Congress authorizing the railroad company to enter the District and lay tracks along a route that began at the Potomac River between L and M streets SE and then continued “westwardly. . . to the intersection of Virginia Avenue with South L and East Twelfth streets; thence along said Virginia Avenue northwestwardly to South K Street; thence along said South K Street westwardly to South Fourth Street; thence along the said bank of the canal westwardly to the intersection of South C and West Ninth streets.” (16 Stat. at 3, March 18, 1869).

In 1901, Congress directed the removal of the railroad from K Street SE and had them placed in an underground tunnel (rather than on streets) in order to facilitate access between Capitol Hill and the waterfront by allowing north-south streets to run over the tracks, passed 31 Stat 767 (Feb. 12, 1901) entitled, “An Act to provide for eliminating certain grade crossings on the line of the Baltimore and Potomac Railroad Company, . . . and requiring said company to depress and elevate its tracks and to enable it to relocate parts of its railroad therein, and for other

purposes.” Based on this 1901 Act, the Baltimore and Potomac Railroad Company completed the second phase of tunnel in 1904.

Both phases used “cut-and-cover” construction to build the tunnel, which involved digging down to a depth of about 30 feet (see photograph), building the tunnel walls and roof, and covering the completed tunnel with fill material as top cover. The first phase consisted of the portion of the tunnel from 11th Street SE to a location between 7th and 8th Streets SE. The second phase of construction

Virginia Avenue Tunnel Construction



extended the location of the tunnel’s west portal by an additional half-mile to 2nd Street SE. When originally completed in 1904, the tunnel contained two sets of tracks. However, due to modernization of train equipment throughout the 20th Century, the approximately 28 feet of interior horizontal clearance within the tunnel forced the conversion to a single railroad track several decades ago. The rail lines immediately on the east and west ends of the tunnel still contain two tracks.

In 1985, a 350-foot section of the tunnel crown collapsed causing a rotational movement of over 600 feet of the tunnel’s wall. The tunnel was shut down for several months so that emergency repairs could be made, which disrupted freight rail operations as well as street level traffic conditions. A 150-foot section of tunnel roof was repaired between 4th and 5th Streets SE, and an additional 300 feet of tunnel was strengthened because it exhibited signs of movement caused by external forces. These repairs involved reinforcement of the sidewalls and replacement of the original brick arch with a new flat roof.

1.2 Background

Today Virginia Avenue Tunnel lies generally beneath eastbound Virginia Avenue SE (except where it is under Virginia Avenue Park and the 11th Street Bridges right-of-way), extending from

just west of 2nd Street SE (west portal) and just east of 11th Street SE (east portal) (see Figure 1-1). The approximately 3,800-foot long tunnel, as well as other CSX rail lines within the District, Virginia and Maryland, is part of CSX's primary mainline freight rail route for freight traffic along the eastern seaboard and Midwest.

As shown in Figure 1-2, Washington, DC is located on the route between east coast ports, such as Norfolk, VA, Charleston, SC, and Savannah, GA, and markets in West Virginia, Pennsylvania, Ohio, Indiana and Illinois. A large percentage of freight carried through this network consists of intermodal containers (goods carried in containers that could also be transported by ship and truck without handling the contents within the containers). However, other types of freight traffic traverse through the Washington, DC and Virginia Avenue Tunnel, such as merchandise, coal and equipment trains.

The CSX rail network through the District as shown on Figure 1-3 was established at the time of the McMillan Plan. From the southwest, the CSX freight rail line enters the District via the Long Bridge, which connects Arlington, VA and southwest DC in the vicinity of the Tidal Basin of the National Mall. Grade-separated from city streets, the rail line is aligned along Maryland Avenue SW, transitioning to Virginia Avenue SW between 9th and 7th Street SW. Between 2nd and 11th Streets SE, the rail line is within the Virginia Avenue Tunnel. Continuing eastward, the rail line is aligned near the Anacostia River, crossing the river via the Anacostia Bridge in the vicinity of the Congressional Cemetery. On the east side of the Anacostia River, the rail line is generally oriented in a southwest-northeast alignment, still grade-separated from city streets, and crossing into Prince George's County, MD at Eastern Avenue NE. CSX also owns rail lines in Northeast and Northwest DC.

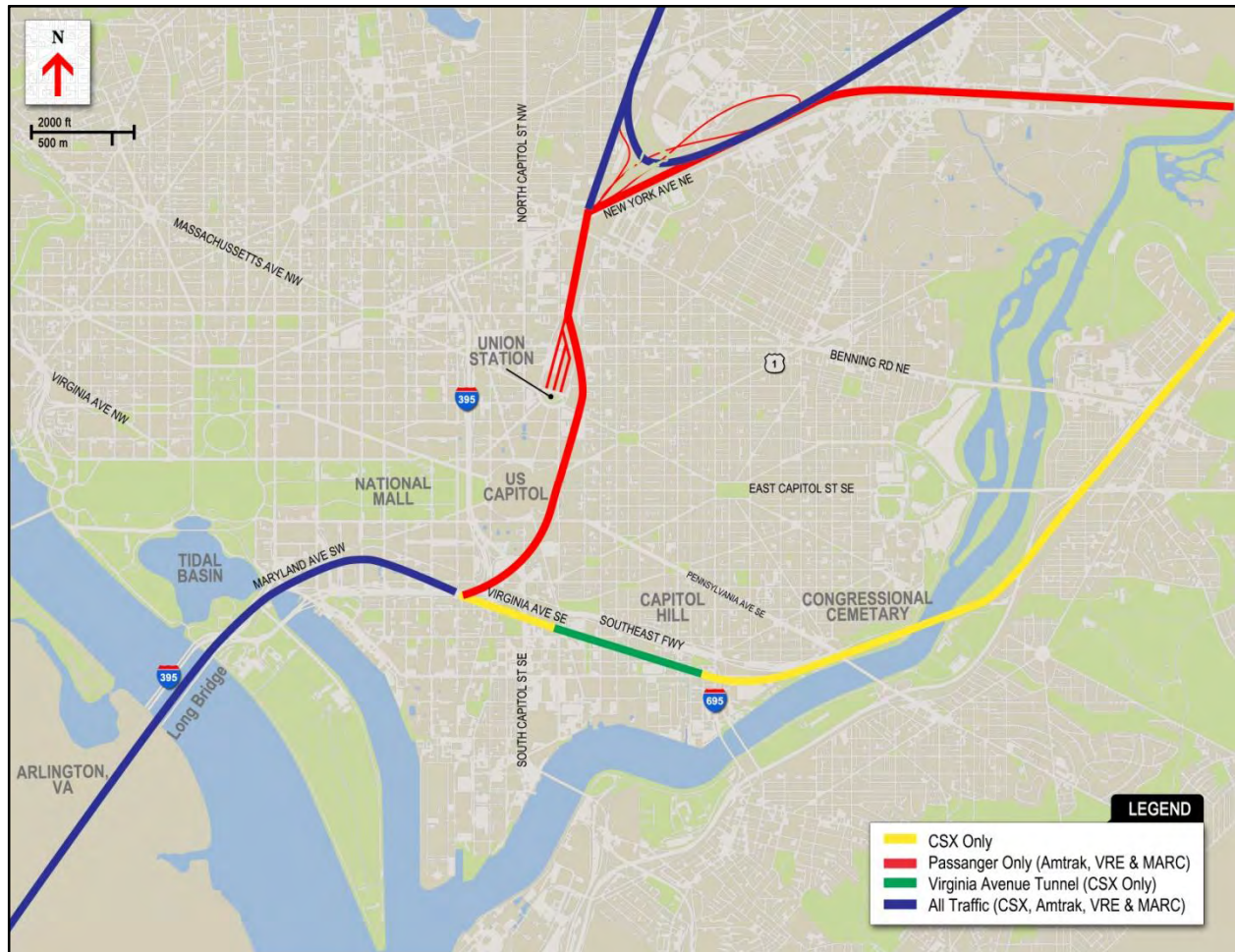
As indicated on Figure 1-3, CSX shares some of its rail lines with passenger rail service operated by AMTRAK, Virginia Railway Express (VRE) and Maryland Area Regional Commuter (MARC). AMTRAK provides regional or intra-state service throughout the east coast and the rest of the U.S. VRE and MARC provide commuter train service serving Virginia, Maryland and West Virginia residents, many of whom are employed within the District. Approximately 90 AMTRAK and commuter passenger trains operate on CSX rail lines through the District of Columbia daily (Freight Forum, January 2012). Sharing rail lines with other users limits the number of trains that could use the track at a given time, slowing train speeds and limiting the freight carrying capacity of the affected rail lines. The rail line between Arlington, VA and Southwest DC described above is shared with AMTRAK and VRE trains. However, the passenger service line diverts from the CSX line in the vicinity of 1st Street SW, and continues into a tunnel beneath the U.S. Capitol Grounds, connecting with Union Station on the north side of the Capitol. The section of CSX rail line from this junction (rail split) is exclusively used for CSX freight traffic (see the yellow and green lines in Figure 1-3). This rail line connects with rail lines in Prince George's County, MD.

Although Congress legislated the right for CSX to construct, operate, and maintain two rail tracks beneath Virginia Avenue SE in a tunnel (see Section 1.1), determining the exact boundaries of the CSX right-of-way is not possible due to lack of documentation. Therefore, in

Figure 1-2
CSX Major Rail Network



Figure 1-3
Active Rail Lines within the District of Columbia



2012, the Government of the District of Columbia and CSX signed an agreement in which the parties agreed that in order to construct Virginia Avenue Tunnel, CSX will seek construction and occupancy permits from DDOT to access subterranean and above surface space. Based on the 2012 agreement, DDOT issued an occupancy permit relative to Virginia Avenue SE and adjacent streets, which is contingent on the selection of a build alternative in the NEPA process.

1.3 Planning Process

NEPA requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. Such actions could include federal funding for a project, issuance

of a federal permit or approval, or allowing use of federal lands on a temporary or long-term basis. The CSX proposed action will require federal approvals and use of federal lands.

Currently, the operation of CSX's rail lines, including the Virginia Avenue Tunnel, through the District does not affect the operation of the Southeast-Southwest Freeway, designated Interstate 695 (I-695) (see Figure 1-1). Despite no expected long-term impacts to the I-695, the Project requires FHWA approval to allow CSX to conduct construction that will temporarily affect I-695 ramps located at 6th and 8th Streets SE. This FHWA approval is subject to the requirements of NEPA.

Following completion of a new Virginia Avenue Tunnel, the surface streets at and surrounding Virginia Avenue SE will return to pre-construction conditions. For example, the operation of the I-695 ramps and the Virginia Avenue SE roadway will be restored back to current conditions, except to the extent that the 8th Street ramp will be modified by 11th Street Bridges project that DDOT is currently undertaking. Specifically, no interference between the rail line and other transportation operations, including that of I-695, will occur following construction.

In addition to the FHWA approval, the Project will require approval from the U.S. Marine Corps to allow construction on its property. The U.S. Marine Corps affected property is a recreational facility located along Virginia Avenue SE between 6th and 7th Streets SE. The approval to allow private construction on federal property is subject to the requirements of NEPA.

Construction of the Project will affect NPS reservations that include Virginia Avenue Park (see Figure 1-1), which is under the jurisdiction of the DC Department of Parks and Recreation. Other affected NPS reservations are located along Virginia Avenue SE, but they are under the jurisdiction of DDOT and the U.S. Marine Corps. A portion of Reservation 122, which is located between 4th and 5th Streets SE, contains a small triangular grassy lawn that is under the jurisdiction of the NPS, but construction will not require the use of the grassy lawn.

The Project may require a formal project review by the NCPC because construction of the Project will affect federally owned lands. This potential NCPC project review is subject to the requirements of NEPA.

Among the federal agencies involved, the FHWA assumed lead agency status for NEPA compliance on May 9, 2011 and invited DDOT as the joint lead agency. FHWA also invited NCPC, NPS and the U.S. Marine Corps to be cooperating agencies under NEPA. In addition, the Federal Railroad Administration (FRA) was invited to be a cooperating agency due to its special expertise related to railroad operations safety. NCPC, NPS, U.S. Marine Corps and FRA all accepted the cooperating agency status.

Due to the closure of certain portions of Virginia Avenue SE during construction for the proposed Project and the need to use and occupy certain public right-of-way for the reconstructed tunnel, DDOT must also provide approval because it has jurisdiction of Virginia Avenue SE and the surrounding streets. Ordinarily, the requirements of the District of Columbia Environmental Policy Act (DCEPA) would apply to the DDOT role and responsibility.

However, because the Project is already subject to the requirements of NEPA, no additional action is needed under DCEPA. In addition, DDOT will provide oversight and inspection of the Project's construction activities.

This Final EIS:

- Describes the Purpose and Need for the Project (Chapter 2);
- Presents the alternatives considered for the Project (Chapter 3), including the Preferred Alternative;
- Describes the environment potentially affected by the Project alternatives (Chapter 4);
- Discloses the potential beneficial and adverse environmental, social and economic impacts that could result from the Project's construction and long-term operation (Chapter 5);
- Presents specific measures to minimize or mitigate adverse impacts to the environment (Chapter 5);
- Documents project compliance with Section 4(f) of the US DOT Act of 1966 (Chapter 6); and
- Documents agency coordination and public involvement activities conducted for the Project (Chapter 7).

This Final EIS also documents compliance with other federal laws that apply to the Project, such as Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, and applicable Executive Orders.

The Project's Draft EIS was available for agency and public review for 75 days from the date of the Federal Register notice of availability, which was on July 12, 2013. A 45-day public comment period is normally required for Draft EISs. However, based on community request, the FHWA extended the comment period by an additional 30 days. The comment deadline was extended to September 25, 2013. During this comment period, a public hearing was held on July 31, 2013 to provide the general public the opportunity to comment on the Project, its potential impacts and environmental mitigation measures. In preparing this Final EIS, FHWA and DDOT reviewed all comments and testimony received on the Draft EIS for the Administrative Record. This Final EIS contains all comments received on the Draft EIS and responses from the FHWA and DDOT. The comments and responses are provided in Appendix L. Unlike the Draft EIS, this Final EIS identifies the Preferred Alternative for the Project.

Following the Federal Register "notice of availability" of this Final EIS, the FHWA will issue a Record of Decision (ROD) no sooner than 30 days after publication of the Final EIS "notice of availability" in the Federal Register. Issuance of the ROD completes FHWA's NEPA process. The ROD will set forth the basis for the FHWA decision as specified in 40 CFR 1505.2, summarize any mitigation measures that will be incorporated into the Project, and document any required Section 4(f) approval in accordance with 23 CFR 774. NCPC, NPS and the U.S. Marine Corps have the option of adopting the FHWA EIS or preparing their own to complete their NEPA requirements, if needed.

After completion of the NEPA process, other required federal and District approvals and permits will be obtained in order for construction of the Project to proceed, such as approvals from NPS and the Marine Corps to allow construction on their properties, and approvals from DDOT to allow construction on Virginia Avenue SE and other affected streets.

Chapter 2

Purpose and Need

Chapter 2

Purpose and Need

The purpose of the Project is to preserve, over the long-term, the continued ability to provide efficient freight transportation services in the District of Columbia, the Washington Metropolitan Area and the eastern seaboard. These services would continue if the following needs are met:

1. Address the structural and operational deficiencies of the century-old Virginia Avenue Tunnel;
2. Accommodate expected increases in freight transportation that, in part, would stem from the Panama Canal expansion scheduled for 2015; and
3. Ensure that during construction freight transportation services remain uninterrupted while the functions of the tunnel are being replaced with a new facility.

Each of these needs is discussed in this chapter.

2.1 Virginia Avenue Tunnel Deficiencies

The existing Virginia Avenue Tunnel is deficient for the following reasons:

- With a horizontal clearance (i.e., width distance between the interior tunnel walls) that only allows a single railroad track, the tunnel is a major bottleneck for freight rail movement not only within the District, but also on the eastern seaboard generally;
- The tunnel has insufficient vertical clearance (i.e., height distance between the tunnel floor and ceiling) to operate double-stack intermodal container freight trains; and
- At over 100 years old, the tunnel is nearing the end of its useful life, and is subject to an ever increasing level of maintenance and repairs and higher risks of structural failure.

2.1.1 Tunnel Width

For a mainline freight rail line, the current industry standard for this type of transportation infrastructure is at least two railroad tracks (to allow for simultaneous two-way traffic) with a minimum operating speed of 40 mph. As described in Section 1.2, the rail route through the Southwest and Southeast areas of DC is an integral part of CSX's mainline freight rail network. Although Virginia Avenue Tunnel was originally constructed to accommodate two railroad tracks, freight trains have increased in size since the original construction and safety clearance requirements for opposing traffic increased, thereby necessitating the conversion of the rails within the existing tunnel to a single railroad track arrangement several decades ago. The existing tunnel is approximately 28 feet wide (inside the tunnel walls). A minimum tunnel width of 33 feet is needed to accommodate two railroad tracks, or five feet more than the existing width of the tunnel.

The Mid-Atlantic Rail Operations Phase II Study (December 2009), prepared for the I-95 Corridor Coalition made up of Departments of Transportation from Delaware, New Jersey, Pennsylvania, Maryland and Virginia, identified Virginia Avenue Tunnel as a primary congestion

point and major bottleneck for both freight and passenger traffic. CSX operates approximately 20 miles of freight rail lines in the District. In addition to freight movement, more than 90 commuter trains operate on CSX tracks through the District daily, including 24 AMTRAK, 30 VRE, and 38 MARC trains (Freight Forum, January 2012).

The single railroad track within Virginia Avenue Tunnel represents the single greatest constraint on rail headway (the frequency of passing trains within a given time period) on CSX's mainline freight rail network. It is a bottleneck to the eastern seaboard freight rail corridor because only a single freight train can pass through the tunnel at any one time. As a train passes through the tunnel, freight trains moving in the opposite direction near the tunnel must stop to allow the oncoming train to safely clear the tunnel, thus, limiting the total number of trains that could pass through the tunnel in a given time period. Freight trains often queue for long periods of time on either end of the tunnel to wait their turn to pass through the tunnel. Ordinarily, just freight trains are affected by this delay. However, if an eastbound train is delayed, the queue could extend beyond the junction at 1st Street SW, which is located just one-half-mile from the Virginia Avenue Tunnel portal at 2nd Street SE, or less than the length of a typical freight train. Trains queued beyond that point will continue to cause delays to passenger rail service traveling between Virginia and Union Station.

2.1.2 Tunnel Height

As a century-old facility, Virginia Avenue Tunnel was not built to accommodate modern freight rail transportation, namely the double-stacking of intermodal containers. Trains pulling double-stacked intermodal container cars have become the industry's operational practice for intermodal freight transportation in the U.S. where the rail networks allow it (i.e., vertical obstructions, such as a roadway overpasses and tunnels, along the entire network allow double-stack intermodal container trains to pass underneath). In order to operate double-stack freight trains through a tunnel or other vertical obstruction, a minimum vertical clearance of at least 21 feet must be provided. The existing vertical clearance within Virginia Avenue Tunnel is about 18 feet, or deficient by about three feet. The complications and inefficiencies created by this aspect of the old tunnel is similar to what the highway transportation industry would experience if an overpass did not meet modern standards for vertical clearance on a heavily-used highway that must accommodate tractor-trailer truck traffic.

The existing Virginia Avenue Tunnel was built to accommodate the industry practices of the late 19th and early 20th centuries. For many years after construction, the tunnel satisfactorily met the needs of the freight transportation in terms of having adequate vertical clearance. However, freight transportation changed dramatically, as noted, with the invention and widespread adoption of the intermodal shipping container as the principal means to move goods between manufacturing centers and consumer markets, regardless of whether the transport is between local, regional, national or international markets.

The last several decades have witnessed a steady growth in the demand for freight transportation due to population growth and the increasing globalization of commerce. Consequently, freight railroad companies, such as CSX, are carrying ever increasing quantities of

intermodal freight, but are often still operating on the same rail network established decades or even more than a century ago. In addition, these same rail networks are increasingly being shared with other users, in particular passenger rail service, as noted in Section 1.2. The industry solution to meeting higher freight transportation demands while still operating on the same network is to carry more freight per train. The ability to double-stack intermodal containers allows a single freight train to essentially double its intermodal freight capacity, if needed. In other words, double stacking intermodal containers is a way to increase capacity without increasing the number of trains, or the need to construct new rail lines.

Thus, this inadequate vertical clearance of Virginia Avenue Tunnel effectively prevents CSX from operating double-stack intermodal container freight trains along its eastern seaboard freight rail corridor. As a result, the inadequate vertical clearance of the tunnel represents both a major deficiency of the tunnel and the ability to provide efficient service in the rail corridor. Although there are other locations in the District with inadequate vertical clearances, addressing them would require only minor modifications to the rail line. For example, the inadequate vertical clearance at New Jersey Avenue SE, which is part of the Project area, would be resolved by lowering the grade beneath the crossing, a relatively minor construction activity that would not disrupt the surrounding community. Other crossings with inadequate vertical clearances in Southeast DC would be handled in a similar manner.

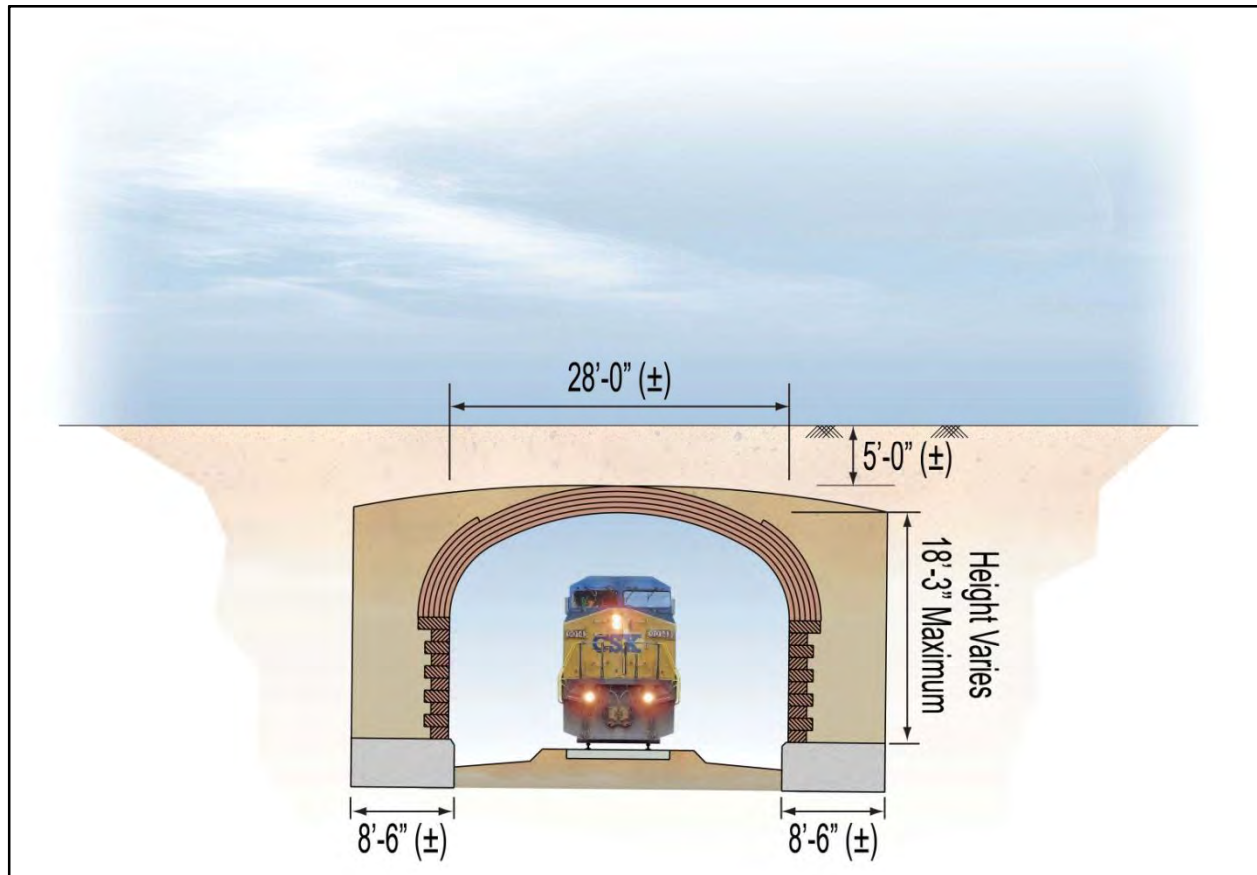
2.1.3 Tunnel Condition

In addition to the capacity and height deficiencies of Virginia Avenue Tunnel, the tunnel is also nearing the end of its useful life. The tunnel requires increasingly frequent inspection and preventive maintenance for safe rail operations. These frequent inspections or preventive maintenance activities are difficult to conduct without compromising normal rail operations, and are likely to increasingly cause service disruptions to become longer than what is acceptable for a mainline freight rail line.

Transportation infrastructures, such as highways, bridges and tunnels, are eventually replaced or undergo major rehabilitation at some point. Alternatively, if a particular element of infrastructure were not replaced, it would continue to require higher levels of investment in maintenance and repair, resulting in more frequent service interruptions and higher risks for localized disturbances.

A typical cross-section of the existing Virginia Avenue Tunnel is shown in Figure 2-1. The tunnel's structural shell consists of walls approximately 8½ feet thick and an arched roof. The walls and roof are of masonry construction. As noted in Section 1.2, the tunnel contains a single set of track (rails and ties) on top of the track ballast. The ballast, which normally consists of a bed of crushed stone, is used to hold the track in place as trains pass through. It is also used to facilitate drainage. The track ballast in and around Virginia Avenue Tunnel consists of crushed stone.

Figure 2-1
Cross-Section of Existing Virginia Avenue Tunnel



Virginia Avenue Tunnel is showing signs of its age. While the overall structure is in relatively good shape, indicators of localized distress are evident, such as cracking in the tunnel's masonry, active water infiltration, spalling (i.e., flaking) of liner brick and the deterioration of mortar in masonry joints. In addition to these tunnel wall conditions, the tunnel's drainage system, made up of a network of ditches, wood trenches, corrugated metal and reinforced concrete pipes, and sump pits and pumps, are severely compromised by overall deterioration and fouling by sediment and debris. This is in part due to the tunnel tracks and drainage system being built directly on top of soil instead of a hard surface, a design no longer used under today's standard engineering practices for most freight rail tunnels. The drainage system is the most critical element in disrepair because this affects the sub-grade load bearing condition of the tunnel floor. The poor drainage system has led to increased moisture in the tunnel and an overall weakening and deterioration of the ground underneath the ballast. Train loadings (i.e., weight of passing trains) are more than double than when the tunnel was first built, which have contributed to the wear and tear on the track bed. Along with the cyclic train loadings, the integrity of the tunnel ballast has also been compromised. In order to maintain safe train passage over areas of substandard track beds, the operating speed limit through the entire

tunnel was reduced to 15 mph (up to 40 mph is allowed immediately outside the tunnel), which has further contributed to the tunnel being a bottleneck of the CSX mainline freight rail network. In addition, poor load bearing of the track bed requires excessive levels of maintenance to ensure the reliable passage of trains.

Just as the techniques for highway and road construction have changed to accommodate the heavier weight of vehicles, so too have railroad construction practices changed to accommodate the increased weight, size and shape of locomotives and rail cars. Not surprisingly, Virginia Avenue Tunnel reflects the engineering practices and construction methods that are more than 100 years old and are effectively obsolete. For example, today's standard engineering practices would recommend a structural floor (e.g., concrete foundation) when the ground of the Virginia Avenue Tunnel is made up of soils.

Despite the signs of distress noted above, the tunnel is in no danger of collapsing in part due to tunnel reinforcements and reconstruction made in late 1985 and early 1986 (see Section 1.1). Nevertheless, even with CSX's active maintenance and inspection program, a major structural deficiency could materialize over the next few decades, possibly due to the continued aging of the tunnel's masonry structure. This would create a major disruption to freight transportation, and would likely disrupt the surface roadway network in the community as CSX would be forced to conduct emergency reconstruction of the affected section of the tunnel.

2.2 Freight Transportation Demand

Currently, an average of 20 freight trains pass through Virginia Avenue Tunnel daily. According to the FHWA's 2011 Freight Analysis Framework (FAF) forecasts, overall freight tonnage would increase by 50 percent in 2040 from 2010 levels. This projection is independent of the Project. According to a U.S. DOT November 3, 2010 press release, freight tonnage is expected to increase 1.6 percent per year, reaching over 27 billion tons by 2040. It was 18.3 billion tons in 2010 back to levels before the U.S. recession in 2008. The press release also noted that intermodal container movement accounted for 18 percent of the value of freight transportation in 2007 and is forecast to grow to nearly 27 percent by 2040. It is likely that rail would accommodate a substantial share of the future increase demand for freight land transportation in the U.S. for the following reasons:

- Highway capacity (freight truck transport) is expanding too slowly to keep up with the FHWA projected demand.
- Certain metropolitan areas have extremely high traffic congestion levels, making highway transport of freight extremely inefficient and time-consuming. For example, according to the 2011 Urban Mobility Report produced by the Texas Transportation Institute (TTI), the Washington Metropolitan Area ranks among the top very large metropolitan areas in the U.S. in terms of congestion.
- Freight trains are almost three times more fuel efficient than freight trucking according to the TTI and the Center for Ports and Waterways in a 2007 report (amended in 2009).
- Greenhouse Gas (GHG) emissions from freight transportation are tied closely to freight energy use. Although energy efficiency improvements have been made in the truck

freight sector, GHG emissions are still growing in this sector because energy efficiencies have not kept pace with growth in freight demand. As noted above, freight rail transportation is approximately three times more energy efficient than freight trucking.

The Panama Canal will soon be expanded to allow vessels carrying 12,000 intermodal containers, more than doubling the maximum freight-carrying capacity (5,000 intermodal containers) of vessels that currently use the canal. Upon its projected completion in 2015, freight throughput from east coast and Gulf of Mexico ports is expected to increase substantially. Freight transporters in Asia could increasingly choose to use east coast and Gulf ports instead of west coast ports to reach inland markets (e.g., Midwest) in the U.S. for their goods due to the cost efficiencies of using larger vessels, even though the water route would be substantially longer than using a west coast port. Currently, it is more economical for shippers of Asian goods to use a west coast port and land transportation (rail and highway) to reach many inland markets in the U.S. even though these markets are geographically closer to east coast or Gulf ports. A Panama Canal that could accommodate a 12,000 container vessel may change the equation between east and west coast freight market shares. It may favor a shift in market shares to east and gulf coast ports, notwithstanding other factors affecting freight market shares. Conversely, freight transporters in the U.S. could increasingly choose to use an east coast port to reach destinations in Asia. Ports along the east coast, such as in Savannah, GA and Charleston, SC are investing hundreds of millions of dollars to upgrade their facilities to accommodate the larger intermodal vessels and capture a greater market share.

As the largest freight railroad company on the east coast, CSX is anticipating the impact of an expanded Panama Canal on freight transportation demand from east coast ports, and is anticipating the need to carry a greater amount of freight between east coast ports and Midwest markets. CSX's existing mainline freight rail network in the mid-Atlantic and Midwest would be able to accommodate anticipated demand provided that at least two railroad tracks are provided throughout the network, and CSX is able to operate double-stack freight trains. CSX implemented a National Gateway initiative to improve the flow of rail traffic throughout the nation by increasing the use of double-stack intermodal container freight trains by creating a more efficient rail route that links mid-Atlantic ports with mid-Atlantic and Midwestern markets.

As shown on Figure 1-2, the CSX rail line through the District, including Virginia Avenue Tunnel, is part of the eastern seaboard freight rail corridor, a mainline route linking mid-Atlantic ports with mid-Atlantic and Midwestern markets. Due to the tunnel's "bottleneck" conditions noted in Section 2.1 (single railroad track and its inability to accommodate double-stack intermodal container freight trains), the tunnel represents a constraint to increasing the freight carrying capacity along much of the rail network in order to meet expected increases in freight transportation demand. Due to the integrated nature of freight rail lines, a single point along a freight rail network (e.g., Virginia Avenue Tunnel) could affect the capacity of the entire network.

2.3 Commerce Demands

The ability to quickly and efficiently move goods to markets throughout the country is vital to the U.S. economy. As one of the nation's major freight railroad companies, CSX provides a valuable public service by facilitating the shipment of goods and services to the general public. It is not feasible to stop freight rail service during the period of time when the Virginia Avenue Tunnel is reconstructed. Currently, CSX operates between 20 and 30 trains through the tunnel daily. The railroad's need to meet its Common Carrier Obligation, including the statutory duty to provide "transportation or service on reasonable request" (49 U.S.C. 11101(a)) will continue unabated throughout the period of time that the tunnel is rebuilt. This duty means that CSX may not decline to provide common carrier service merely because doing so might be inconvenient or unprofitable, or somehow disruptive to others. As with other aspects of interstate commerce that could have profound economic consequences if interrupted, the preservation and maintenance of these transportation services are in the national interest. Just as service cannot be halted during tunnel reconstruction, it would also be inconsistent with the railroad's Common Carrier Obligation to allow such transportation services to be unduly delayed. An increasing amount of railroad traffic is time-sensitive, reflecting economic decisions by shippers to use "just-in-time" approaches to manufacturing. Just-in-time approaches seek to reduce inventory, and allow for the arrival of critical parts that dependably arrive exactly when they are needed by the manufacturer.

As shown on Figure 1-2, severing the rail network in the District would effectively cut-off freight transport between the mid-Atlantic and Midwestern states because CSX does not own rail lines within or near the Washington Metropolitan Area that could serve as an alternate route through or around the District during construction. In particular, the Long Bridge (see Section 1.2) is CSX's only Potomac River crossing other than in Harpers Ferry, WV, which is located approximately 50 miles northwest of the District.

During construction, CSX will need to continue providing its customers with the same level of timely and efficient freight service as it currently provides today, which includes having a Virginia Avenue Tunnel with a single set of tracks. Any diminution in the ability to provide reliable, consistent, and timely freight rail service would make freight rail transport less competitive than truck transport, and the expected response of many freight customers would be to switch transport modes from rail to truck. A substantial shift in modes may result in worsening the already congested interstate and regional road networks, especially those along the I-95 and I-81 corridor, along with associated environmental and socioeconomic impacts. In addition, some portion of this diversion of freight from train to truck would not revert back to freight rail shipment after completion of the Project because a prolonged disruption in service could force some shippers to make long term changes to industrial production and shipping routines.

2.4 Logical Project Termini

The purpose of the Project is to preserve, over the long-term, the continued ability to provide efficient freight transportation services in the District of Columbia, the Washington Metropolitan Area and the eastern seaboard. These services will continue if the structural and operational deficiencies of Virginia Avenue Tunnel are addressed, capacity is added in preparation for expected increases in freight transportation demand, and commerce remain uninterrupted while the tunnel is replaced with a new facility. For these reasons, the Virginia Avenue Tunnel generally running under Virginia Avenue SE from 2nd Street SE to 11th Street SE and at grade at 12th Street SE represents logical termini of the Project. On the west end, the need to provide proper grading of the existing tracks west of the new rebuilt tunnel will mean that the vertical clearance underneath the New Jersey Avenue SE bridge will also be able to accommodate double-stack intermodal container freight trains. On the east end, the project limits include the extension of the new tunnel from 11th Street SE to 12th Street SE. The construction area for rebuilding the existing tunnel will not change by extending the new tunnel to 12th Street SE because enclosing the section of track between 11th and 12th Street will not affect the new grading of the tracks east of the tunnel.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 3

How tomorrow moves [CSX]



The National Gateway
Preparing for Tomorrow
June 2010

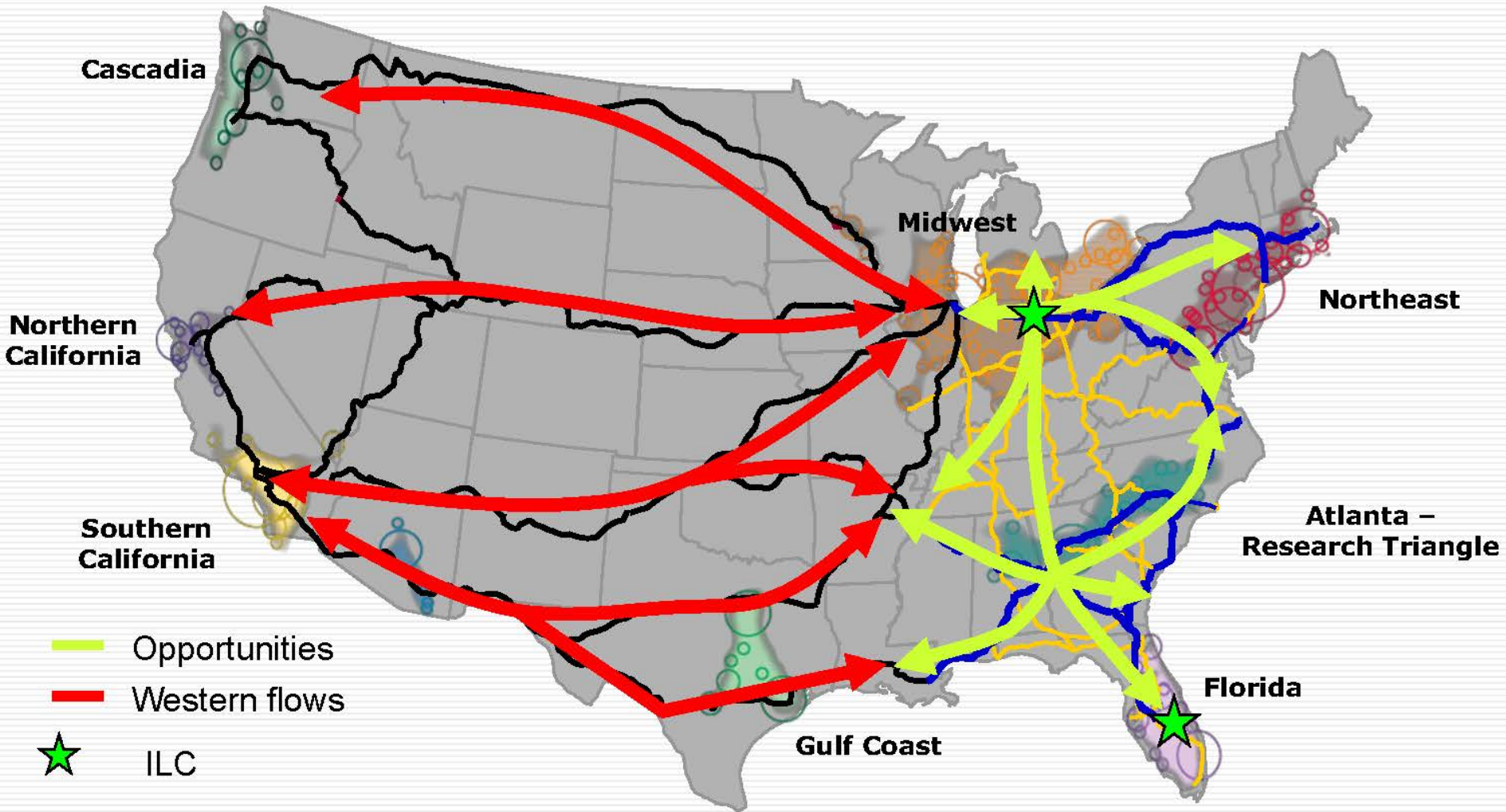
National Gateway overview

Project overview:

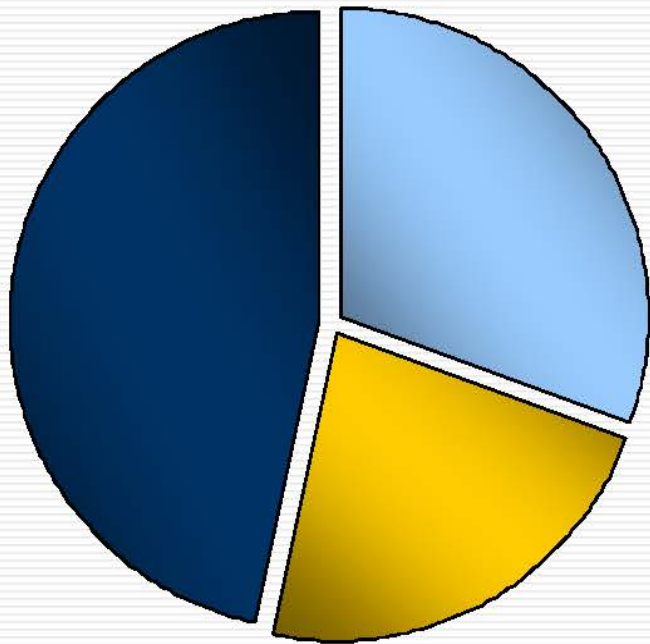
- \$842 million in investments
- 61 double stack clearance projects
- Construction or expansion of 6 intermodal terminals
- Public-Private Partnership
- Federal Funding- National Environmental Policy Act Compliant



Evolved Network Addresses New Flows



National Gateway costs and funding



■ Federal ■ State ■ CSX

Federal = \$258 Million

State = \$191 Million

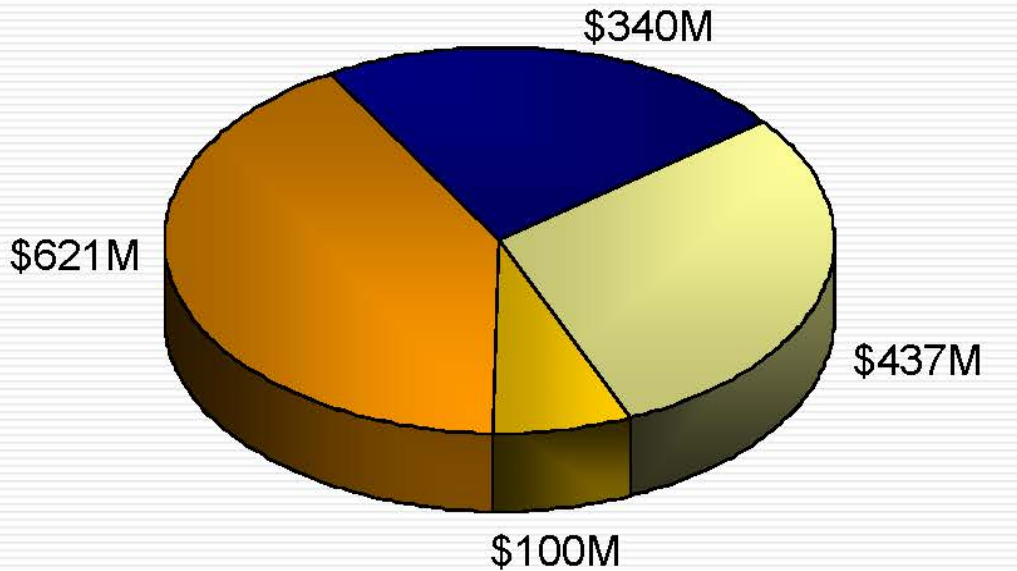
CSX = \$393 Million

Total = \$842 Million

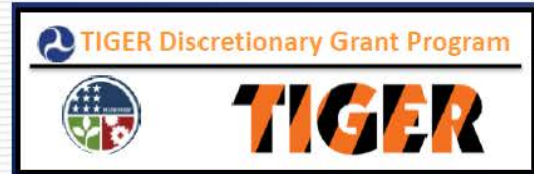
***\$22 in public benefits for every
\$1 of public funds invested***

TIGER Grants: Where Did the Money Go?

TIGER Grants



- Freight Rail
- Livability
(commuter & passenger rail/bikes/streetcars/buses/multimodal facilities)
- Highways/Bridges
- Ports/Barges



- \$1.5 billion for transportation “projects of national and regional significance”
- 1,380 requests for \$57 billion in funding (37:1 ratio)
- Less than 3% of requests received funding (46 grants, 15 TIFIA loans)

TIGER Grants: Where Did the Money Go?

WEST \$406 million



CENTRAL \$392 million



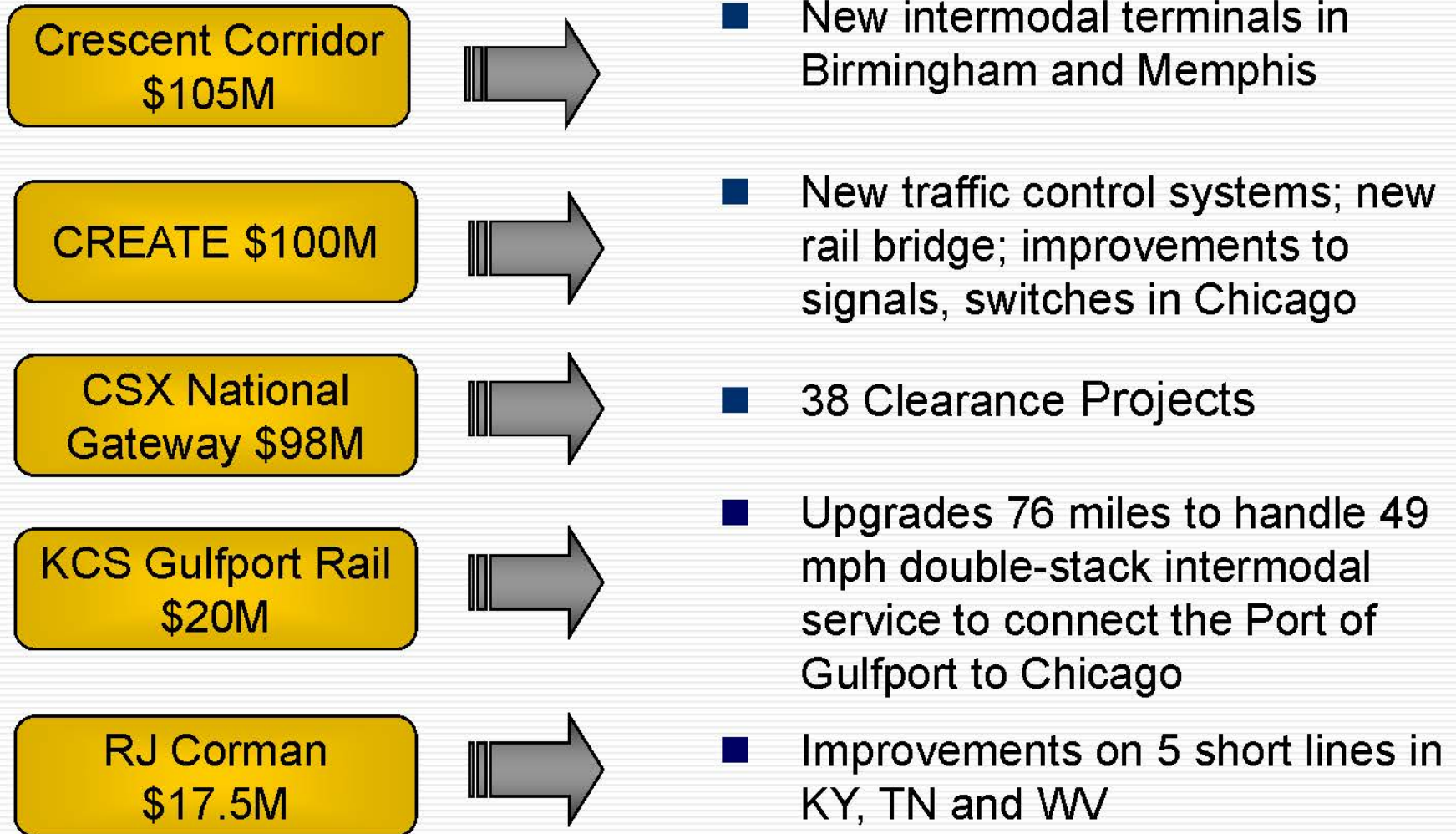
NORTHEAST \$398M



SOUTH \$302



Freight Rail recognized as key to US transportation future





National Gateway: What are the Public Benefits?

- **Stimulates the economy**
 - Over 30 years, expected to create more than 50,000 jobs, including more than 25,000 jobs in 14 economically distressed areas
- **Improves U.S Competitiveness**
 - Triples the market access potential for the Ports of Baltimore, Hampton Roads and Wilmington while improving western connections over Chicago.
- **Provides a Sustainable Transportation Solution**
 - Reduces emissions – estimated 20 million tons of CO₂ eliminated
 - Assists states in attainment of federal clean air standards
- **Reduces Consumption of Oil**
 - Contributes to U.S. energy security by saving 2 billion gallons of diesel fuel



National Gateway: Environmental Coordination

Positive Actions

- Early involvement at every level
Local, District , State, Federal
DOTs, SHPOs , EPAs, DNRs
- Who's the Federal lead? Every meeting started with the same question, couldn't answer until March 2010!
- Never been done- Team viewed unknowns as incremental steps, not insurmountable obstacles
- Results oriented- Have a plan, define objectives/ long lead times, set deadlines, plan deliverables, milestones, and agency review to fit deadline
- Maintain positive public outreach along the way





National Gateway: Environmental Coordination

Lessons Learned

- Early agency cooperation vital
- Process oriented- know State/ Federal procedures. Are your consultants pre-approved?
- Communicate- Stakeholders held weekly calls
- Highway and rail projects not the same- Preexisting DOT procedures may or may not apply
- Coordinate with design teams- Small last minute design changes create major environmental hurdles
- Maintain schedule





National Gateway: Environmental Partnering Success

- July- August 2009- Initial meetings with States
- December 2009- First NEPA approvals 6 clearance sites, 2 track support structures
- February 2010- Award of TIGER Grant \$98 Million to coalition of States
-Completed environmental work viewed favorably by TIGER team
- October 2010- Expected NEPA Approval for TIGER Award projects 30 clearance sites, 4 track support structures



National Gateway Projects of Interest

- **NW Ohio Integrated Logistics Center**
 - Largest single project currently underway in Ohio (\$175M)
 - Will reduce transit time for freight rail through Chicago by 24-48 Hours
 - Opens Mid-west markets to rail service
 - 2,000 acres south of the ramp are zoned for job-generating warehouse and distribution development
- **Virginia Avenue Tunnel in Washington, DC**
 - Focus is on securing funding for the Virginia Avenue tunnel
 - Largest National Gateway clearance project (\$160M)
 - Mid-Atlantic Rail Operations Planning Study lists as major rail bottleneck that prevents the efficient movement of freight and passenger rail on this corridor
 - Plan to return tunnel to double track and enlarge to allow for double-stack

Innovation Levers Investment

Northwest Ohio – Widespan Crane Operation



5 widespan cranes
8 working tracks
Two straddle lanes
One truck lane
5 container stacks (4 high)
18 block swap tracks

■ Environment

- Reduce carbon emissions
- Almost silent operations

■ Network

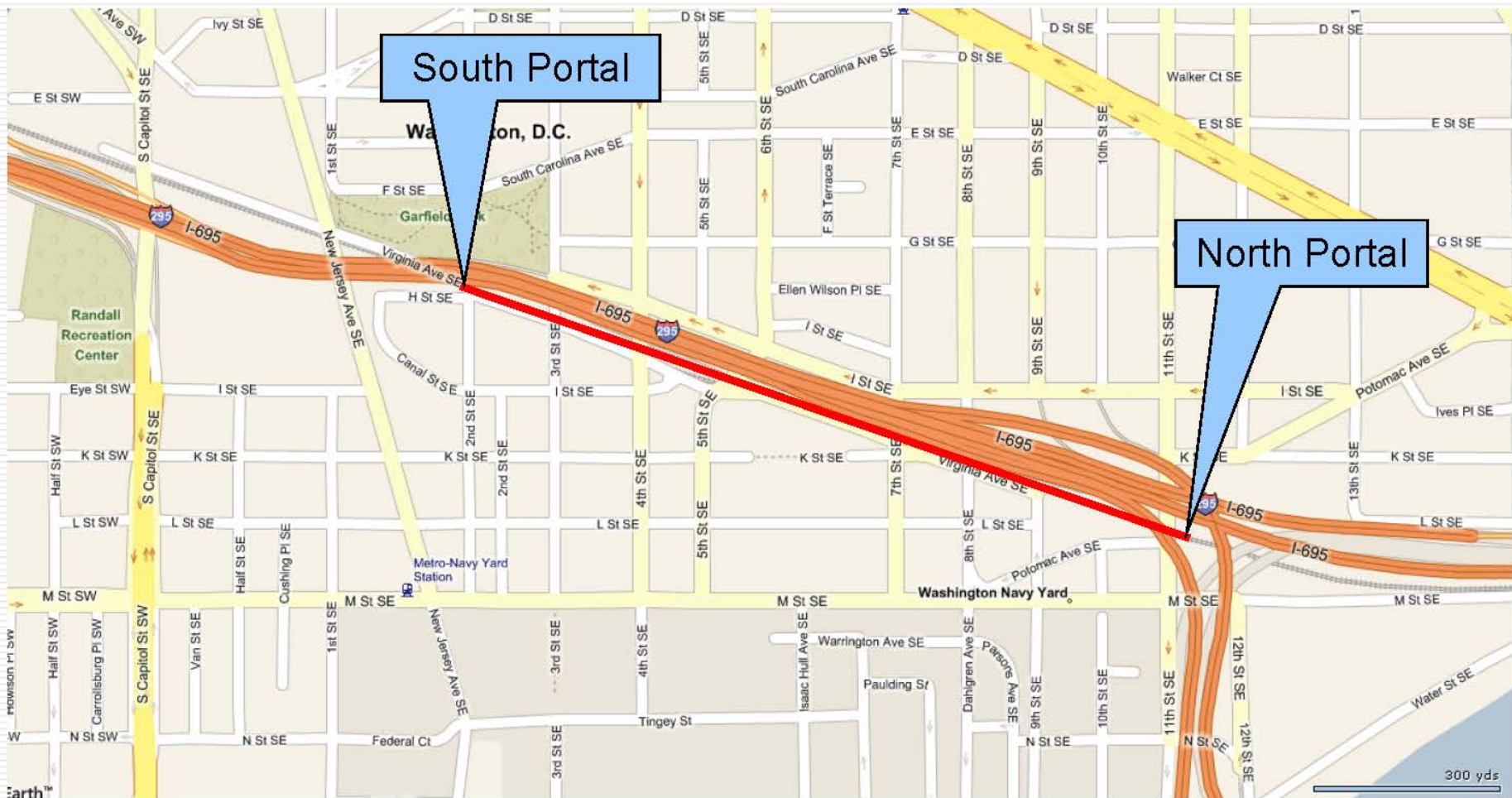
- Increase terminal throughput
- Connect more markets
- Reduce transit times

■ Operations

- Semi automatic operations
- Improves facility safety
- Reduce equipment maintenance
- Reduce fuel & labor expense

*Evansville Western Railway, an affiliate of CSX,
is the developer-operator of this NW Ohio facility*

Virginia Avenue Tunnel (CFP 113.34)



Case 1:14-cv-01903-CRC Document 3-2 Filed 11/12/14 Page 16 of 17

Virginia Avenue Tunnel (MP. CFP 113.34)

Washington, DC

- Tunnel Under Virginia Avenue
- 4000 foot long masonry tunnel
- Originally Constructed between 1872 and 1904
- Located near Capitol & USDOT
- Sophisticated Communities



Growing List of Supporters – www.nationalgateway.org



**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 4

ITEM 14 - Action

July 15, 2009

Briefing on Integrating Freight into the 2010 Update of the CLRP, and Approval of Response to a Request by CSX Transportation for TPB Support for its National Gateway Rail Freight Initiative

Staff

- Recommendation:**
- Receive briefing on proposed activities to address freight movements in the 2010 update of the CLRP and to engage freight stakeholders in the region through the TPB Freight Subcommittee.

 - Approve the enclosed draft letter responding to the CSX request for TPB support for its National Gateway Rail Freight Initiative.

Issues: None

Background: The Freight Subcommittee of the TPB Technical Committee was established in April 2008.

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

DRAFT

July 15, 2009

Louis E. Renjel, Jr.
Vice President, Strategic Infrastructure Initiatives
CSX Transportation
500 Water Street
15th Floor, C-900
Jacksonville, FL 32202

Dear Mr. Renjel,

In response to your June 26, 2009 letter, the National Capital Region Transportation Planning Board (TPB) is pleased to join the Governors of Virginia and Maryland in support of the National Gateway Initiative. The TPB agrees that the National Gateway Initiative will enhance the National Capital Region's ability to handle projected increases in freight traffic, reduce overall freight shipping costs, ease congestion and emissions, and minimize highway and road maintenance costs and delays. The TPB is particularly interested in the potential of the National Gateway Initiative to help relieve bottlenecks and conflicts between rail freight traffic and the passenger rail services provided by Amtrak, MARC, and VRE.

The TPB notes that thirteen National Gateway projects fall within the Washington region. We anticipate that CSX will coordinate closely with TPB and our state and local governments to ensure local impacts are adequately addressed as these projects are developed, and we look forward to that coordination.

Sincerely,

Charles Jenkins
Chairman
National Capital Region
Transportation Planning Board

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

CSX National Gateway Projects in Washington Region				
#	State	Project Name	Description	City, County
1	Maryland	Germantown Rd. North	Replace Bridge	Germantown, Montgomery
2	Maryland	Deer Park Drive	Replace Bridge	Washington Grove, Montgomery
3	Maryland	Balt. Washington Parkway Rt. 295	Lower Track	Hyattsville, Prince George's
4	Maryland	Kenilworth Ave.	Lower Track	Hyattsville, Prince George's
5	Maryland	Catoctin Tunnel		Catoctin, Frederick
6	Maryland	Point of Rocks Tunnel		Point of Rocks, Frederick
7	Virginia	Railroad Ave.	Replace Bridge	Woodbridge, Prince William
8	District of Columbia	Virginia Ave. Tunnel	Raise/Replace Tunnel Roof, Double Track Double Stack	District of Columbia
9	District of Columbia	New Jersey Ave.	Lower Track	District of Columbia
10	District of Columbia	10th St.	Lower Track	District of Columbia
11	District of Columbia	I-395 Ramp	Lower Track	District of Columbia
12	District of Columbia	12th St. SW	Lower Track	District of Columbia
13	District of Columbia	Potomac River Swing Bridge	Bridge Modification	District of Columbia

7/15/2009



Louis E. Renjel, Jr.
Vice President
Strategic Infrastructure Initiatives

500 Water Street
15th Floor, C-900
Jacksonville, FL 32202
Tel. (904) 359-3770
Fax (904) 359-3597

June 26, 2009

Chairman Charles Jenkins
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, NE
Suite 300
Washington, DC 20002

Dear Mr. Jenkins:

I am writing to request your organization's support for the National Gateway, an initiative that will bring significant benefits to the Washington region.

Current predictions of 60% growth in freight by 2020 and 87% by 2035 may be off due to the current economy, but even growth by half could have significant impacts on our communities.

In an effort to better manage this growth, The National Gateway creates a more efficient rail corridor by removing obstructions that prevent running double-stack intermodal trains throughout the Washington area.

The project offers over \$6 billion of public benefits, and has been endorsed by the Governors of Ohio, Pennsylvania, Maryland, Virginia, and North Carolina; the Ohio, Kentucky, Indiana COG and Toledo Metropolitan Area COG; along with 50 other associations and business, including Schneider National, UPS and The Limited.

The National Gateway enhances the Washington region's ability to handle the projected increase in freight traffic, thereby:

- Reducing overall freight shipping costs for the region;
- Easing congestion and emissions – one train can carry the load of more than 280 trucks and travel 436 miles to the gallon per ton;
- Minimizing highway and road maintenance costs and delays by shifting about 70,000 trucks off District area highways each year; and,
- Eliminating key passenger (Amtrak/MARC/VRE) and freight bottlenecks.

The National Gateway is a public-private partnership. The overall project cost – which includes upgrading tracks, equipment and facilities, and providing clearance for double-stack intermodal trains – is over \$700 million dollars, half of which will be paid by CSX Transportation. Because of

its significant public benefits, we are seeking state and federal transportation funding to cover the remaining 50 percent.

This project is a sound investment as it provides over \$16 in public benefit for every \$1 of public money invested. The National Gateway is important for your constituents and we ask that you join our growing list of supporters by providing a letter of support for this critical initiative.

Thank you for your consideration.

Best Regards,

A handwritten signature in black ink that reads "Louis Rangel". The signature is written in a cursive style with a large initial "L" and a long, sweeping tail on the "l".



COMMONWEALTH of VIRGINIA

Office of the Governor

May 14, 2009

Timothy M. Kaine
Governor

The Honorable James L. Oberstar, Chairman
Committee on Transportation and Infrastructure
U.S. House of Representatives
2165 Rayburn House Office Building
Washington, DC 20515

The Honorable John L. Mica
Ranking Republican Member
Committee on Transportation and Infrastructure
U.S. House of Representatives
2163 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Oberstar and Ranking Member Mica:

I write in support of major passenger and freight rail investments to benefit the economy, the environment and our quality of life, not only in Virginia, but throughout the eastern United States.

The upcoming surface transportation authorization should include dedicated, long-term funding for the combined intercity and southeast high-speed passenger rail initiatives, as well as the Norfolk-Southern Crescent Corridor and the CSX National Gateway freight rail initiatives.

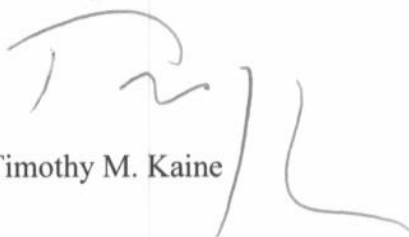
Virginia has a progressive and balanced rail program to secure public benefits in both passenger and freight rail improvements. The Commonwealth has committed more than \$149.6 million in state funds to these initiatives, and these prior commitments should be recognized in any matching requirements established in the authorizing legislation. Virginia also will be working with several states to seek Recovery Act funding for these three initiatives.

The Honorable James L. Oberstar
The Honorable John L. Mica
May 14, 2009
Page 2

Congress struggled during the last reauthorization to provide dedicated funding to specific passenger and freight rail improvements. Long-term, programmatic commitments will be even more challenging. We will need to address these structural issues if we are going to properly balance the needs of both freight and passenger rail in the U.S.

I look forward to working with you to achieve these important, long-term goals.

Sincerely,



Timothy M. Kaine

TMK:es

c: The Honorable Edward Rendell, Governor, Commonwealth of Pennsylvania
The Honorable Joe Manchin, III, Governor, State of West Virginia
The Honorable Martin O'Malley, Governor, State of Maryland
The Honorable Beverly Purdue, Governor, State of North Carolina
The Honorable Ted Strickland, Governor, State of Ohio
Mr. Joseph Szabo, Federal Railroad Administrator
Mr. Joseph Boardman, Amtrak President and CEO
Mr. Micheal Ward, President, CSX
Mr. Charles "Wick" Moorman, CEO, Norfolk Southern President

May 18, 2009

The Honorable James L. Oberstar
Chairman
Committee on Transportation and
Infrastructure
U.S. House of Representatives
2165 Rayburn House Office Building
Washington, DC 20515

The Honorable John L. Mica
Ranking Republican Member
Committee on Transportation and
Infrastructure
U.S. House of Representatives
2163 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Oberstar and Ranking Member Mica:

We are writing to express our strong support for a \$194 million request of federal funds for the National Gateway in the upcoming surface transportation authorization legislation. We urge Congress to satisfy this request of great regional and national significance with funding in addition to states' apportionment for highway and transit programs. By investing in a more efficient freight rail network for our country, the National Gateway can, in a very meaningful way, help address serious concerns about the economy, U.S. competitiveness, congestion, highway safety and maintenance, global warming, clean air and energy efficiency.

Brief Background

Along with dozens of government, community and business leaders and CSX Transportation, we are spearheading the National Gateway. This initiative proposes a more efficient, state-of-the-art rail corridor linking the East Coast's international deepwater ports and major consumption markets with the population and manufacturing centers of the Midwest. With improved clearances, new intermodal terminals and greater capacity, this project will bolster environmental health and promote economic growth by improving the flow of freight via rail through the increased use of double-stack, intermodal trains. Cambridge Systematics estimates public benefits of over \$6 billion from the project, or a ratio of over 16 to 1 for each public dollar invested.

Estimates from the U.S. Department of Transportation, American Association of State Highway and Transportation Officials and the Congressional Budget Office anticipate a *67 percent growth in the freight industry by 2020*. This will result in additional strain on the nation's transportation infrastructure, particularly in West Coast ports. Capacity constraints in West Coast ports mean more freight from Asia being transported through the Panama and Suez canals and brought to East Coast ports, promoting economic growth to states that are positioned to accommodate the movement and distribution of this additional freight. The National Gateway will enable the ports of Baltimore, Norfolk and Wilmington, North Carolina to efficiently handle this growth in traffic while reducing the volume on already congested roadways like I-95, I-81 and I-70/I-76.

Freight rail is the most environmentally-friendly way to move goods over land and is a critical part of the solution to meeting our nation's transportation needs. However, in order for freight rail to help alleviate current and future challenges with the nation's transportation and freight industries, e.g. capacity constraints, fluctuating fuel costs, crowded highways, and greenhouse gas emissions, we must enhance the national freight rail infrastructure and allow for double-stack container movements.

Summary Description / Economic Impact

The National Gateway will provide the following:

Enhanced Intermodal Service. The National Gateway will provide more competitive intermodal service between East Coast ports and the Midwest, combining the short-haul flexibility of trucks with the long-haul efficiency of rail. The addition of several new intermodal terminals along the National Gateway route will enhance consumers' options and augment our nation's ability to deliver manufactured goods to world markets by drastically increasing the market access potential for three East Coast ports.

New Jobs and Businesses. In the short-term, the National Gateway will create design and construction jobs along the corridor. In the longer-term, it will support thousands of logistics, manufacturing and port-related businesses in our states. Initial estimates for job creation resulting from the double-stack clearances alone exceed 5,000 new jobs in the first ten years. The investment in the intermodal facilities along the route by CSX will create thousands of *additional* jobs relating to the increased freight being shipped, and by the companies that benefit from the improved rail shipping operations.

Reduction in Traffic Congestion/Emissions. By enhancing efficient freight transportation, the National Gateway will also reduce traffic congestion and lower highway maintenance costs in our states. One train can carry the load of more than 280 trucks, clearing space for over 1,100 cars. This project will shift an estimated 2.3 billion truck miles off our nation's highways each year, greatly improving safety and congestion.

Reduction of Transportation Sector Greenhouse Gas Emissions. EPA's most recent data shows that over 25% of emissions come from the transportation sector, and these emissions are expected to continue to rise in the years ahead. We share your goal of reducing greenhouse gas emissions, and this project will help us do so by taking advantage of the energy efficiency of moving goods by rail. Building on an 85% increase in greenhouse gas intensity improvement since 1980, freight rail can help tackle the challenges of global warming. In fact, railroads are the most environmentally-friendly way to move goods on land – moving a ton of freight over 436 miles on a single gallon of fuel – and an independent study by Cambridge Systematics shows that the National Gateway will reduce over 2.7 tons of CO₂ in the first ten years alone.

Funding and Implementation

This ambitious public-private partnership calls for over \$700 million in public and private investment across six states and the District of Columbia. CSX Transportation has committed one half (\$387 million) of the total project cost, primarily for the construction of new intermodal terminals along the corridor, and a multi-state effort is being undertaken to secure approximately \$194 million, or 25% of the project cost, in federal transportation funds. State governments along the route would provide the remaining 25% in matching funds based on their share of the clearance work in their respective states. These double-stack clearance projects include track lowering, bridge raising and bridge replacement. Specific information on each of the clearance projects has been included in the formal project submission to the Committee.

Our states have already demonstrated our commitment to this project, and the broad-based interest it has generated, by allocating state rail program or federal stimulus funds to begin work even before the federal authorization process began. For example:

- The State of Ohio recently committed \$20 million in ARRA funds for National Gateway clearance projects in that state and an application for \$10 million is pending with the Ohio Department of Development for additional clearance projects. In addition, Ohio has committed \$5 million in Section 130 funds for rail safety-related improvements near the future Northwest Ohio intermodal terminal;
- The Commonwealth of Pennsylvania has committed to provide half (\$35 million) of the cost of clearance projects in that state over the next three years, with construction due to begin this summer. In addition, the Commonwealth of Pennsylvania provided \$500,000 from the Governor's Action Team for the Chambersburg intermodal terminal;
- The Commonwealth of Virginia has committed \$19 million in Virginia Rail Enhancement Fund monies between FY2010 and FY2015 for clearance projects in Virginia and the District of Columbia. Earlier this month, Virginia's Rail Advisory Board increased the funding level to \$26 million, and the Commonwealth Transportation Board will consider approving the increase in June.
- The State of Maryland has committed to provide 50% (up to \$75 million) in state or federal funds for a new CSX Intermodal facility in the Baltimore-Washington region; and
- The State of North Carolina (NCDOT and the NC Ports Authority) has committed to provide half (\$100,000) of the cost of clearance projects in that state. Construction will be completed in 2009.

In addition to the National Gateway clearances and funding commitments outlined above, our states are undertaking a number of public-private partnership initiatives related to congestion relief and freight mobility. These efforts along with the National Gateway clearances will have significant benefits in each of our states as well as along the National Gateway corridor as a whole.

Because some federal and state funds have already been committed to the National Gateway, we believe having USDOT provide project management and oversight will provide consistency among the six states and simplify the administration of the project.

Therefore, we respectfully request that USDOT serve as the lead agency for the implementation of this multi-state project, in the same way that Eastern Federal Lands served as the lead agency for the Heartland Corridor project.

Summary

The National Gateway and its double-stack clearance projects will help ensure that East Coast ports are ready for the growth in cargo likely to occur once the Panama Canal is widened in 2015. It also delivers over \$6 billion in public benefits – a 16 to 1 ratio – and will provide greater capacity for product shipments; reduce traffic congestion and carbon emissions and lower highway maintenance costs; and create thousands of jobs that directly or indirectly support the initiative.

We look forward to working with you in the coming weeks and months to secure the federal funding needed to make the National Gateway a reality and provide the economic stimulus our country so desperately needs.

Sincerely,



Governor Edward G. Rendell



Governor Martin O'Malley



Governor Beverly Perdue



Governor Ted Strickland

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 5

News Releases

CSX Commits Additional \$160 Million to National Gateway

JACKSONVILLE, Fla., May 18, 2011 /PRNewswire via COMTEX/ --

CSX announced today that it will invest \$160 million over the next several years to complete one of the most important transportation projects in the country -- the National Gateway. This project will deliver substantial public benefits, including thousands of jobs. This latest commitment by CSX will bring those benefits and jobs much sooner than would otherwise be possible.

"Through the National Gateway, CSX and its public partners are working together to vastly improve the quality and flexibility of the eastern rail network," said Michael J. Ward, CSX chairman, president and chief executive officer. "With today's new \$160 million commitment, CSX will have obligated a total of about \$575 million over several years to better meet the needs of our customers, our states and our ports."

Total project costs are approximately \$850 million, and state and federal partners are investing more than \$280 million to help secure the substantial public benefits of the National Gateway. These public partners recognize that investing in the quality of the transportation infrastructure is essential for American competitiveness.

The National Gateway investment will be made over several years and, taken together, represent one of the largest project investments in company history. The amounts are included in the company's long-term capital plans.

Most of the \$160 million investment announced today will expand and improve the century-old Virginia Avenue Tunnel in Washington, D.C. and provide double-stack train clearances in Maryland, West Virginia and the District of Columbia.

Supporting ports and businesses. The project will move more of CSX's customers' freight on double-stack trains between the Midwest and the Ports of Baltimore, Virginia, and Wilmington. This will be especially important as the Panama Canal expansion brings more traffic through these ports.

Supporting communities. The National Gateway will bring jobs and infrastructure improvements to communities while taking trucks off the highways. In the first 30 years of operation, it is expected to create 50,000 jobs and convert more than 14 billion highway miles to rail, saving many millions of dollars of highway maintenance costs.

Supporting the environment. Trains can move one ton of freight nearly 500 miles on a single gallon of fuel, and double-stack trains traveling along the National Gateway can deliver twice as many goods on one trip. The National Gateway could avoid nearly 2 billion gallons of fuel consumption and 20 million tons of CO2 emissions in the first 30 years of operation.

"The completion of the National Gateway and Virginia Avenue Tunnel will help improve the flow of rail traffic through the District and the region, and we will be working with CSX to minimize the impact of the construction on our residents and neighborhoods," said Terry Bellamy, interim director, District Department of Transportation.

"The National Gateway will positively impact Maryland's economy, transportation system and environment," said Maryland Transportation Secretary Beverley Swaim-Staley. "We have been proud to partner with CSX on this initiative and today's announcement is another significant demonstration of their commitment to Maryland. It will allow Maryland to compete globally while creating jobs and growing the economy locally."

Sean T. Connaughton, secretary of transportation for the Commonwealth of Virginia, said, "The National Gateway, with its improvements to the Virginia Avenue Tunnel, Kilby Yard and along the I-95 rail corridor, will open new business opportunities for the Port of Virginia and position the Commonwealth to be even more competitive in the global economy. The improvements on this corridor will also help address highway congestion and complement Virginia's passenger rail initiatives."

About the National Gateway

The National Gateway is an innovative infrastructure project that will improve the flow of freight rail traffic throughout the eastern United States by increasing the use of double-stack trains, creating a more efficient rail route between Mid-Atlantic ports and Midwestern markets. This award-winning public-private partnership will clear 61 obstructions and build or expand six intermodal facilities along CSX's network in North Carolina, Virginia, Maryland, West Virginia, Pennsylvania, Ohio and the District of Columbia that together make up the National Gateway. The National Gateway is supported by a broad and diverse group of more than 300 public and private sector organizations and individuals. For more information visit www.nationalgateway.org <URL: <http://www.nationalgateway.org>>.

About CSX

CSX, based in Jacksonville, Fla., is one of the nation's leading transportation companies, providing rail, intermodal and rail-to-truck transload services. The company's transportation network spans approximately 21,000 miles, with service to 23 eastern states and the District of Columbia, and connects to more than 240 short line and regional railroads and more than 70 ocean, river, and lake ports. More information about CSX Corporation and its subsidiaries is available at www.csx.com <URL: <http://www.csx.com>>.

SOURCE CSX Corporation

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
<hr/>)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 6

May 2014

Final Environmental Impact Statement
& Section 4(f) Evaluation

VIRGINIA AVENUE TUNNEL

RECONSTRUCTION



Final Environmental Impact Statement
Final Section 4(f) Evaluation



FEDERAL HIGHWAY ADMINISTRATION

d.

DISTRICT DEPARTMENT OF TRANSPORTATION

**Virginia Avenue Tunnel Reconstruction
Final Environmental Impact Statement &
Section 4(f) Evaluation
Washington, DC**

**Submitted Pursuant to
42 U.S.C. 4332(2)(c) and 49 U.S.C 303**

**U.S. Department of Transportation
Federal Highway Administration
and
District of Columbia Department of Transportation**

**Cooperating Agencies
Federal Railroad Administration
National Capital Planning Commission
National Park Service
U.S. Marine Corps**

June 5, 2014
Date of Approval

Matthew T. Brown
Matthew T. Brown, Acting Director
District of Columbia Department of Transportation

June 5, 2014
Date of Approval

Joseph C. Lawson
Joseph C. Lawson, Division Administrator
Federal Highway Administration, District of
Columbia Division

The following persons may be contacted for additional information concerning this document:

Michael Hicks, Environmental Engineer
Federal Highway Administration

Faisal Hameed, Ph.D.,
Deputy Chief Engineer

District of Columbia Division
1990 K Street NW, Suite 510
Washington, DC 20006-1103
Michael.Hicks@dot.gov
(202) 219-3513

Project Development & Environment
District Department of Transportation
55 M Street SE, Suite 400
Washington, DC 20003
Faisal.Hameed@dc.gov
(202) 671-2326

The Federal Highway Administration and the District Department of Transportation are considering approvals for the proposed reconstruction of Virginia Avenue Tunnel. The tunnel is owned by CSX Transportation, Inc. (CSX) and is located beneath eastbound Virginia Avenue SE, with portals located a short distance west of 2nd Street SE and a short distance east of 11th

(over)

Street SE. The proposed project will include reconstruction of the tunnel, including converting the tunnel's single-track to a two-track configuration, and providing vertical clearance for double-stack intermodal container freight trains. Impacts of a no-build (Alternative 1) and three build alternatives (Alternatives 2, 3 and 4) are analyzed in this Final EIS. Alternative 3 was identified as the preferred alternative.

Section 1319 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) requires, to the maximum extent practicable, and unless certain conditions exist, that FHWA develop a single document that combines the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). FHWA has determined that practicability considerations preclude issuance of the combined document pursuant to section 1319 of MAP-21. Therefore, FHWA is issuing the FEIS as a separate document to allow the agencies to review additional public comments submitted after the FEIS and to convene an additional public meeting after the publication of the FEIS prior to issuing a Record of Decision

A Federal agency may publish a notice in the Federal Register, pursuant to 23 USC §139(l), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. FHWA intends to issue this 150 days' notice when it will issue the Record of Decision.

Table of Contents

Final Environmental Impact Statement (EIS)

Volume 1 Final EIS Chapters

Cover Sheet

Table of Contents	i
Executive Summary	S-1
S.1 Proposed Action	S-1
S.2 Purpose and Need	S-3
S.3 Selection of the Preferred Alternative	S-4
S.4 Reasonable Alternatives Considered	S-5
S.5 Other Nearby Major Governmental Proposed Actions	S-9
S.6 Summary of Environmental Impacts and Proposed Mitigation	S-9
S.7 Key Issues Raised by Community and Responses	S-26
S.7.1 Alternatives	S-27
S.7.2 Construction Impacts	S-28
S.7.3 Freight Train Operations	S-33
S.7.4 Right-of-Way	S-35
S.7.5 Other Issues	S-36
S.8 Major Unresolved Issues	S-37
S.9 Other Federal and Government of the District of Columbia Actions Required	S-37
S.10 Environmental Commitments	S-37
Chapter 1 Introduction	1-1
1.1 History	1-3
1.2 Background	1-4
1.3 Planning Process	1-7
Chapter 2: Purpose and Need	2-1
2.1 Virginia Avenue Tunnel Deficiencies	2-1
2.1.1 Tunnel Width	2-1
2.1.2 Tunnel Height	2-2
2.1.3 Tunnel Condition	2-3
2.2 Freight Transportation Demand	2-5
2.3 Commerce Demands	2-7
2.4 Logical Project Termini	2-8
Chapter 3 Alternatives	3-1
3.1 Overview	3-1
3.2 Selection of the Preferred Alternative	3-3

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECT

FINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

3.3	Alternative 1 - No Build	3-4
3.4	Build Alternatives	3-5
3.4.1	Preferred Alternative (Alternative 3) – Two New Tunnels.....	3-6
3.4.2	Alternative 2 - Rebuilt Tunnel / Temporary Runaround Track.....	3-8
3.4.3	Alternative 4 - New Partitioned Tunnel / Online Rebuild	3-9
3.5	Construction Period Conditions	3-11
3.5.1	Limits of Disturbance.....	3-11
3.5.2	Phasing.....	3-14
3.5.3	Access and Haul Routes.....	3-28
3.5.4	Maintenance of Traffic and Property Access.....	3-28
3.5.5	Safety and Security.....	3-32
3.5.6	Duration.....	3-36
3.5.7	Cost.....	3-37
3.6	Proposed Virginia Avenue SE Streetscape.....	3-38
3.7	Alternative Concepts Considered But Rejected.....	3-42
3.7.1	Alternative Concepts Overview	3-42
3.7.1.1	Concept 2: Rebuild, Temporary South Side Runaround.....	3-45
3.7.1.2	Concept 3: Rebuild, Temporary North Side Runaround.....	3-46
3.7.1.3	Concept 3A: Rebuild, Permanent Two Tunnels (New Tunnel on North Side of Existing Virginia Avenue Tunnel)	3-47
3.7.1.4	Concept 4: Rebuild, Temporary Combination Runaround	3-49
3.7.1.5	Concept 5: Rebuild, Permanent Two Tunnels (New Tunnel on South Side of Existing Virginia Avenue Tunnel)	3-50
3.7.1.6	Concept 6: Rebuild with On-Line Construction.....	3-51
3.7.1.7	Concept 7: Rebuild, Temporary Reroute	3-51
3.7.1.8	Concept 8: Reroute, Deep Bore Tunnel.....	3-55
3.7.1.9	Concept 9: Reroute NCPC Indian Head Alignment.....	3-56
3.7.1.10	Concept 10: Reroute, NCPC Dahlgren Alignment	3-60
3.7.1.11	Concept 11: Reroute, Permanent Reroute	3-60
3.7.2	Evaluation Criteria and Screening Process	3-60
3.7.3	Concepts Dismissed from Further Consideration	3-63
Chapter 4 Affected Environment		4-1
4.1	Land Use.....	4-1
4.1.1	Existing Land Uses	4-1
4.1.2	Land Use and Transportation Plans, Policies and Controls	4-6
4.1.2.1	Federal	4-6
4.1.2.2	District of Columbia	4-6
4.1.2.3	Other Governmental Plans and Actions	4-9
4.1.3	Zoning.....	4-13
4.2	Farmland.....	4-16
4.3	Social and Community Conditions	4-17
4.3.1	Demographic Conditions	4-17
4.3.2	Neighborhoods and Communities	4-21

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

4.3.3	Public Facilities, Services and Safety	4-24
4.3.4	Environmental Justice	4-27
4.4	Economic Conditions	4-30
4.5	Climate and Air Quality.....	4-31
4.5.1	Applicable Regulations and Standards.....	4-32
4.5.2	Criteria Pollutants and Effects	4-32
4.5.3	Other Pollutants and Effects.....	4-36
4.5.4	Attainment Status and Conformity with Regional Air Quality Planning	4-37
4.5.5	Ambient Air Quality.....	4-38
4.5.5.1	Climate and Local Meteorology	4-38
4.5.5.2	Monitored Air Quality.....	4-38
4.6	Noise	4-41
4.6.1	Description and Characteristics of Noise	4-41
4.6.2	Existing Noise Conditions	4-42
4.7	Vibration	4-44
4.7.1	Description and Characteristics of Vibration.....	4-44
4.7.2	Existing Vibration Conditions.....	4-44
4.8	Site Contamination - Soil	4-47
4.8.1	Geology.....	4-47
4.8.2	Site Contamination.....	4-49
4.8.2.1	Database and Historic Mapping Review.....	4-49
4.8.2.2	Soil and Groundwater Investigations	4-50
4.9	Water Resources	4-54
4.9.1	Surface Waters.....	4-55
4.9.1.1	Navigable Waters	4-55
4.9.1.2	Wild and Scenic Rivers.....	4-55
4.9.1.3	Coastal Zone	4-55
4.9.1.4	Chesapeake Bay Protection	4-57
4.9.2	Groundwater.....	4-57
4.9.3	Wetlands.....	4-57
4.9.4	Floodplains.....	4-58
4.10	Vegetation and Wildlife	4-60
4.10.1	Flora.....	4-60
4.10.2	Fauna	4-63
4.10.3	Threatened and Endangered Species.....	4-64
4.11	Historic and Archaeological Resources	4-65
4.11.1	Section 106 Process.....	4-65
4.11.2	Historic Properties.....	4-66
4.12	Public Parks and Recreational Resources.....	4-74
4.13	Visual and Aesthetic Conditions.....	4-77
4.14	Utilities.....	4-79
4.15	Transportation	4-80
4.15.1	Freight Infrastructure and Operations	4-80
4.15.2	Roadway Network.....	4-80

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

4.15.3	Traffic Conditions	4-84
4.15.4	Parking	4-84
4.15.5	Pedestrian and Bicycle Facilities	4-89
4.15.6	Transit Facilities and Services	4-89
Chapter 5	Environmental Consequences	5-1
5.1	Land Use	5-2
5.1.1	Construction Impacts	5-2
5.1.2	Post-Construction Impacts	5-3
5.1.2.1	Right-of-Way Requirements	5-3
5.1.2.2	Land Use Development Trends	5-4
5.1.2.3	Land Use Plans, Policies and Controls	5-4
5.1.2.4	Zoning	5-7
5.1.3	Mitigation Measures	5-7
5.2	Farmland	5-7
5.2.1	Construction Impacts	5-7
5.2.2	Post-Construction Impacts	5-7
5.2.3	Mitigation Measures	5-7
5.3	Social and Community Conditions	5-7
5.3.1	Construction Impacts	5-7
5.3.1.1	Neighborhoods and Communities	5-7
5.3.1.2	Public Facilities, Services and Safety	5-8
5.3.2	Post-Construction Impacts	5-10
5.3.2.1	Neighborhoods and Communities	5-10
5.3.2.2	Public Facilities, Services and Safety	5-10
5.3.3	Environmental Justice	5-11
5.3.4	Mitigation Measures	5-13
5.4	Economic Conditions	5-15
5.4.1	Construction Impacts	5-15
5.4.1.1	Employment	5-15
5.4.1.2	Commercial/Residential	5-15
5.4.2	Post-Construction Impacts	5-17
5.4.2.1	Employment	5-17
5.4.2.2	Commercial/Residential	5-17
5.4.3	Mitigation Measures	5-17
5.5	Air Quality	5-18
5.5.1	Conformity Regulations	5-18
5.5.2	Construction Impacts	5-19
5.5.3	Post-Construction Impacts	5-24
5.5.4	Mitigation Measures	5-24
5.6	Noise	5-25
5.6.1	Noise Impact Criteria	5-26
5.6.2	Construction Impacts	5-27
5.6.3	Post-Construction Impacts	5-35

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

5.6.4 Mitigation Measures	5-35
5.7 Vibration	5-36
5.7.1 Vibration Impact Criteria	5-36
5.7.2 Construction Impacts	5-38
5.7.3 Post-Construction Impacts	5-39
5.7.4 Mitigation Measures	5-43
5.8 Site Contamination - Soils	5-47
5.8.1 Construction Impacts	5-47
5.8.2 Post-Construction Impacts	5-49
5.8.3 Mitigation Measures	5-49
5.9 Water Resources	5-49
5.9.1 Construction Impacts	5-49
5.9.1.1 Surface Water	5-50
5.9.1.2 Groundwater	5-50
5.9.1.3 Wetlands	5-51
5.9.1.4 Floodplains	5-51
5.9.2 Post-Construction Impacts	5-51
5.9.2.1 Surface Water	5-52
5.9.2.2 Groundwater	5-52
5.9.2.3 Wetlands	5-52
5.9.2.4 Floodplains	5-53
5.9.3 Mitigation Measures	5-53
5.10 Vegetation and Wildlife	5-53
5.10.1 Construction Impacts	5-53
5.10.1.1 Flora	5-53
5.10.1.2 Fauna	5-55
5.10.1.3 Threatened and Endangered Species	5-55
5.10.2 Post-Construction Impacts	5-56
5.10.2.1 Flora	5-56
5.10.2.2 Fauna	5-55
5.10.2.3 Threatened and Endangered Species	5-56
5.10.3 Mitigation Measures	5-56
5.11 Historic and Archaeological Resources	5-57
5.11.1 Section 106 Compliance	5-57
5.11.2 Construction Impacts	5-58
5.11.3 Post-Construction Impacts	5-58
5.11.4 Mitigation Measures	5-59
5.12 Parks and Recreational Resources	5-62
5.12.1 Construction Impacts	5-62
5.12.2 Post-Construction Impacts	5-64
5.12.3 Section 6(f)	5-65
5.12.3.1 Legal and Regulatory Context	5-65
5.12.3.2 Description of Section 6(f) Properties	5-66
5.12.3.3 Potential Impacts on Section 6(f) Properties	5-66

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

5.12.3.4 Section 6(f) Coordination	5-66
5.12.4 Mitigation Measures	5-66
5.13 Visual and Aesthetic Conditions	5-66
5.13.1 Construction Impacts	5-66
5.13.2 Post-Construction Impacts	5-68
5.13.3 Mitigation Measures	5-69
5.14 Utilities	5-70
5.14.1 Construction Impacts	5-70
5.14.2 Post-Construction Impacts	5-80
5.14.3 Mitigation	5-80
5.15 Transportation	5-81
5.15.1 Freight Operations	5-81
5.15.1.1 Construction Impacts	5-81
5.15.1.2 Post-Construction Impacts	5-81
5.15.1.3 Mitigation Measures	5-82
5.15.2 Roadway Network	5-83
5.15.2.1 Construction Impacts	5-84
5.15.2.2 Post-Construction Impacts	5-84
5.15.2.3 Mitigation Measures	5-85
5.15.3 Traffic Conditions	5-85
5.15.3.1 Construction-Period Impacts	5-85
5.15.3.2 Post Construction Impacts	5-92
5.15.3.3 Mitigation Measures	5-93
5.15.4 Parking	5-95
5.15.4.1 Construction Impacts	5-95
5.15.4.2 Post-Construction Impacts	5-96
5.15.4.3 Mitigation Measures	5-97
5.15.5 Pedestrian and Bicycle Facilities	5-97
5.15.5.1 Construction Impacts	5-97
5.15.5.2 Post-Construction Impacts	5-98
5.15.5.3 Mitigation Measures	5-98
5.15.6 Transit Facilities and Services	5-98
5.15.6.1 Construction Impacts	5-98
5.15.6.2 Post-Construction Impacts	5-99
5.15.6.3 Mitigation Measures	5-99
5.16 Energy	5-99
5.17 Indirect Effects	5-100
5.18 Cumulative Impacts	5-100
5.19 Permits and Approvals	5-105
5.20 Relationship of Local Short-Term Uses vs. Long-Term Productivity	5-106
5.21 Irreversible and Irretrievable Commitment of Resources	5-106
Chapter 6 Final Section 4(f) Evaluation	6-1
6.1 Project Description	6-1

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

6.2	Purpose and Need	6-1
6.2.1	Structural and Operational Deficiencies of Virginia Avenue Tunnel	6-3
6.2.2	Freight Transportation Demand	6-3
6.2.3	Commerce Demands	6-3
6.3	Proposed Action	6-3
6.4	Regulatory Requirements	6-4
6.4.1	Key Considerations in Section 4(f)	6-4
6.4.2	Assessing "Use" of Section 4(f) Properties	6-6
6.5	Section 4(f) Properties	6-7
6.5.1	Virginia Avenue Tunnel	6-7
6.5.2	L'Enfant Plan of Washington, DC	6-8
6.5.3	Capitol Hill Historic District	6-8
6.5.4	Virginia Avenue Park	6-8
6.6	Other Section 4(f) Properties	6-8
6.6.1	Garfield Park	6-9
6.6.2	Marine Corps Facility Turf Field	6-9
6.6.3	St. Paul AUMP Church	6-10
6.7	Alternatives Considered	6-10
6.7.1	Alternative 1, No Build	6-10
6.7.2	Alternative 2, Rebuilt Tunnel / Temporary Runaround Track	6-10
6.7.3	Alternative 3, Two New Tunnels	6-11
6.7.4	Alternative 4, New Partitioned Tunnel / Online Rebuild	6-13
6.8	Impacts on Section 4(f) Properties	6-14
6.8.1	Virginia Avenue Tunnel	6-14
6.8.2	L'Enfant Plan of Washington, DC	6-14
6.8.3	Capitol Hill Historic District	6-15
6.8.4	Virginia Avenue Park	6-15
6.9	Evaluation of Section 4(f) Use	6-16
6.9.1	Avoidance Alternatives Considered	6-16
6.9.1.1	Concept 1/Alternative 1 – No Build	6-17
6.9.1.2	Concept 8 – Reroute, Deep Bore Tunnel	6-17
6.9.1.3	Concept 9 – Reroute, Indian Head Alignment and Concept 10 – Reroute Dahlgren Alignment	6-17
6.9.1.4	Concept 11 – Permanent Reroute	6-18
6.9.2	Least Overall Harm	6-18
6.9.2.1	Analysis	6-18
6.9.2.2	Least Overall Harm Conclusion	6-23
6.9.3	Planning and Measures to Minimize Harm	6-23
6.10	Agency Coordination	6-25
6.11	Section 4(f) Conclusion	6-26
Chapter 7 Comments and Coordination		7-1
7.1	Agency Consultation and Coordination	7-1
7.1.1	Early Agency Briefings	7-1

7.1.2	NEPA Scoping	7-2
7.1.3	Interagency Meetings.....	7-3
7.1.4	Agency Regulatory Coordination	7-4
7.1.5	Other Agency Meetings.....	7-7
7.2	Community Outreach	7-7
7.2.1	Community Group Briefings	7-7
7.2.2	Public Information Meetings	7-9
7.2.3	Project Website.....	7-11
7.2.4	Project Newsletters.....	7-12
7.2.5	Other Activities	7-12
7.3	Draft Environmental Impact Statement	7-12
7.3.1	Availability.....	7-12
7.3.2	Public Hearing	7-12
7.3.3	Comments.....	7-13
Chapter 8 List of Preparers		8-1
Chapter 9 Final EIS Recipients		9-1
Chapter 10 References		10-1
Chapter 11 Index		11-1

List of Figures

S-1	Project Location	S-2
S-2	Cross Section View of Post-Construction Preferred Alternative between 3rd and 9th Streets SE	S-6
S-3	Cross Section View of Post-Construction Alternative 2 between 3rd Street and 9th Streets SE	S-7
S-4	Cross Section View of Post-Construction Alternative 4 between 3rd and 9th Streets SE	S-8
1-1	Location of the Existing Virginia Avenue Tunnel	1-2
1-2	CSX Major Rail Network.....	1-6
1-3	Active Rail Lines within the District of Columbia	1-7
2-1	Cross-Section of Existing Virginia Avenue Tunnel.....	2-4
3-1	Typical Sections of the Preferred Alternative by Section.....	3-7
3-2	Cross Section View of Post-Construction Preferred Alternative between 3rd and 9th Streets SE	3-8
3-3	Cross Section View of Post-Construction Alternative 2 between 3rd and 9th Streets SE	3-9
3-4	Cross Section View of Post-Construction Alternative 4 between 3rd and 9th Streets SE	3-10

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

3-5	Limits of Disturbance during Construction under the Preferred Alternative or Alternative 2	3-12
3-6	Construction Haul Routes and Access Points	3-29
3-7	Maintenance of Traffic Plan, Phase 1	3-31
3-8	Maintenance of Traffic Plan, Phase 2	3-33
3-9	Location Key for Proposed Roadway Typical Sections	3-39
3-9A	Proposed Typical Section between 2nd and 4th Streets	3-40
3-9B	Proposed Typical Section between 4th and 5th/6th Streets	3-40
3-9C	Proposed Typical Section between 5th/6th and 7th Streets	3-40
3-9D	Proposed Typical Section between 7th and 8th Streets	3-41
3-9E	Proposed Typical Section between 8th and 9th Streets	3-41
3-10	Concept 2 Typical Section	3-46
3-11	Concept 3 Typical Section	3-47
3-12	Concept 3A Typical Section	3-48
3-13	Concept 4 Typical Section	3-49
3-14	Concept 5 Typical Section	3-50
3-15	Concept 6 Typical Section	3-52
3-16	Concept 7 Typical Section	3-53
3-17	Temporary Detours outside the District under Concept 7	3-54
3-18	Concept 8 Typical Section	3-57
3-19	Concept 8 Tunnel Alignment and Portal Locations	3-58
3-20	Concept 9, NCPC Indian Head Alignment	3-59
3-21	Concept 10, NCPC Dahlgren Alignment	3-61
4-1	Existing Land Uses	4-3
4-2	Zoning in the Immediate Vicinity of the Project	4-14
4-3	Overlay Districts near the Project	4-15
4-4	Census Blocks and Tracts near the Project	4-18
4-5	Neighborhoods and Advisory Neighborhood Commissions near Project	4-23
4-6	Public and Emergency Facilities and Services	4-25
4-7	2010 Census Blocks Reporting Minority Populations and Actual EJ Populations	4-29
4-8	Noise Monitoring Locations	4-43
4-9	Vibration Monitoring Locations	4-46
4-10	Soils in the General Vicinity of the Project	4-48
4-11	Soil and Groundwater Sampling Locations	4-53
4-12	Water Resources in the General Vicinity of the Project	4-56
4-13	Floodplains in the General Vicinity of the Project	4-59
4-14	Tree Stands in Project	4-62
4-15	Historic and Archaeological Features	4-67
4-16	Parks and Recreation Facilities	4-76
4-17	Roadway Network	4-81
4-18	Analyzed Intersections	4-85
4-19	Parking Locations in the General Vicinity of the Project	4-88
4-20	Crosswalks in the General Vicinity of the Project	4-90
4-21	Bicycle Facilities in the General Vicinity of the Project	4-91

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECT

FINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

4-22	Metrobus Routes in the General Vicinity of the Project	4-92
5-1	Construction-Period Noise Modeling Receptor Sites.....	5-29
5-2	Highway Noise Analysis Sites	5-34
5-2	Limits of Disturbance within Virginia Avenue Park	5-63
5-4	Storm and Sanitary Sewer Lines Affected by the Build Alternatives	5-71
5-5	Water Lines Affected by the Build Alternatives.....	5-73
5-6	Natural Gas Lines Affected by the Build Alternatives	5-73
5-7	Electrical Power Lines Affected by the Build Alternatives.....	5-76
5-8	Communication Lines Affected by the Build Alternatives.....	5-76
5-9	Analyzed Intersections	5-89
6-1	Project Location	6-2
6-2	Cross Section View of Post-Construction Alternative 2 between 3rd and 9th Streets SE	6-11
6-3	Cross Section View of Post-Construction Preferred Alternative between 3rd and 9th Streets SE	6-12
6-4	Cross Section View of Post-Construction Alternative 4 between 3rd and 9th Streets SE	6-13

List of Tables

S-1	Summary of Environmental Impact Studies and Proposed Mitigation.....	S-10
3-1	Alternative 2 Construction Phasing.....	3-15
3-2	Preferred Alternative Construction Phasing.....	3-19
3-3	Alternative 4 Construction Phasing.....	3-24
3-4	Estimated Construction Duration by Alternative.....	3-37
3-5	Estimated Cost Breakdowns by Alternative	3-38
3-6	Concepts Evaluation Matrix	3-64
4-1	Comprehensive Plan Goals Relevant to the Project	4-7
4-2	Goals for the Near Southeast Area	4-8
4-3	Subareas in the General Vicinity of Project	4-9
4-4	Zoning Code Descriptions for Parcels Immediately Adjacent to the Project	4-16
4-5	Population by Race and Hispanic Origins in 2010.....	4-19
4-6	Population by Age in 2010.....	4-20
4-7	Employment and Income in 2010	4-21
4-8	National Origin in 2010.....	4-21
4-9	Public and Emergency Facilities and Services.....	4-26
4-10	National Ambient Air Quality Standards	4-33
4-11	Attainment Classifications and Definitions.....	4-37
4-12	Ambient Air Quality Monitor Data 2009-2011	4-39
4-13	Existing Measured Sound Levels at Sensitive Receptors.....	4-44
4-14	Summary of Tree Survey.....	4-60
4-15	Historic Properties in the Area of Potential Effects	4-68
4-16	Existing LOS of Signalized Intersections in the General Vicinity of the Project.....	4-86
4-17	Existing LOS of Un-signalized Intersections in the General Vicinity of the Project	4-87

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

5-1	General Conformity Applicability Thresholds	5-19
5-2	Total Annual Emissions from Construction Equipment and Activities under Alternative 2	5-20
5-3	Total Annual Emissions from Construction Equipment and Activities under the Preferred Alternative	5-21
5-4	Total Annual Emissions from Construction Equipment and Activities under Alternative 4	5-21
5-5	Maximum Total Estimated Criteria Pollutant Concentrations at Sensitive Receptors	5-22
5-6	Results of CO Analysis at the M Street SE / 8th Street SE Intersection	5-24
5-7	Predicted Construction Noise Levels for the Build Alternatives by Receptor Location and Type of Construction Activity.....	5-29
5-8	Predicted Noise Levels from Temporary Train Operations under Alternative 2	5-32
5-9	Predicted Noise Levels from Temporary Train Operations under Alternative 4	5-32
5-10	Predicted Noise Levels from Traffic Detours during Construction	5-33
5-11	Human Annoyance Vibration Impact Criteria by Land Use Category	5-37
5-12	Human Annoyance Vibration Impact Criteria for Special Buildings	5-37
5-13	Building Vibration Damage Impact Criteria	5-38
5-14	Construction Equipment Vibration Impact Distances.....	5-39
5-15	Highest Construction Activity Vibration Levels.....	5-40
5-16	Human Annoyance Impact Distances During Train Pass By Events.....	5-42
5-17	Impact Distances from Train Pass-By Events under the Preferred Alternative.....	5-44
5-18	Storm and Sanitary Sewer Lines Affected by the Build Alternatives	5-70
5-19	Water Lines Affected by the Build Alternatives.....	5-72
5-20	Natural Gas Lines Affected by the Build Alternatives	5-72
5-21	Electric Power Lines Affected by the Build Alternatives	5-75
5-22	Communication Lines Affected by the Build Alternatives.....	5-75
5-23	Highest Vibration Levels at Water Pipes	5-79
5-24	Highest Vibration Levels at Sewer Pipes	5-79
5-25	Construction-Period Predicted Peak Hour Level-of-Service (and Overall Delay) at Selected Signalized Intersections in the General Vicinity of the Project	5-86
5-26	Construction-Period Predicted Peak Hour Level-of-Service (and Overall Delay) at Selected Un-Signalized Intersections in the General Vicinity of the Project.....	5-88
5-27	Level-of-Service Definitions	5-90
5-28	Post-Construction Predicted Peak Hour Level-of-Service (and Overall Delay) at Signalized Intersections along Virginia Avenue SE.....	5-94
5-29	Parking Displacements by Location and MOT Phase	5-96
6-1	Summary of Agency Coordination Activities	6-26
7-1	Summary of Draft EIS Comments.....	7-14

Volume 2
Appendix A

- A Federal Register Notices
- Agency Scoping Letters
- Cooperating Agency Correspondence
- Section 7 Correspondence
- Section 106 Correspondence and Memorandum of Agreement
- CSX/DC Government Memoranda of Agreements
- Pre-Draft EIS Public Comments

Volume 3
Appendices B to K

- B Concepts Evaluation Technical Report
- C Limits of Disturbance of Build Alternatives
- Residential Property Mitigation Plan "Front Row" Residences
- D Air Quality Technical Report
- E Noise Assessment Report
- F Vibration Analysis Report
- G Modified Phase I Environmental Site Assessment
- H Tree Inventory
- Composite Species List
- I Section 106 Assessment of Effects for Historic Properties
- J Transportation Management Plan Report
- Traffic Operational Analysis Report
- K Project Newsletters
- Public Meeting Advertising

Volume 4
Appendix L: Draft EIS Comments and Responses

Volume 5
Appendix M: Construction Phasing Report

Glossary

Advisory Neighborhood Commissions (ANCs) — A District of Columbia local body of government that is made of the residents of the neighborhoods that affected by government action. There are 37 ANCs in the District of Columbia.

Ballast — For freight rail, normally consisting of crushed stone and is used to hold the track in place as trains pass through and to facilitate drainage.

Boring — the act of drilling holes into the earth to obtain soil samples.

Build Alternative — an alternative that requires programming and construction of improvements to fulfill the purpose and need for a project

Clean Water Act — also known as the Federal Water Pollution Control Act of 1972 disallows discharging any pollutant from a point source into navigable waters, unless a permit was obtained beforehand. Section 106 of the Act, provides federal assistance to states and interstate agencies to establish and implement ongoing water pollution control grants.

Coastal Zone Management Act of 1972 — an act administered by the Office of Ocean and Coastal Resource Management of the National Oceanic and Atmospheric Administration, provides for management of the nation's coastal resources, including the Great Lakes, and balances economic development with environmental conservation. The CZMA outlines two national programs, the National Coastal Zone Management Program and the National Estuarine Research Reserve System.

Combined Sewer Overflow (CSO) Tunnel — a tunnel that carries stormwater into the sewer system under normal conditions. In periods of a heavy weather event, when the sewer system cannot accommodate the increase in stormwater, the excess is discharged directly into a water source untreated.

Common Carrier Obligation - The common carrier obligation refers to the statutory duty of railroad companies to provide "transportation or service on reasonable request" (49 U.S.C. 11101(a)). A railroad company may not refuse to provide service merely because to do so would be inconvenient or unprofitable.

Council on Environmental Quality (CEQ) – Established in the Executive Office as part of the National Environmental Policy Act of 1969 (NEPA), the council coordinates federal environmental efforts, policies, and initiatives, and ensures that federal agencies meet NEPA requirements.

Cut-and-cover — method used to construct tunnels. This involves digging an open trench ("cut") and then sealing the top of the tunnel and "covering" it with backfill or other material. The "cut and cover" method is typically cheaper than boring

Environmental Impact Statement (EIS) – A comprehensive study of potential environmental impacts related to federally assisted projects. Projects for which an EIS is required are defined in the National Environmental Policy Act of 1969, as amended.

Environmental Justice — the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. An environmental justice analysis is required in environmental assessments and environmental impact statements to ensure a future project does not disproportionately impact low-income and/or minority areas.

Federal Transit Administration (FTA) – The Federal Transit Administration (FTA) assists in developing improved mass transportation systems for cities and communities nationwide. Through its grant programs, FTA helps plan, build, and operate transit systems with convenience, cost and accessibility in mind.

Hispanic — persons who originate from Spanish-speaking countries, such as those in Latin America. In the U.S. Census, Hispanic is considered an ethnicity, not a race.

Intermodal Shipping Container — A freight container that is transported via multiple modes of transportation (usually between ship and train).

Jurisdictional determination (JD) – Regulatory review of previously identified wetlands and waters of the U.S. by the Army Corps of Engineers in compliance with Section 404 of the Clean Water Act.

Limits of Disturbance (LOD) — The area affected by construction and staging for the Project.

Maintenance of Traffic (MOT) — a plan that illustrates or lays out how traffic can navigate through a project site during an event that interrupts the everyday traffic flow (such as construction).

MARC (Maryland Area Regional Commuter) — Commuter Rail service offered by the Maryland Transit Administration. Service areas include Harford County, Maryland; Baltimore City; Washington D.C.; Brunswick, Maryland; Frederick, Maryland and Martinsburg, West Virginia.

Memorandum of Agreement (MOA) – A document that describes the terms and conditions agreed upon to resolve the potential adverse effects of a federal agency program, under Section 106 of the National Historic Preservation Act.

National Environmental Policy Act of 1969 (NEPA) – The law that requires federal agencies to consider the environmental impacts of major federal projects or decisions, to share information with the public; to identify and assess reasonable alternatives; and to coordinate efforts with other planning and environmental reviews taking place.

National Flood Insurance Program — The National Flood Insurance Program (NFIP) is a Federal Program under the jurisdiction of the Federal Emergency Management Agency (FEMA) that provides floodplain information to local communities, as well as flood insurance for property owners at risk to flooding. The NFIP makes available previously unavailable coverage for flood losses through a cooperative program based on community adoption and enforcement of minimum Federal floodplain management criteria.

National Historic Preservation Act of 1966 (NHPA) – The law that requires federal agencies to preserve historical and archeological sites. The Act created the National Register of Historic Places, the list of National Historic Landmarks, and State Historic Preservation Offices. Section 106 of the Act requires Federal agencies to take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. (Also see Section 106 terminology)

No Build/ No Action Alternative — The opposite of a Build Alternative, the No Build or No Action Alternative, means the proposed activity would not take place. The resulting environmental effects from the No Build or No Action Alternative serve as a control to compare with the effects of the Build Alternatives.

Project Proponent — the individual or organization that has overall control and responsibility for the project, or an individual or organization that together with others, each of which is also a project proponent, has overall control or responsibility for the project.

Rail Headway — The time between two trains boarded by the same unit at the same point.

Record of Decision (ROD) – The final step in the EIS process under NEPA. Documentation of the lead federal agency's formal decision on the proposed action. This document constitutes the basis for the federal agency's environmental finding on the project.

Right-of-way or rights-of-way (ROW) — Land owned by federal, state, or local agency reserved for transportation or utility uses (such as a road or power transmission lines).

Safe Drinking Water Act — a law originally passed in 1974, amended in 1986 and amended again 1996, to regulate the nation's public drinking water supply.

Washington Metropolitan Area Transit Authority (WMATA) – The agency that plans, builds, operates, and maintains the Washington D.C. metropolitan region's Metrorail and Metrobus transit systems as well as MetroAccess paratransit service.

Section 106 Terminology

Adverse Effect - Found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified

subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative. Adverse effects may include, but are not limited to physical destruction or damage to all or part of a historic property; alterations that are not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR part 68); removal of the property from its historic location; change of the character of the use or physical features that contribute to its significance; and/or introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.

Advisory Council on Historic Preservation (ACHP) - An independent federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy.

Area of Potential Effects (APE) - the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

Aspects of Integrity - Location; Design; Setting; Materials; Workmanship; Feeling; Association. These aspects influence the property's ability to convey its significance. Eligible and listed properties usually retain several aspects of integrity.

Historic Properties Affected - In accordance with 36 CFR 800.4(d)(2), at least one historic property is present within the APE. Consulting parties should then be invited to provide their views on the effects the undertaking. The federal agency is then responsible for making effect determinations, which are described in Section 4.

No Adverse Effect - In accordance with 36 CFR 800.5(b), an undertaking may be determined to have "No Adverse Effect" to historic properties if the undertaking's effects will impact the historic properties, but the effect would not alter a characteristic that qualifies the resource for inclusion in the NRHP in a manner that diminishes the significant aspect of integrity, then the finding for that aspect of integrity is "No Adverse Effect."

No Effect - In accordance with 36 CFR 800.4(d)(1), if no historic properties are present or an undertaking may have no effect to historic properties present in the APE, a finding of "No Effect" may be determined for an undertaking. This finding indicates that an undertaking would not alter any aspects of integrity or character-defining features for any historic properties.

No Historic Properties Affected - In accordance with 36 CFR 800.4(d)(1), no historic properties are present within the APE or historic properties may be present but the undertaking will have no effect on them. The no effect means the undertaking would not alter any aspects of integrity or character-defining features on any historic property. If the federal lead agencies renders a "no historic properties affected" determination, and the SHPO concurs, the Section 106 process is then concluded.

Historic Property - Properties listed in or determined eligible for listing in the NRHP. The NRHP Criteria is applied to evaluate a property's historic significance.

Memorandum of Agreement (MOA) or Programmatic Agreement (PA): Cooperative written agreement between parties that communicates the agreed upon project or objective. Generally used in the Section 106 process to resolve adverse effects, describe mitigation, or stipulate project procedures.

National Historic Landmark (NHL) - nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States.

National Register of Historic Places (National Register) - Administered by the National Park Service (NPS), the official list of the nation's historic places worthy of preservation. It includes districts, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture.

National Register Criteria - The Criteria state that the quality of significance in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- A. are associated with events that have made a significant contribution to the broad patterns of our history
- B. are associated with the lives or persons significant in our past; or
- C. embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. have yielded, or may be likely to yield, information important in prehistory or history

Built resources are typically evaluated under Criterion A, B, and C; Criterion D applies primarily to archaeological resources.

State Historic Preservation Officer (SHPO) - Administers the national historic preservation program at the state level, reviews National Register of Historic Places nominations, maintains data on historic properties that have been identified but not yet nominated, and consults with federal agencies during Section 106 review.

Undertaking - In accordance with CFR 800.16(y), a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency. It includes those carried out by or on behalf of a federal agency; those carried out with federal financial assistance;

those requiring a federal permit, license, or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a federal agency.

Acronyms and Abbreviations

<u>Acronym/Abbreviation</u>	<u>Full Name</u>
ACHP.....	Advisory Council on Historic Preservation
ADA.....	Americans with Disabilities Act
Amtrak.....	National Passenger Railway Corporation
ANC.....	Advisory Neighborhood Commission
APE.....	Area of Potential Effect
AREMA.....	American Railway Engineering and Maintenance-of-Way
BGS.....	Below Ground Surface
BTEX compounds.....	benzene, toluene, ethylbenzene, and xylenes
CAAA.....	Clean Air Act Amendments
CEQ.....	Council on Environmental Quality
CFR.....	Code of Federal Regulations
CLRP.....	Constrained Long Range Plan
CO.....	Carbon monoxide
CSO.....	combined sewer overflow
CSX.....	CSX Transportation, Inc.
CZMA.....	Coastal Zone Management Act of 1972
CZMP.....	Coastal Zone Management Plan
dB.....	Decibel
DBH.....	Diameter at Breast Height
DC.....	District of Columbia
DCEPA.....	District of Columbia Environmental Policy Act
DCOZ.....	District of Columbia Office of Zoning
DCRA.....	DC Department of Consumer and Regulatory Affairs
DDOE.....	DC Department of the Environment
DDOT.....	District Department of Transportation
DMPED.....	DC Office of the Deputy Mayor for Planning and Economic Development
DPR.....	DC Department of Parks and Recreation
DPW.....	DC Department of Public Works
EIS.....	Environmental Impact Statement
EJ.....	Environmental Justice
EO.....	Executive Order
FAF.....	Freight Analysis Framework
FAR.....	Floor Area Ratio
FEMA.....	Federal Emergency Management Agency
FHWA.....	Federal Highway Administration
FIRM.....	Flood Insurance Rate Map
FTA.....	Federal Transit Administration
GHG.....	Greenhouse Gas

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECT

FINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

HABS.....	Historic American Building Survey
HAER.....	Historic American Engineering Record
HHRAP.....	Human Health Risk Assessment Protocol
ISA.....	International Society of Arboriculture
Ldn.....	day-night sound level
Leq.....	equivalent continuous noise level
LOD.....	Limits of Disturbance
LUST.....	Leaking Underground Storage Tank
MARC.....	Maryland Area Regional Commuter
MAROPs.....	Mid-Atlantic Rail Operations
MOA.....	Memorandum of Agreement
MOT.....	Maintenance of Traffic
MSATs.....	Mobile Source Air Toxics
MWCOG.....	Metropolitan Washington Council of Governments
NAAQS.....	National Ambient Air Quality Standards
NCPC.....	National Capitol Planning Commission
NDW.....	Naval District Washington
NEPA.....	National Environmental Policy Act of 1969
NHL.....	National Historic Landmark
NHPA.....	National Historic Preservation Act of 1966
NO ₂	Nitrogen Dioxide
NPS.....	National Park Service
NRCS.....	Natural Resources Conservation Service
NS.....	Norfolk Southern
O ₃	Ozone
OP.....	(District of Columbia) Office of Planning
PA.....	Programmatic Agreement
PCBs.....	polychlorinated biphenyls
PM ₁₀ ; PM _{2.5}	Particulate Matter 10/2.5 microns
PPV.....	peak particle velocity
RCRA.....	Resource Conservation and Recovery Act
ROD.....	Record of Decision
SHPO.....	State Historic Preservation Officer
SIP.....	State Improvement Plan
SVOCs.....	semi-volatile organic compounds
TCLP.....	toxicity characteristic leaching procedure
TIP.....	Transportation Improvement Plan
TPB.....	(National Capital Region) Transportation Planning Board
TPH-DRO.....	total petroleum hydrocarbons in the diesel range organics
TPH-GRO.....	total petroleum hydrocarbons in the gasoline range organics
TTI.....	Texas Transportation Institute
FWS.....	U.S. Fish and Wildlife Service
USACE.....	U.S. Army Corps of Engineers
UST.....	Underground Storage Tanks

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECT

FINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

VdB vibration decibels
VMT Vehicle Miles Traveled
VOCs volatile organic compounds
VRE Virginia Railway Express
WASA District of Columbia Water and Sewer Authority
WMATA Washington Metropolitan Area Transit Authority

Executive Summary

Executive Summary

S.1 Proposed Action

The Federal Highway Administration (FHWA) in conjunction with the District of Columbia Department of Transportation (DDOT) is issuing this Final Environmental Impact Statement (Final EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, for the proposed reconstruction of the Virginia Avenue Tunnel (the Project). FHWA is the lead federal agency for the development of the EIS while DDOT is the joint lead agency. The Federal Railroad Administration (FRA), the National Park Service (NPS), the National Capital Planning Commission (NCPC) and the U.S. Marine Corps are cooperating agencies for the EIS. The project sponsor is CSX Transportation, Inc. (CSX). The tunnel is owned by CSX and is located in the Capitol Hill neighborhood of the District of Columbia (DC or District) beneath eastbound Virginia Avenue SE from 2nd Street SE to 9th Street SE; Virginia Avenue Park between 9th and 11th Streets; and the 11th Street Bridge right-of-way. The tunnel is also aligned on the south side of Interstate 695 (I-695) previously known as Interstate 295 (I-295) (see Figure S-1). The tunnel portals are located a short distance west of 2nd Street SE and a short distance east of 11th Street SE. The tunnel and rail lines running through the District are part of CSX's eastern seaboard freight rail corridor, which connects Mid-Atlantic and Midwest states.

The reconstruction of the tunnel will require the short-term (approximately a week or less) closure of ramps of an Interstate Highway (I-695) and use of interstate highway air rights which require FHWA approval. Both approvals are federal actions. CSX is also seeking approval from DDOT to allow temporary I-695 ramp closures and interstate highway air rights. DDOT has issued an occupancy

permit relative to Virginia Avenue SE and adjacent streets, which is contingent on the selection of a build alternative. The FEIS has identified Alternative 3 as the selected build alternative, also known as the Preferred Alternative. The permit will have no force or effect until a build alternative is approved via a

Double-Stack Intermodal Container Freight Train

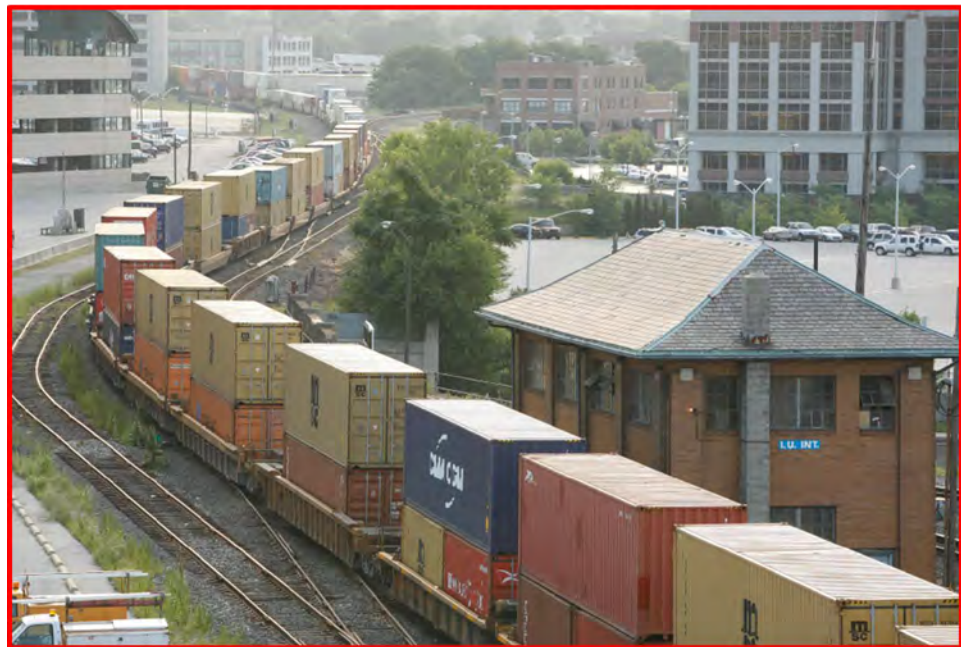
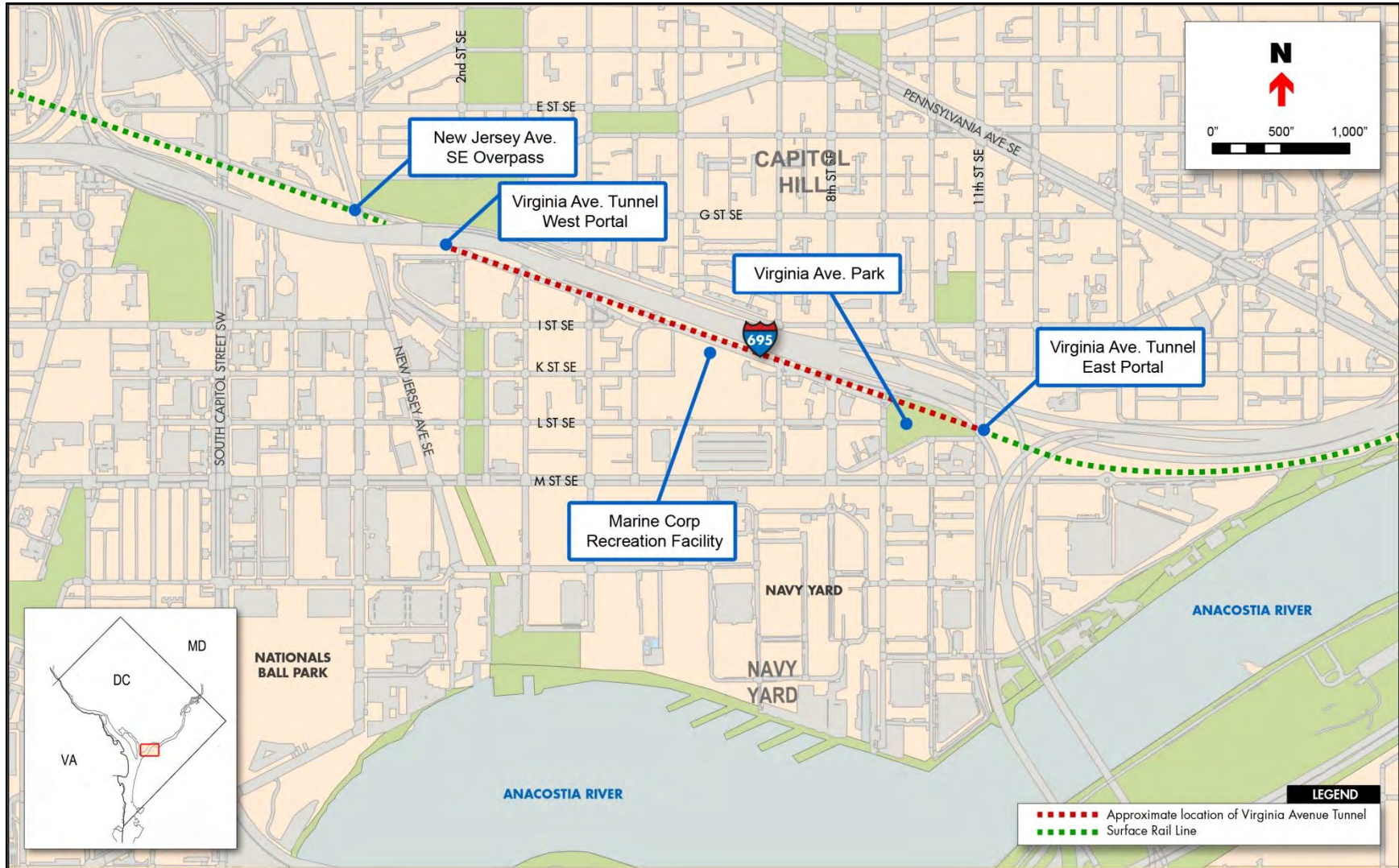


Figure S-1
Project Location



Record of Decision. The reconstruction of the tunnel will require temporary closure of Virginia Avenue SE between 2nd and 9th Streets SE, as well as other interim effects on several adjacent city streets during construction. The Project will also require sub surface use of a small portion of land in the U.S Marine Corps recreational facility located between 5th and 7th Streets SE on Virginia Avenue SE.

The CSX proposal includes the complete reconstruction of the tunnel, which was built over 100 years ago. The Project will transform the tunnel into a two-track configuration and provide the necessary vertical clearance (minimum 21 feet) to allow double-stack intermodal container freight train operations. This will allow more efficient freight movement, especially in light of expected increases in freight traffic. Reconstructing the tunnel to allow double-stack intermodal container freight trains will require the re-grading of the existing tracks west of the new rebuilt tunnel, which will mean that the vertical clearance underneath the New Jersey Avenue SE Overpass will also allow passage of double-stack intermodal container freight trains.

S.2 Purpose and Need

The purpose of the proposed action is to preserve, over the long-term, the continued ability to provide efficient freight transportation services in the District of Columbia, the Washington Metropolitan Area and the eastern seaboard. These services will continue if the following needs are met:

1. Address the structural and operational deficiencies of the century-old Virginia Avenue Tunnel;
2. Accommodate expected increases in freight transportation that, in part, would stem from the Panama Canal expansion scheduled for 2015; and
3. Ensure that during construction freight transportation services remain uninterrupted while the functions of the tunnel are being replaced with a new facility.

Structural and Operational Deficiencies of Virginia Avenue Tunnel

Virginia Avenue Tunnel's horizontal clearance only allows a single railroad track within the tunnel, which causes a bottleneck in the rail network due to the existence of two railroad tracks on both sides of the tunnel. In addition, the tunnel's vertical clearance does not allow the operation of double-stack intermodal container freight trains, a type of operation that CSX and other major railroad companies have adopted as the norm in the freight rail transportation industry where the rail network allows it. Finally, as an aging piece of infrastructure nearing the end of its useful life, the tunnel is increasingly subject to inspection and preventive maintenance for safe rail operations. These frequent inspections and preventive maintenance activities are difficult to conduct without compromising normal rail operations.

Freight Transportation Demand

Virginia Avenue Tunnel and the eastern seaboard freight rail corridor need to accommodate expected increases in freight transportation demand over the next few years, in part due to the Panama Canal expansion scheduled to occur in 2015. The projected increased demand for freight transportation requires taking steps now to modernize the freight rail network, including replacing the tunnel with a more modern facility. By accommodating double-stacked intermodal containers, CSX will be able to transport the expected increase in freight in fewer trains than would otherwise be possible.

Commerce Demands

Reconstructing an existing and vital piece of transportation infrastructure presents challenges in terms of how to maintain freight operations during the construction of the replacement tunnel. The ability to quickly and efficiently move goods to markets throughout the country is vital to the U.S. economy. As one of the nation's major freight railroad companies, CSX provides a valuable service by facilitating the shipment of goods and services to the general public.

S.3 Selection of the Preferred Alternative

After careful consideration of the Project's Purpose and Need, environmental impact analyses and public and agency input, Alternative 3 (see Section S.4) was selected as the Preferred Alternative. This alternative best meets the Project's Purpose and Need while minimizing project impacts and addressing community concerns. This alternative reduces the construction duration for the project to the greatest extent possible as well as accommodates the train operations in a closed tunnel thereby addressing community concerns about operation of trains within an open trench near residents. This alternative also enhances the safety of the tunnel and railroad operations by providing a center wall in the new tunnel separating the two sets of tracks, which will provide the benefit of isolating any derailment within the tunnel. The wall will also provide maintenance flexibility if an operational shutdown is required. Although the outer surface of the southern wall under Alternative 3 will be located approximately 25 feet south of the existing tunnel's outer southern wall, the new enclosed structure, track ballast/bed and concrete floor will serve to prevent proximity effects from train-related vibration to nearby buildings.

Alternative 1 was not selected as the Preferred Alternative because it would not address the Project's Purpose and Need. While Alternatives 2 and 4 would meet the Project's Purpose and Need, they were not selected as the Preferred Alternative. Alternative 2 would employ runaround train operations in an open trench during construction. Although the open trench under Alternative 2 would be completely enclosed within the construction area and would not affect the health and safety of both construction workers and nearby residents, runaround operations raised concerns among residents. Although Alternative 4 also would employ runaround train operations during construction (within the same trench as the tunnel

construction), Alternative 4 was not selected as the Preferred Alternative mainly because it would require substantially longer construction duration than the other Build Alternatives.

S.4 Reasonable Alternatives Considered

Three Build Alternatives are being considered, in addition to a No Action Alternative. They were developed from among 12 preliminary concepts that were considered as candidates for the Project. These 12 concepts were developed through a preliminary assessment of the engineering and physical constraints along the alignment of the existing tunnel, as well as input from DDOT, FHWA and other government agencies, interested parties and the general public.

The 12 preliminary concepts are as follows:

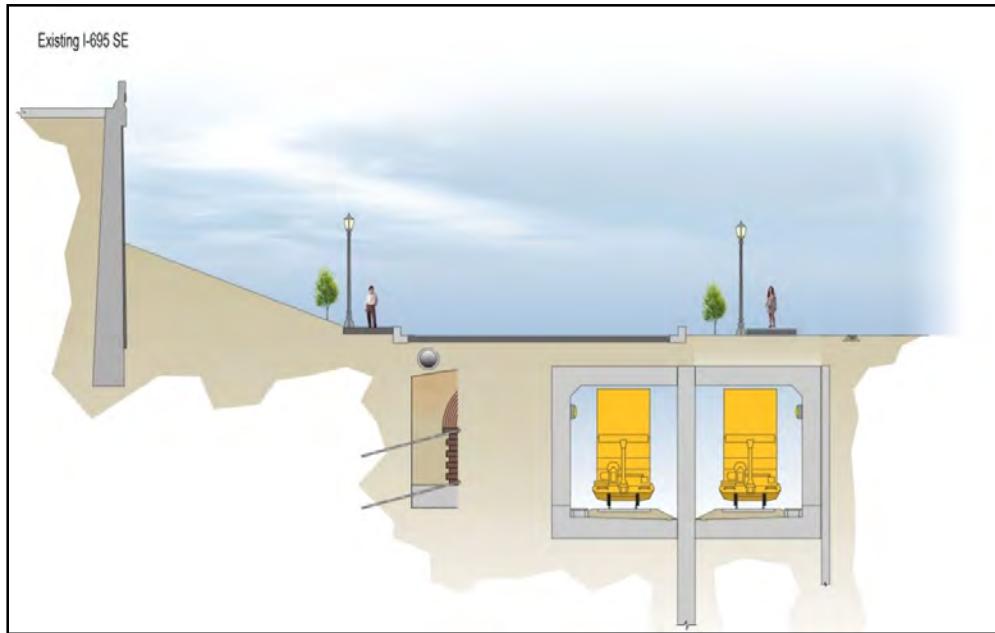
- Concept 1 is the no action or no build condition.
- Concepts 2 through 7 (includes two versions of Concept 3) involve the reconstruction of the Virginia Avenue Tunnel.
- Concepts 8 through 11 involve rerouting the main rail line outside of the existing Virginia Avenue Tunnel, but the tunnel would remain to service Washington Metropolitan Area regional customers.

Following an evaluation of these concepts based largely on their ability to meet the Project's Purpose and Need, the following alternatives were identified for this Final EIS:

Preferred Alternative - Two New Tunnels (originally Concept 5 and identified as Alternative 3 in the Draft EIS): Alternative 3 was selected as the Preferred Alternative. It involves replacing the existing Virginia Avenue Tunnel with two new permanent tunnels constructed sequentially (see Figure S-2). Each new tunnel will have a single railroad track with enough vertical clearance to allow double-stack intermodal container freight trains. A new parallel south side tunnel will be built first as trains continue operating in the existing Virginia Avenue Tunnel. After the south side tunnel is completed, train operations will switch over to the new tunnel and the existing Virginia Avenue Tunnel will be demolished and rebuilt. With the exception of operating in a protected open trench for approximately 230 feet immediately east of the 2nd Street portal (within the Virginia Avenue SE segment between 2nd and 3rd Streets SE), trains will operate in enclosed tunnels throughout construction under the Preferred Alternative. Throughout most of the length of the entire rebuilt tunnel, the two tunnels will be separated by a center wall. This center wall will be the new centerline of the two tunnels, and it will be aligned approximately 25 feet south of the existing tunnel centerline, between 2nd and 9th Streets SE. Due to new columns associated with the rebuilt 11th Street Bridge, the tunnels will be separated on the east end starting just west of Virginia Avenue Park, resulting in two separate single-track tunnels and openings at the east portal.

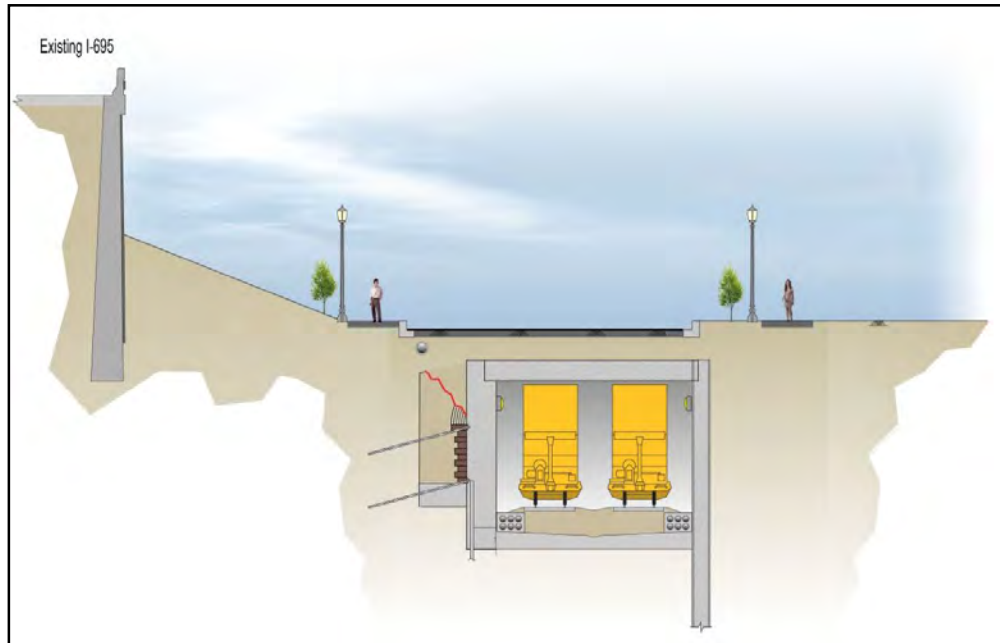
Alternative 1 - No Build (originally Concept 1): The No Build alternative is automatically carried forward into the Final EIS. The tunnel would not be rebuilt under this alternative. However, the railroad would continue to operate trains through the tunnel and at some point, emergency or unplanned major repairs or rehabilitation could be required to this critical, aging infrastructure that might prove equally disruptive to the community than the Build Alternatives.

Figure S-2
Cross Section View of Post-Construction Preferred Alternative
between 3rd and 9th Streets SE



Alternative 2 -Rebuilt Tunnel / Temporary Runaround Track (originally Concept 2): This Alternative involves rebuilding the existing Virginia Avenue Tunnel. It would be rebuilt with two tracks and enough vertical clearance to accommodate double-stack intermodal container freight trains (see Figure S-3). It would be rebuilt in generally the same location, except aligned approximately seven feet to the south of the existing tunnel center line. It would be rebuilt using protected open trench construction methods. During construction, freight trains would be temporarily routed through a protected open trench outside the existing tunnel (runaround track). The runaround track would be aligned to the south and generally parallel to the existing tunnel, and would be located below street level. Due to new columns associated with the rebuilt 11th Street Bridge, the runaround track would slightly separate from the tunnel alignment on the east end starting just west of Virginia Avenue Park. Safety measures such as securing fencing would be used to prevent pedestrians and cyclists from accessing the runaround track.

Figure S-3
Cross Section View of Post-Construction Alternative 2
between 3rd Street and 9th Streets SE



Alternative 4 - New Partitioned Tunnel / Online Rebuild (originally *Concept 6*): Alternative 4 would result in a new tunnel with two permanent tracks (see Figure S-4). Similar to the Preferred Alternative, the new tunnel would be partitioned and have enough vertical clearance to allow double-stack intermodal container freight trains. It would be aligned approximately 17 feet south of the existing tunnel's centerline. The new tunnel would be built using protected open trench construction methods. The rebuild would occur 'online' meaning that during the period of construction, the protected open trench would accommodate both construction activities and train operations. Maintaining safe and reliable temporary train operations is a more complicated endeavor under Alternative 4 than under the other two Build Alternatives because of the online rebuild approach.

Regardless of the Build Alternative, the Project would extend the east portal by approximately 330 feet to a location northeast of the 12th Street and M Street T-intersection, and the existing north tunnel wall would largely remain in place after construction as shown on Figures S-2 through S-4. However, Alternative 4 would remove most of the wall on the east end. The wall would serve as an earth retention system, which would reduce the risk of damaging I-695 structures. During final design, the earth retention system would be further evaluated, including determining if portions of the north wall could be removed during construction. In addition, safety measures, such as secured fencing, would be used to prevent unauthorized access to the work area regardless of the Build Alternative.

Figure S-4
Cross Section View of Post-Construction Alternative 4
between 3rd and 9th Streets SE



As used in this Final EIS, the term limits of disturbance (LOD) means all areas where construction will take place, including areas needed for staging, materials stockpiling, utility relocations, and temporary freight train operations. The LOD will be restricted from the general public, except Virginia Avenue's cross streets, which will remain open for public passage throughout construction by means of temporary bridges.

The Preferred Alternative or the other two Build Alternatives will include the restoration of Virginia Avenue SE, and other areas affected by construction, including Virginia Avenue Park and the Marine Corp Recreation Facility. The restoration of Virginia Avenue SE will include the following improvements:

- Improved access to Garfield Park for wheelchair dependent individuals;
- Continuous bike path between 2nd and 9th Streets, which will connect Garfield Park and Virginia Avenue Park;
- Straightened alignment on Virginia Avenue SE within the 400 block to be consistent with the original L'Enfant Plan;
- Improved lane configuration between 5th/6th and 8th Streets to provide safer and calmer traffic conditions;
- Additional landscaping; and
- Improved street lighting, traffic signals and crosswalks.

Outreach to other agencies, stakeholders and the community will be conducted to solicit input regarding the specifics of the improvements.

S.5 Other Nearby Major Governmental Proposed Actions

The following other government actions are currently taking place or would be conducted in the near future in the general vicinity of the LOD:

- 11th Street Bridges project (currently under construction), which will replace two existing bridges with three new bridges and improve the associated interchanges;
- South Capitol Street Corridor Project would include a new Frederick Douglass Memorial Bridge, transform the street into a boulevard to improve safety, multi-modal transportation and community access to support economic development;
- Clean Rivers Project, a multi-billion dollar effort by DC Water, which would include a combined sewer overflow (CSO) tunnel under the Anacostia River, but also includes diversion tunnel beneath M Street SE (currently under construction);
- Garfield-Canal Park Connector would establish a pedestrian and bicycle connection linking Garfield Park and Canal Park;
- Southeast Boulevard, which would convert the segment of the Southeast Freeway from 11th Street Bridge to Barney Circle to an urban boulevard;
- Relocation of Marine Corps Enlisted Bachelors Quarters (Building 20); and
- Other Anacostia Waterfront Initiatives, such as:
 - The Southwest Waterfront with Market Square and Civic Park,
 - Southeast Federal Center and Waterfront Park, and
 - Anacostia Riverwalk and Trail.

S.6 Summary of Environmental Impacts and Proposed Mitigation

Table S-1 summarizes the results of environmental impact studies conducted for the Project. The table includes the entire range of environmental topics covered in this Final EIS from land use to public transportation.

As stated earlier, Alternative 1 does not include any major repairs or rehabilitation of the tunnel in the near future. However, given that the tunnel is over a hundred years old, it could eventually require emergency or unplanned repairs at some point in the future. The Preferred Alternative and Alternatives 2 and 4 would all reconstruct the Virginia Avenue Tunnel in generally the same location and alignment as the existing tunnel. Their differences involve slightly different alignments and how train operations would be conducted during construction.

Following construction, freight train activities will resume back to pre-construction conditions, except for greater service and energy efficiencies due to the provision of two tracks and the minimum 21 feet of vertical clearance within the rebuilt tunnel. Due to the nature of the Project, most of the anticipated impacts of the Project will be related to or occur during

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 4
<i>Land Use</i>				
Construction	None	The LOD within public rights-of-way or CSX property, except the Marine Corps Recreation Facility and Virginia Avenue Park. All areas affected by construction will be restored. No private property will be required.	Same as the Preferred Alternative.	With the exception of the Marine Corps property, Alternative 4's LOD is a few feet narrower along Virginia Avenue SE, and it needs less area within Virginia Avenue Park.
Permanent (Post Construction)	May result in similar impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Continuance of current development trends and realization of government land use plans in the general vicinity of Virginia Avenue SE. The new tunnel will be partially located within the Marine Corps property and will require approval.	Same as the Preferred Alternative, except the tunnel will be located outside the Marine Corps property.	Same as the Preferred Alternative, except the tunnel will be located outside the Marine Corps property.
Mitigation	Not Applicable.	Project sponsors will work with landowner agencies to obtain the necessary approvals to allow construction on their properties.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 4
<i>Social and Community Conditions</i>				
Construction	None.	Certain residences will be in proximity to an active construction site for 30 to 42 months. All schools, and religious, social services and community facilities will be accessible. Emergency response services will be unaffected. No disproportionately high and adverse impact in accordance with Executive Order 12898 on Environmental Justice.	Same as the Preferred Alternative.	Same as the Preferred Alternative, except the duration of construction would be 54 to 66 months.
Permanent (Post Construction)	May result in similar impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Social and community conditions will revert back to pre-construction conditions.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Project sponsor will provide "front row" residents and others with monetary compensation to offset inconveniences resulting from major construction activities.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
<i>Economic Conditions</i>				
Construction	None.	All businesses remain accessible. Traffic detours will displace on-street parking on I Street SE, but this will not affect general business conditions due to other transportation options. Property values of residences adjacent to the LOD may be temporarily affected.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Permanent (Post Construction)	May result in similar economic impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Business conditions will revert back to pre-construction conditions.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	The project sponsor will provide up to \$75,000 to owners of "front row" residences if selling their homes under unforeseen circumstances during construction to offset possible loss in market value. Also, see mitigation under Transportation – Parking.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATIONTable S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
<i>Air Quality</i>				
Construction	None.	Not exceeding the General Conformity (GC) Rule's <i>de minimis</i> emission thresholds or the National Ambient Air Quality Standards (NAAQS).	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Permanent (Post Construction)	May result in similar air quality impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Not predicted to exceed the GC Rule's <i>de minimis</i> emission thresholds or the NAAQS.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Employ dust control measures and measures to minimize other air pollutant emissions, where feasible.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Noise</i>				
Construction	None.	Construction activities predicted to cause noise impacts at certain noise sensitive receptors representing Capitol Quarter and Capper Senior Apartments.	Same as the Preferred Alternative.	Requires sheet piling, a construction activity that is predicted to impact all noise sensitive receptors analyzed.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Permanent (Post Construction)	May result in similar noise impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Train operations not predicted to cause noise impacts at noise sensitive receptors.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Employ measures to reduce construction noise generation, such noise barriers near residences, using techniques that are less noisy and noise monitoring.	Same as the Preferred Alternative.	Sheet piling would be conducted only between 8:30 AM and 4:30 PM on weekdays.
<i>Vibration</i>				
Construction	None.	Certain construction activities near buildings could cause annoyance to occupants. Train operations during construction not predicted to cause human annoyance or building damage.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Permanent (Post Construction)	May result in similar vibration impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Train operations not predicted to cause human annoyance or building damage	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Mitigation	Not applicable.	Pre-construction inspections of buildings. Employ measures that reduce construction vibration, such as phasing vibration-producing activities when feasible so that they do not occur within the same time period.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Site Contamination - Soil</i>				
Construction	None.	Although not widespread, contaminated soil or groundwater handled during construction will be disposed of in accordance with applicable federal and local laws and regulations.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Permanent (Post Construction)	May result in similar size contamination and soil impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Any contaminated water encountered during long term dewatering of the new tunnel (to keep it dry) will be disposed of in accordance with applicable laws and regulations.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Mitigation	Not applicable.	All appropriate regulatory precautions will be taken to properly handle and dispose any contaminated soil or groundwater encountered during construction.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Water Resources</i>				
Construction	None.	No impacts to the quality of nearby surface waters because of construction storm water management measures. A portion of the staging and stockpile area will be within a 500-year floodplain.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Permanent (Post Construction)	May result in similar water related impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Restored Virginia Avenue SE will include a storm water management system.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Sediment and erosion control measures installed during construction. Spill prevention and control plans prepared. Rail yard managed in accordance with local flood hazard	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATIONTable S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Mitigation (cont.)		permit and other requirements.		
<i>Vegetation and Wildlife</i>				
Construction	None.	Removal of 168 street trees, 15 trees in Virginia Avenue Park, 8 trees in Marine Corps property, and trees within CSX property. Short term habitat loss for fauna species adapted to urban environments.	Same as the Preferred Alternative.	Same as the Preferred Alternative except 164 street trees would be removed.
Permanent (Post Construction)	May result in similar impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Landscaping plans, including tree replantings, will be coordinated with pertinent owners and stakeholders.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Implementation of tree replacement plan at the end of construction.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Historic and Archaeological Resources</i>				
Construction	None.	An "adverse effect" in accordance with Section 106 of the National Historic Preservation Act (NHPA) was rendered due to proposed demolition of the existing tunnel;	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Construction (cont.)		construction-period impacts to the L'Enfant Plan and the Capitol Hill Historic District; and construction-period proximity to St Paul AUMP Church.		
Permanent (Post Construction)	May result in at least partial demolition of the tunnel if tunnel failure occurs.	Restoration of Virginia Avenue SE, which includes straightening the section between 4 th and 5 th /6 th Streets SE, in keeping with the original L'Enfant Plan for the street.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation		Implementation of resolution of the adverse effect identified in the signed Memorandum of Agreement (MOA).	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Parks and Recreational Resources</i>				
Construction	None.	The LOD includes part of Virginia Avenue Park, but not the garden, and the area under I-695 at 2 nd Street SE, which will prevent public access to Garfield Park at this location, and displace ad	Same as the Preferred Alternative, except that within Virginia Avenue Park, trains would operate in a protected open trench.	Same as the Preferred Alternative, except that the LOD in the park would be slightly smaller, but occupy the park up to two years longer, and trains would operate in a protected open trench.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Construction (cont.)		hoc recreational activities (skateboarding) under the freeway. In Virginia Avenue Park, trains will operate in a tunnel.		
Permanent (Post Construction)	May result in similar impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Virginia Avenue Park restored according to the DPR direction, the Section 4(f) Evaluation and the requirements of the Section 106 MOA. The area under the freeway at 2 nd Street restored, and ad hoc recreation may continue.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation		The project sponsor will enhance Virginia Avenue park. Wayfinding signs provided during construction showing routes to Garfield Park.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Visual and Aesthetic Resources</i>				
Construction	None.	Fencing, and construction equipment and activities will be visible from adjacent buildings and other nearby viewpoints. The duration of this visual	Same as the Preferred Alternative.	Same as the Preferred Alternative, except that the duration would be 54 to 66 months.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Construction (cont.)		impact will be 30-42 months.		
Permanent (Post Construction)	May result in similar visual impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Aesthetic effectiveness of replanted street trees initially marginal because they will be younger with smaller canopies than the existing street trees. Over time, the re-planted street trees will grow and contribute to the visual environment.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Stockade construction fencing (instead of chain link) to be used in residential areas. Construction site kept orderly, such as daily regular clean-up.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Utilities</i>				
Construction	None.	Relocation and/or protection of dozens of water, sewer and other utilities. The Marine Corps' chiller unit temporarily or permanently repositioned.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Permanent (Post Construction)	May result in similar utility impacts noted under construction for Preferred Alternative if tunnel failure occurs.	None.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Coordination with utility companies to minimize service disruptions. If unavoidable, effort will be made to conduct the utility work during non-peak usage hours and to protect health.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Transportation-Freight</i>				
Construction	None.	Trains always operating inside a tunnel except for a 230 foot segment within the 200 block of Virginia Avenue SE.	Same as the Preferred Alternative, except that double-stack intermodal container freight trains would operate sooner.	Same as the Preferred Alternative, except that it would pose a greater risk of service disruptions.
Permanent (Post Construction)	May potentially result in substantial freight service disruptions if tunnel failure occurs.	Provision of two tracks eliminates bottleneck. Double-stack intermodal container operations reduce the number of trains in comparison to the No Build condition.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	None required.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATIONTable S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
<i>Transportation-Roadways</i>				
Construction	None.	Closure of Virginia Avenue SE between 2 nd and 9 th Streets SE, but cross streets remain open. I-695 ramps closed for about one week. During MOT phase 1, single eastbound lane available between 6 th and 8 th Streets SE.	Same as the Preferred Alternative.	Same as the Preferred Alternative, except that the first several months of construction would be concentrated in the area between 2 nd and 5 th /6 th Streets SE.
Permanent (Post Construction)	May result in similar roadway impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Virginia Avenue SE will be restored to its pre-construction condition with improvements (see Section S.4).	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	In addition to addressing safety, the MOT plan will address the restoration and maintenance of transportation mobility.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Transportation-Traffic</i>				
Construction	None.	MOT maintains traffic mobility in community and access to all adjacent properties. Peak hour congestion predicted at intersections along MOT	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATIONTable S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Construction (cont.)		phase 2 detours on the westbound Virginia Avenue SE. Traffic conditions on I-695 will not be affected.		
Permanent (Post Construction)	May result in disruptions to traffic if tunnel failure occurs.	Traffic flow will return to previous levels.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Signal optimization used to improve intersection conditions during construction. Intersections will be monitored to determine the effectiveness of the optimization schemes.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Transportation-Parking</i>				
Construction	None.	In MOT phase 1, 63 on-street parking spaces displaced. In phase 2, an additional 48 on-street parking spaces displaced for a total impact of 111 spaces. Applicable fees paid to DDOT for the temporary parking losses.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Permanent (Post Construction)	May result in similar parking impacts noted under construction for Preferred Alternative if tunnel failure occurs.	Restoration and improvements to Virginia Avenue SE results in a net reduction of 19 parking spaces.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	Construction workers provided prioritized parking (i.e., those who carpool). Workers restricted from using on-street parking used by residents. Temporary wayfinding signs provided to direct motorists to available off-street parking.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Transportation-Pedestrian and Bicycle</i>				
Construction	None.	Cross streets and detours accessible for pedestrians and cyclists. East-west movements limited on Virginia Avenue SE, but parallel detours will be established. Access at 2 nd Street SE prohibited due to the Tiber Creek Sewer relocation.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECTFINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table S-1 (Continued)
Summary of Environmental Impact Studies and Proposed Mitigation

Resource or Topic / Time Frame	No Build (Alternative 1)	Preferred Alternative (Alternative 3)	Alternative 2	Alternative 3
Permanent (Post Construction)	May disrupt bicycle and pedestrian movements if tunnel failure occurs.	Proposed improvements to Virginia Avenue SE will enhance bike and pedestrian facilities.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	The MOT provisions provide for the safety of pedestrians and cyclists when crossing the construction area on Virginia Avenue. Temporary wayfinding signs provided for pedestrians.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
<i>Transportation-Public Transit</i>				
Construction	None.	Metrobus and DC Circulator routes will not be affected.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Permanent (Post Construction)	May result in similar impacts noted under construction for Preferred Alternative if tunnel failure occurs.	None.	Same as the Preferred Alternative.	Same as the Preferred Alternative.
Mitigation	Not applicable.	None required.	Same as the Preferred Alternative.	Same as the Preferred Alternative.

construction. The Project is not anticipated to result in indirect effects to the surrounding community. While the build alternatives would contribute to cumulative impacts to some resources during construction, such impacts would be localized within the LOD and would be temporary in nature.

S.7 Key Issues Raised by Community and Responses

A number of issues were generated from the public and agencies during the project's outreach efforts, or were communicated to the project team through other venues. These issues included:

- Access to adjacent properties;
- Air quality;
- Coordination with other construction projects;
- Damage to residences;
- Right-of-way
- Economic effects to businesses;
- Environmental Justice populations;
- Virginia Avenue Park, including the community;
- Mobility of motorists, pedestrians, cyclists and public transit users;
- Noise (including from temporary freight operations);
- Pest and rodent control;
- Property values of adjacent residences;
- Public safety and security of construction sites and temporary freight operations;
- Soil removal;
- Street tree displacements;
- Utility disruptions;
- Vibration (including from temporary freight operations); and
- Visual appearance of the construction site.

Other issues raised by the public included:

- Alternatives identification;
- CSX and DDOT rights-of-way;
- Freight rail transportation after construction;
- Freight transport of hazardous materials and refuse through the District;
- Future streetscape of Virginia Avenue SE; and
- Post-construction noise and vibration impacts from freight operations.

In order to assist the public in understanding how some of the most important issues raised were addressed, the following Q&A (questions and answers) were developed. The questions are thematic and do not reflect a particular question or comment from any one individual, agency or organization. For each question, answers or responses are provided, some of which include references to sections of the Final EIS where additional information can be obtained.

The questions and responses are categorized in the following manner: Alternatives, Construction Impacts, Freight Train Operations, Right-of-Way and Other Issues.

S.7.1 Alternatives

Q1: Why were none of the reroute alternatives advanced for detailed consideration in the Draft EIS?

A: Among the permanent reroute alternatives considered but dropped from consideration were Concepts 9 and 10, which involved constructing new freight rail routes identified by the National Capital Planning Commission (NCPC) in its 2007 Freight Railroad Realignment Feasibility Study.

Concept 9 would have developed the "Indian Head" alignment and Concept 10 would have developed the "Dahlgren" alignment. These concepts required 31 and 38 miles of new rail lines, respectively, a new bridge over the Potomac River, and would have affected diverse natural resources and several communities. NCPC estimated that constructing either of these alternative alignments would cost between \$3.2 and \$4.2 billion for the Indian Head alignment and \$3.5 and \$4.7 billion for the Dahlgren alignment. Therefore, neither alternative would have been a cost effective solution to address the deficiencies of the existing Virginia Avenue Tunnel in comparison to the Preferred Alternative, which is estimated to cost approximately \$168 million. Nevertheless, reconstructing Virginia Avenue Tunnel will not preclude establishing a new mainline freight rail route outside of the District if, at a minimum, funding were to become available.

Other reroute concepts considered but dropped from consideration include Concepts 8 and 11. Concept 8 would bore a new tunnel beneath the existing Virginia Avenue Tunnel. In order to maintain a stable foundation in the existing tunnel, the new tunnel would be about 80 feet below the surface or about 45 feet below the existing tunnel. To reach this depth and avoid existing obstructions (e.g., Metrorail tunnels and the rivers), the new tunnel would need to be about nine miles long. Concept 8 was eliminated because it would require acquisition of 14 to 16 acres at the portal locations and would cost about \$2 billion. Concept 11 would require substantial upgrades to existing CSX routes spanning several states. In addition to the high cost of upgrading facilities, it would add significant amount of mileage and travel time to major transportation markets, which would likely encourage shippers to switch to other modes of transportation, such as trucking.

Section 3.7 provides further information.

Q2: Why did the rebuild alternatives include freight rail operations through the Virginia Avenue corridor during construction?

A: Freight transportation is an integral part in maintaining the health of the U.S. economy. As one of the nation's major freight railroad companies, CSX facilitates the shipment of goods, equipment and other supplies and commodities to the general public. It is not feasible to stop

freight rail service within the mid-Atlantic region during the period of time when the Virginia Avenue Tunnel is being reconstructed, with an estimated 30 to 42 months construction duration period. Due to the condition of the freight rail network in and around the District of Columbia, closing Virginia Avenue Tunnel would effectively cut off freight transport between the mid-Atlantic and Midwestern states. There are no rail lines available within or near the Washington Metropolitan Area that could serve as an alternate route through or around the District during construction.

Except for one of the preliminary concepts, all of the rebuild concepts provide provisions to maintain freight rail operations through the Virginia Avenue corridor during construction. Concept 7 would not have included this provision. Instead, it would have utilized a combination of other CSX and Norfolk Southern rail lines in southern and western Virginia, North Carolina and Pennsylvania, and the AMTRAK rail line through Union Station. Concept 7 was eliminated from further consideration before release of the Draft EIS because none of the combination of routes identified could effectively accommodate the approximately 20 trains CSX operates through the District on a daily basis. In addition, Concept 7 would have required construction that would affect communities located outside the District.

Sections 2.3, 3.4 and 3.7 provide further information.

Q3: Why was Alternative 3 selected as the Preferred Alternative?

A: After careful consideration of the Project's Purpose and Need, environmental impact analyses and public and agency input, Alternative 3 was selected as the Preferred Alternative. This alternative best meets the Project's Purpose and Need while minimizing project impacts and addressing community concerns. This alternative reduces the construction duration for the project to the greatest extent possible as well as accommodates the train operations in a closed tunnel thereby addressing community concerns about operation of trains within an open trench near residents. This alternative also enhances the safety of the tunnel and railroad operations by providing a center wall in the new tunnel separating the two sets of tracks, which will provide the benefit of isolating any derailment within the tunnel. The wall will also provide maintenance flexibility if an operational shutdown is required. Although the outer surface of the southern wall under Alternative 3 will be located approximately 25 feet south of the existing tunnel's outer southern wall, the new enclosed structure, track ballast/bed and concrete floor will serve to prevent proximity effects from train-related vibration to nearby buildings.

Section 3.7 provides further information.

S.7.2 Construction Impacts

Q4: How will the construction contractor control dust and other types of air pollutants so as to not affect the health and well-being of nearby residents and others who work or pass through the construction area?

A: Construction activities will comply with local and federal regulations for fugitive dust control and mobile source emissions. Dust control measures will be implemented to prevent fugitive dust from excavation and other dust-producing activities from affecting areas beyond the construction site. Such measures include erecting windscreens, using watering trucks and sprinklers for haul roads and other dirt-exposed areas, routinely cleaning public roads covering all trucks during transport of fill materials or soil and stabilizing or covering material stockpiles. In addition, measures will be used to minimize other air pollutant emissions, such as assuring proper equipment operations that will include using appropriate emission-control devices (per EPA regulations) on all construction equipment powered by gasoline or diesel fuel to reduce carbon monoxide, nitrogen oxide and particulate matter emissions in equipment exhaust, and using low or ultra-low sulfur fuels to reduce sulfur emissions. Stationary equipment that generates air emissions, such as compressors, will not be placed in direct proximity to sensitive land uses, such as residences, or where people tend to congregate, such as the Virginia Avenue Community Garden, to the extent feasible.

Section 5.5 provides further information.

Q5: How will the construction contractor control noise so as to not affect the health and well-being of nearby residents and others who work or pass through the construction area?

A: A number of measures to reduce the impacts of construction noise on nearby residents will be employed, including:

- Use of fencing (e.g., wood stockade or type of solid material) near noise sensitive receptors that could also serve as temporary noise barriers and hanging noise dampening blankets on the inside face of the fencing if the effectiveness of the noise barriers need to be improved;
- Where feasible, using drilled installation methods instead of driven methods when installing bearing and temporary support piles near residences;
- Properly maintaining all motorized equipment in a state of good repair to limit wear induced noise (e.g., mufflers are in good working condition); and
- Establishing a community outreach program to notify nearby residents and businesses about upcoming high noise producing activities as well as procedures to address noise complaints.

In addition, noise monitoring will be conducted to determine the effectiveness of these and other measures.

Section 5.6 provides further information.

Q6: What measures will the construction contractor implement to prevent construction-related vibration from damaging my home or building?

A: Vibration monitoring will be an important activity to prevent vibration-producing construction activities from affecting nearby buildings, and to evaluate the effectiveness of mitigation measures that are used to reduce the amount of vibration generated during construction. These mitigation measures will include properly maintaining all motorized equipment in a state of good repair; using drilled piles near residences where the geological conditions permit; limiting the use of high vibration activities, such as vibratory rollers, to weekday daytime hours; and paving or smoothing the surface haul paths within the construction area.

The project team will develop a noise and vibration monitoring program that will include monitoring the adjacent properties. Based on the resident/owner's approval, vibration monitors will be installed to ensure that vibration levels do not exceed established criteria. In case of exceedence, the contractor will be informed immediately and the construction activity causing the condition will be mitigated or monitored.

Section 5.7 provides further information.

Q7: Will construction vibration affect St. Paul AUMP Church?

A: Vibration levels from construction are not predicted to affect St. Paul AUMP Church. However, the church will be monitored for vibration levels during the construction period.

Q8: How will the public be kept safe from construction activities?

A: The project team is committed to keeping the general public safe from construction activities and train operations. Security fencing, barricades, signage and lighting will be used to prevent unauthorized access to construction zones and areas used for trains operations. Furthermore, CSX will be assigning dedicated community police officers specifically to the Project and the Capitol Hill community. The perimeter fencing will be at least eight feet high, and fencing will also be provided at cross streets where vehicles, pedestrians and cyclists will be allowed to cross the construction zone

Section 3.5.5 provides further information.

Q9: Who will provide oversight over the construction activities conducted by CSX's contractor?

A: DDOT will provide oversight and inspection of construction activities. DDOT inspectors will be provided office space at the construction site. Also, the affected utility companies will provide oversight over the utility relocation work.

Q10: Will people be able to cross Virginia Avenue SE throughout construction? What about those with physical disabilities, such as those in wheelchairs?

A: Yes. Throughout construction, all currently available cross streets (3rd to 8th Streets) will be open to motorists, bicyclists and pedestrians. Cross streets will only be closed when installing and removing the temporary bridges. The Project's MOT plan will provide for the needs of those who are wheelchair dependent and others with disabilities. Temporary street crossings will be accessible and usable to wheelchair dependent persons.

Section 3.5.4 provides further information.

Q11: Will the I-695 6th Street Off-Ramp be closed throughout construction?

A: No. The 6th Street Off-Ramp will be closed at most a week when the temporary bridge crossing at the 5th/6th Street intersection is installed and removed. In addition, construction will not affect the future I-695 8th Street On-Ramp currently under construction by the 11th Street Bridges project (the ramp was recently open to traffic).

Section 3.5.4 provides further information.

Q12: Will we be able to access our homes during construction? How will fire, ambulance, and other emergency service responders access our homes in times of emergency?

A: The construction MOT plan will be prepared to address motor vehicle and pedestrian use and ensure access to every residence and property along the project limits, including access to garages and alleyways. However, to ensure continuous access, some properties will require the construction of temporary driveways. Existing driveway access will be restored at the conclusion of construction. The plan will also provide continuous accessibility for local emergency services and first responders to support and protect the communities. The MOT plan will be updated as required in close coordination with DDOT and the District Fire Department and Emergency Management Services throughout the construction period.

Q13: If construction activities damage my home or building, will the damage be repaired?

A: Yes. CSX and its contractor will be responsible to protect adjacent buildings from damage. CSX and its contractor will be responsible for any damage to buildings as a direct result of construction. Owners of buildings located adjacent to the Project's limits of disturbance will be offered pre-construction inspections, which will entail visually identifying all existing signs of exterior, interior and roof damage and any signs of structural settlement. Building owners are highly recommended to allow this inspection in order to expedite the claims process if construction activities do cause damage to buildings. If damage does occur and it is determined that the damage was caused by construction activities, CSX and its contractor will be responsible to make the appropriate repairs after coordinating with the property owner(s).

Section 5.7 provides further information.

Q14: How will the construction contractor prevent pests, rats and other rodents in the tunnel from infecting my home after they have been disturbed by construction of the Project?

A: A rodent control program will be initiated prior to the start of construction and maintained during the entire duration of construction. The rodent control program will be implemented in accordance with District health regulations, using a qualified rodent control company. The program will combine elements of baiting and trapping to achieve the highest rate of success. During construction, food source removal is a key component for successful rodent control. Garbage and food debris will be stored in containers with lids. Spilled food and garbage will be cleaned up regularly. Unorganized or cluttered debris and weedy vegetation, that could provide harborage for rodents, will not be allowed within the construction area or along the perimeter.

Section 5.10 provides further information.

Q15: Will property values of homes along Virginia Avenue SE be affected by construction? What will happen if an affected resident has to sell a home, and how will he or she be compensated for any decreased home value?

A: The degree to which temporary factors, such as construction on city streets and other neighborhood construction projects, affect short-term property values can be subjective and difficult to quantify. Nevertheless, it is possible that construction of the Project can affect the willingness of buyers to enter into purchases of properties adjacent to Virginia Avenue SE, but this affect will diminish near the completion of construction. Therefore, the project sponsor has agreed to compensate up to \$75,000 to offset the loss of market value if a "front row" residential property owner must sell his or her home during construction. Appendix C provides the locations and addresses of the "front row" residences.

Section 5.4 provides further information.

Q16: What is the duration of construction?

Construction of the Preferred Alternative will take between 30 to 42 months. Alternative 2 has the same estimate construction duration. Alternative 4's estimate construction duration is between 54 and 66 months.

Section 3.5.6 provides further information.

Q17: Explain how the construction team has the expertise and experience to safely construct the Preferred Alternative in the time frame described in the EIS, and what measures will be taken to assure compliance with the construction schedule?

A: The selection process that will be used to identify the contractor team will include selection criteria covering past experience building large infrastructure projects in dense urban environments, qualifications of key personnel, financial strength, knowledge of the local construction market and past performance on similar sized complex infrastructure projects.

CSX will issue substantial monetary penalties to the selected contractor team for late performance of work. The contractor team will be required to prepare comprehensive weekly, monthly and quarterly reports for CSX and DDOT covering safety, schedule, MOT, train operations, utilities, communications with the community and stakeholders, materials status, staffing, quality, and subcontractor work. One of the main purposes of the reporting is to identify potential challenges to schedule early so they can be mitigated before adversely affecting progress of the Project. A Project office will be established at the New Jersey Yard where a co-located team consisting of staff from the contractor team, CSX, and DDOT will work together to maximize effective communications, streamline permitting and monitor and plan project progress in "real time".

S.7.3 Freight Train Operations

Q18: How will the Preferred Alternative maintain freight train operations during construction?

A: Initially for approximately 16 to 22 months, trains will continue operating within the existing tunnel while the permanent new south side single-track tunnel is being constructed. However, an approximately 230-foot section of the tunnel alignment immediately east of the 2nd Street portal (west segment) will be an open cover trench during construction in the first phase while the train traffic remains on the existing track. Once the south side tunnel is completed, train traffic will switch to the new tunnel for the remainder of the construction period. The second phase of construction will largely involve the demolition of the existing tunnel and the construction of the new north side single-track tunnel. During most of the second phase, the approximately 230-foot west segment will remain open cover even though train traffic is switched to the new south side track.

Section 3.5.2 provides further information.

Q19: What safety and security measures will be taken to protect the public from the 230-foot long open cover trench under the Preferred Alternative?

A: The 230-foot open cover trench will be located entirely within the 200 block of Virginia Avenue SE where there are no residences. Also, the trench will be located entirely within the construction area, which will include perimeter fencing and other security measures.

Safety and security are top priorities for CSX, and all CSX facilities have security plans in place. For example, the existing Virginia Avenue Tunnel is protected and secured using high technology devices, such as closed circuit cameras and motion detectors monitored 24 hours a day, seven days a week. These same measures will be employed during and after construction.

Section 3.5.5 provides further information.

Q20: Can CSX guarantee a train derailment in the trench or tunnel would not cause or threaten property damage or loss of human life?

A: Trains passing through the Virginia Avenue SE construction area will operate at lower speed and a railroad employee-in-charge who will be assigned to the Project during construction with the primary responsibility of ensuring the safe passage of trains through the work zone. The role of the railroad employee-in-charge is primarily to protect the safety of construction workers, but will also have the added benefit of protecting the general public. With the new tunnel, train derailments will be less likely to occur because of the new, more reliable tunnel concrete floor and track ballast. CSX will continue to partner with local first responders of the District and the surrounding jurisdictions in order to coordinate protocols for responding to train derailments. This includes continuing to provide periodic training activities.

Sections 3.5.5, 5.3 and 5.15.1 provide further information.

Q21: Why does CSX appear not to be open in answering questions on how and where it transports hazardous materials in and outside the District of Columbia?

A: CSX trains do not transport explosive, toxic by inhalation (TIH), or poisonous by inhalation (PIH) materials through the District due to a voluntary agreement with the Government of the District of Columbia. For national security reasons, CSX does not disclose how and where it transports these materials to the public. However, this information is provided by CSX to the District and Federal safety and security officials. Construction of a new Virginia Avenue Tunnel will not affect the materials, goods or equipment transported through the District of Columbia.

Q22: I live along the south side of Virginia Avenue SE, and understand that the new Virginia Avenue Tunnel under the Preferred Alternative will be located closer to my home. Will I hear freight trains passing through the new tunnel? Will I feel the vibration from freight trains passing through the new tunnel?

A: Based on detailed noise and vibration studies conducted for the EIS, the residents will not hear nor be able to feel trains passing through the new tunnel.

Sections 5.6 and 5.7 provide further information.

Q23: Will the project result in more freight trains passing through the new Virginia Avenue Tunnel?

A: The provision of two railroad tracks (eliminates the bottleneck) and enough vertical clearance to allow double-stack intermodal container trains (doubles the capacity for this type of freight on a single train) will lead to greater efficiencies of the freight rail network. The ability to operate double-stack intermodal container freight trains will mean that the overall number of trains may be reduced in comparison to not rebuilding the tunnel.

Section 5.15.1 provides further information.

Q24: How much crude oil does CSX transport through the District of Columbia?

A: Any crude oil shipments by CSX through the District of Columbia are individual tank cars, and they are very rare. In 2013, the crude oil shipments through the District of Columbia (Virginia Avenue Tunnel) represent less than 0.006% of all loaded rail cars shipped through the Virginia Avenue Tunnel. Each of these was a single tank car on a separate train. CSX has no current movements of crude oil unit trains through the District of Columbia.

Q25: Will the project result in additional movement of crude oil shipped through the District of Columbia?

A: No. There is no market for CSX to transport crude oil through the District of Columbia now, or in the foreseeable future.

S.7.4 Right-of-Way

Q26: Will private property be acquired, either temporarily or permanently, to construct the new tunnel?

A: No. Construction of the Preferred Alternative does not require the use or acquisition (temporary or permanent) of private property other than properties owned by CSX. All construction will occur within CSX property, DDOT right-of-way, and property within the Marine Corps Recreation Facility and Virginia Avenue Park.

See Section 3.5.1 for further information.

Q27: How was right-of-way issue between DDOT and CSX resolved?

Based on research by both DDOT and CSX, it was agreed that Congress legislated the right for CSX to construct, operate, and maintain two rail tracks beneath Virginia Avenue SE in a tunnel and determining the exact boundaries of the right-of-way is not possible due to lack of documentation. It was also agreed that the specifications of the tunnel beneath the surface should meet current railroad standards regarding vertical and horizontal widths. Therefore, in order to access this subterranean and above surface space, DDOT and CSX have agreed that CSX will seek construction and occupancy permits from DDOT for the Project. DDOT issued an occupancy permit contingent upon the completion of the NEPA process should a build alternative be selected.

Q28: Are there any past agreements between DDOT and CSX that include Virginia Avenue Tunnel?

A: Yes, DDOT and CSX have some agreements regarding a number of projects in the District of Columbia. Agreements related to the reconstruction of the Virginia Avenue Tunnel are included in Appendix A.

Q29: Will DDOT sell its right-of-way to CSX for the project?

A: No. DDOT issued an occupancy permit relative to Virginia Avenue SE and adjacent streets, which is contingent on the selection of a build alternative in the NEPA process.

Q30: What compensation to the Government of the District of Columbia will CSX provide for use of the public rights-of-way for construction?

A: CSX will pay all associated permit and inspection fees associated with the construction of the Preferred Alternative of the Project.

S.7.5 Other Issues

Q31: How will the Virginia Avenue Park, including the Community Garden, be affected by this project?

A: The Preferred Alternative will require temporary use of a portion of Virginia Avenue Park during construction. The construction area will not include the community garden. Affected areas of the park will be restored at the conclusion of construction.

Section 5.12 provides further information.

Q32: What will be the economic impacts on local businesses as a result of construction of this project?

A: The Project's MOT plan will ensure that all businesses remain accessible by auto, bike and walking throughout construction. Only one storefront is anticipated to be affected during construction. The project team has and will continue to work with this business to relocate the storefront during construction. At the conclusion of construction, operation of the new tunnel will have no effect on local businesses.

Section 5.4 provides further information.

Q33: How will I get information about construction activities that may affect my daily routine?

A: The Project website, www.virginiaavenuetunnel.com, will continue as a tool that the public can use to obtain information about the Project throughout the construction period. The website is an integral part of the overall public outreach program established to keep communication open with the community. Information about utility disruptions or activities that may disrupt travel will be disseminated through flyers to nearby residences and email blasts, in addition to having this information posted on the Project website.

Section 5.3 provides for further information.

S.8 Major Unresolved Issues

There are no major unresolved NEPA issues related to the Project.

S.9 Other Federal and Government of the District of Columbia Actions Required

Other than NEPA, the only federal action required before final Project approval in accordance with NEPA is FHWA approval of the Section 4(f) Evaluation for the use of Virginia Avenue Tunnel, L'Enfant Plan, Capitol Hill Historic District and Virginia Avenue Park.

Post-NEPA, the following federal actions will be required:

- Approval to temporarily affect I-695 ramps located at 6th and 8th Streets SE (FHWA)
- Approval associated with construction activities within Virginia Avenue Park and potentially other NPS reservations along Virginia Avenue (NPS)
- Approval associated with construction activities within the Marine Corps Recreation Facility (U.S. Marine Corps)
- Approval associated with the location of the reconstructed tunnel under the Preferred Alternative and any relocated utilities within the Marine Corps Recreation Facility (U.S. Marine Corps)
- NPDES Stormwater Permit for Construction Activities (U.S. Environmental Protection Agency, Region III)

DDOT has issued an occupancy permit relative to Virginia Avenue SE and adjacent streets, which is contingent on the selection of a build alternative in the NEPA process. Construction permits will be issued after the FHWA NEPA Record of Decision and when the design of the Project is submitted to DDOT for review. Once construction is completed, the final right-of-way area will be modified to reflect the as-built location of the reconstructed tunnel.

S.10 Environmental Commitments

Related to the mitigation measures summarized in Table S-1, the following are the commitments of the project sponsor to ensure maintenance of the environmental quality of the area surrounding Virginia Avenue Tunnel during and after construction of the Project:

Construction Related Commitments

These commitments will be conducted to mitigate construction-related impacts:

- Implementing a community outreach program using a project website, email blasts, flyers and other forms of open communication and dialogue for the purposes of informing certain stakeholders (e.g., residents of Capper Senior Apartments and Capitol Quarters) and the general public about construction status and activities that may

disrupt normal daily activities (e.g., temporary disruption of utility service), but also used to solicit any public complaints about construction activities.

- Maintaining a community office located at 861 New Jersey Avenue SE where members of the community can obtain construction information, and ask questions about the Project.
- Ensuring that the LOD will not include private property.
- Ensuring that vehicular, pedestrian and bicycling mobility is maintained throughout construction and that all properties, including those adjacent to the LOD, are accessible through the provision of temporary bridges across Virginia Avenue SE and detours that include converting the westbound Virginia Avenue SE/I Street SE between 6th and 8th Streets to two-way operations and providing the necessary traffic signals.
- Providing all properties with driveways directly adjacent to the LOD with provisions for driveway access so that these properties remain accessible for owners, users and visitors, as appropriate, as well as to fire and emergency response vehicles.
- Providing temporary wayfinding signs to Garfield Park, off-street parking lots and other important gathering places located near the LOD, such as Barracks Row, Eastern Market, and the Washington Navy Yard. The project sponsor will work with local business and civic groups to determine the important gathering places that should be identified by temporary signage.
- Providing fencing of at least eight feet high along the perimeter of the construction area, including areas used for temporary train operations and at cross streets where vehicles, pedestrians and cyclists will be allowed to cross the construction area, in order to prevent unauthorized access. The type of fencing or barrier may vary along the LOD. For those sections near residences and the park, screens will be attached to the chain link fencing or stockade fencing may be used.
- Restricting public access to the LOD to keep the general public from construction activities and temporary freight operations, which will include but not necessarily limited to fencing (as noted above), suitable lighting, and regular patrols by railroad police officers assigned to the Project.
- Using dust control measures to prevent fugitive dust from excavation and other dust-producing activities from affecting areas beyond the construction site. These practices include, but are not necessarily limited to frequent watering, material stockpile stabilization, and good housekeeping, which will also help in the appearance of the construction area.
- Using measures to limit non-dust air pollutant emissions as reasonably practical and feasible. These practices include, but are not necessarily limited to, turning off the

engines of construction vehicles if they are left idling for more than 30 minutes, and using appropriate emission-control devices per U.S. Environmental Protection Agency regulations. In addition, stationary equipment that has air emissions will not be placed in direct proximity to sensitive land uses or where people tend to congregate to the extent feasible.

- Using noise control as reasonably practical and feasible. These practices include, but are not necessarily limited to, using drilled installation methods instead of driven methods when installing support piles near residences, using demolition equipment with crush/shear technology, limiting high noise generating activities to daytime and weekdays, and properly maintaining all motorized equipment in a state of good repair to limit wear induced noise.
- Providing the owner of any building located adjacent to the LOD with pre-construction building inspections to document the condition of the structure.
- Using vibration control as reasonably practical and feasible. These practices include, but are not necessarily limited to, conducting monitoring of vibration-producing activities, maintaining all motorized equipment in a state of good repair to limit wear induced vibration, and limiting pile driving near residences to weekday daytime hours to minimize the number of people who could be annoyed by the vibration of this activity.
- Conducting a vibration monitoring program during construction to determine whether vibration-producing construction activities may be affecting nearby buildings.
- Conducting building inspections of those structures (offers will be extended to the owners) close enough to a construction vibration source that damage to that structure due to vibration may be possible in order to document the pre-construction conditions. The pre-construction survey documents the existing conditions so that it would be evident that any new damage or structural settlement would likely have been caused by construction activities of the Project. If damage does occur due to construction operations, the project sponsor and its contractor will be fully responsible to make the appropriate repairs.
- Taking all appropriate regulatory precautions to properly handle and dispose of any contaminated soil or groundwater encountered during construction. A Health and Safety Plan will be prepared and implemented where contamination is identified and handled.
- Installing erosion control measures and stormwater management systems to reduce or eliminate contamination of surface water runoff resulting from the construction site. In addition, appropriate spill prevention and control plans will be prepared.
- Implementing a rodent control program that will be initiated prior to the start of construction and maintained during the entire duration of construction.

-
- Preparing a Construction Protection Plan prior to construction to avoid and minimize adverse effects on known historic properties.
 - Preparing historic documentation and photographic recordation of Virginia Avenue Tunnel in accordance with the guidelines set forth in Historic American Building Survey (HABS) / Historic American Engineering Record (HAER) Photographs: Specifications and Guidelines", "HABS/HAER Standards", and "HABS Historical Reports" prior to its demolition.
 - Establishing a preservation fund in the amount of \$200,000.00 for the purpose of carrying out historic preservation-related projects within the District of Columbia.
 - Providing interpretive signs that will describe the history of the Virginia Avenue Tunnel, Virginia Avenue SE in relation to the L'Enfant Plan and related historical topics.
 - Making the original stones that form the eastern and western portals of the tunnel available to the Friends of Garfield Park, NPS National Capital Parks East, and DPR.
 - Conducting exterior rehabilitation of CP Virginia, an historic railroad switching tower located near 2nd Street and Virginia Avenue SW.
 - Salvaging and reusing some of the Virginia Avenue Paving (remnants of the original cut-stone block paving used for Virginia Avenue SE) as part of interpretive sign and display relating to Virginia Avenue SE.
 - Investigating sections of cross streets proximate to Virginia Avenue SE between 2nd and 11th Street SE to assess the potential and verify the presence of any additional intact historic cut-stone block paving.
 - Conducting utility relocation work that requires unavoidable service disruptions during non-peak usage hours. Any utility service disruptions will be announced through the community outreach program noted above.
 - Providing incentives to construction workers to carpool or use public transportation for commuting.
 - Providing about 90 parking spaces within the west staging area (New Jersey Yard) for construction workers. Parking preferences will be given to those construction workers who carpool. Construction workers will be prohibited from parking at metered or two-hour residential spaces.
 - Coordinating with the 11th Street Bridges Project to complete the portion of this project where the reconstruction of the tunnel affects 11th Street SE.

Post-Construction Commitments

Although these commitments will be provided during construction, they will continue to provide benefits after completion of the Project:

- In the restoration of affected areas of Virginia Avenue SE, the streetscape will be improved from existing conditions by straightening the street between 4th and 5th/6th Streets; the green space will be restore and an enlarged, including the replanting of street trees; sidewalks will be widened and more will be provided, such as on the north side of Virginia Avenue between 7th and 8th Streets; new shared use bike paths connecting Garfield and Virginia Avenue Parks will be provided; the lanes between 5th/6th and 8th Streets will be reduced; and the street lighting, traffic signals and crosswalks will be improved. DDOT and the project sponsor will conduct outreach with the community and other stakeholders to plan the specifics of these enhancements.
- In the restoration of the affected areas of Virginia Avenue Park, additional amenities will be included, such as a new dog park. Additional improvements, including landscaping, will be determined through consultation with NPS, DPR and the community. DPR is expected to lead the public outreach to plan the specifics of the dog park and other park enhancements.
- Restoration of the Marine Corps Recreation Facility to at least their pre-construction conditions, including replacing trees displaced by the Project. The tree replacement plan for the Marine facility will be coordinated with the Marine Corps.
- Improving access to Garfield Park at 2nd Street SE in accordance with the Americans with Disabilities Act.
- Although not directly related to the Project, changing the mandatory practice of requiring every train to blow its horn before entering and exiting the tunnel. Engineers will still have the discretion to use the train horn for safety reasons.
- Replacing public street trees displaced by the Project on a one-to-one ratio based on total diameter at breast height impacts. A tree replacement plan will be coordinated with DDOT Urban Forestry Administration during the landscaping plan development.

THIS PAGE INTENTIONALLY LEFT BLANK.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
<hr/>)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 7

Chapter 8
List of Preparers

Chapter 8 List of Preparers

Management Oversight and Document Review

Federal Highway Administration, District of Columbia Division

Michael Hicks, Environmental/Urban Engineer

District Department of Transportation

Faisal Hameed

Saadat Khan

Lezlie Rupert

Jamie Henson

Eulois Cleckley

Document Preparation

Parsons Brinckerhoff, Inc.

Stephen Plano, Project Manager
M.A., Geography and Environmental Planning
B.S., Landscape Architecture
34 years experience

Jason Yazawa, Deputy Project Manager and EIS Author
M.U.R.P., Urban and Regional Planning
B.A., Economics
20 years experience

Pamela McNicholas, Natural Resources and EIS Author
M.S., Environmental Science and Policy
B.S., Environmental Analysis and Planning
20 years experience

Joseph Curtis, Land Use, Socioeconomic and EIS Author
M.C.P., City Planning
A.B., Geography
11 years experience

Allyson Reynolds, EIS Author
M.S., Transportation
B.A., English
23 years experience

John Winkel, Graphics
B.F.A, Graphic Design and Visual Communications
16 years experience

Eduardo Maeyama, Transportation
B.S., Civil Engineering
7 years experience

Erin Knauer, EIS Author
B.A., Sociology and Anthropology
1 year experience

Alice Lovegrove, Air Quality
M.S., Environmental and Waste Management
B.E., Engineering Science
24 years experience

Edward Tadross, Air Quality
B.A., Environmental Studies
B.A., Earth Sciences
15 years experience

Steve Allison, Biological Resources
B.S., Landscape Architecture
4 years experience

Michael Folli, Natural Resources & Wetlands
B.S. Environmental Science
17 years experience

Stephanie Foell, Historic Resources
M.H.P, Historic Preservation
B.S., History and Psychology
19 years experience

Henry Ward, Historic Resources
M.S., Anthropology
B.A., Anthropology and Sociology
33 years experience

Kelsey Britt, Historic Resources
B.A., Art History
2 years experience

John Page, Section 4(f)
M.U.P., Urban Planning
B.S., Urban Planning
38 years experience

Adam Heft, Site Contamination
M.S., Geology
B.S., Geology and Earth Sciences
20 years experience

Amanda Mendoza, Water Resources
B.S., Biology
5 years experience

Technical Contributors

Clark-Parsons Joint Venture

Philip Sheridan, Engineering
B.S., Civil Engineering
29 years experience

Prakash Patel, Engineering
B.S., Civil Engineering
33 years experience

Robert Brander, Transportation
M.S., Transportation Engineering and Planning
B.S., Civil Engineering
16 years experience

Winn Frank, Rail Operations
M.B.A, Business Administration
B.S., Transportation
46 years experience

Areg Gharabegian, Vibration
M.S., Energy, Resources and Environment
B.S., Mechanical Engineering
34 years experience

Gannett-Fleming

Ahmed El-Aassar, Noise
Ph.D., Environmental Engineering
M.S., Environmental Engineering
M.S., Water Resources Management
B.S. Civil Engineering
15 years experience

Geosyntec Consultants

Michael Berman, Site Contamination
M.E., Civil and Environmental Engineering
B.S., Chemical Engineering
19 years experience

Rick Jenson, Site Contamination
B.S., Geology
17 years experience

Hillis-Carnes Engineering Associates

Mike Hillis, Geotechnical Sampling
B.S., Finance
26 years experience

Mueser Rutledge Consulting Engineers

Francis J. Arland, Geotechnical Engineering
M.S., Civil Engineering
B.S., Civil Engineering
33 years experience

Shaw Environmental & Infrastructure Group

Roy Stancil, Site Contamination
B.S., Environmental Sciences
16 years experience

Stratacomm LLC

John Undeland, Public Outreach
B.A., Politics and Government
28 years experience

Wiles Mensch Corporation

Hank Sloan, Surveying
B.S., Forest Engineering
35 years experience

Matthew McComas, Utilities
B.S., Civil Engineering
13 years experience

Project Sponsor – CSX Transportation, Inc.

Ernest "Chip" Dobson, Project Coordinator

Keith Brinker, Environmental Coordinator

Charles Gullakson, Engineering Coordinator

Stephen Flippin, Community/Government Coordinator

Rick Hood, Real Estate Coordinator

THIS PAGE INTENTIONALLY LEFT BLANK.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
<hr/>)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 8

Chapter 10

References

Chapter 10 References

Reports Prepared for the Project

- Clark/Parsons, Joint Venture. *Virginia Avenue Tunnel Reconstruction Project – Traffic Operational Analysis Report*. September 2013 (Revised by Erata Sheet, April 2014)
- Clark/Parsons, Joint Venture. *Virginia Avenue Tunnel Reconstruction Project – Transportation Management Plan Report*. November 2013
- Clark/Parsons, Joint Venture. *Virginia Avenue Tunnel Reconstruction Project – Vibration Analysis Report*. March 2014
- Environmental Acoustics, Inc. *Virginia Avenue Tunnel Reconstruction Project – Noise Assessment Report*. June 2013
- Parsons Brinckerhoff. *Virginia Avenue Tunnel Reconstruction Project – Air Quality Technical Report*. April 2014
- Parsons Brinckerhoff. *Virginia Avenue Tunnel Reconstruction Project – Concept Evaluation Technical Report Version 2*. July 2012
- Parsons Brinckerhoff. *Virginia Avenue Tunnel Reconstruction Project - Modified Phase I Environmental Site Assessment*. May 2013
- Parsons Brinckerhoff. *Virginia Avenue Tunnel Reconstruction Project – Section 106 Assessment of Effects for Historic Properties*. August 2013

Other References

- 56th Congress of the United States, February 12, 1901
- American Farmland Trust for the U.S. Department of Agriculture and Natural Resources Conservation Service (September 2012). *Mitigation of Farmland Loss*. Retrieved from http://www.farmlandinfo.org/documents/29993/FPPA_Mitigation_Report.pdf. Accessed March 29, 2012.
- Association of American Railroads (November 2009). "Rail Intermodal Keeps America Moving," November 2009. Retrieved from http://www.aar.org/Economy/~/_media/AAR/BackgroundPapers/Intermodal%20Nov%202009.ashx.
- Audubon Society of the District of Columbia. *DC Audubon Society* (website). Retrieved from <http://www.dcaudubon.org/> Accessed July 22, 2012.

Barracks Row.org (March 21, 2011). *About Barracks Row*. Retrieved from <http://www.barracksrow.org/what/about>. Accessed March 5, 2012.

Cambridge Systematics, Inc. for the I-95 Corridor Coalition (December 2009). *Mid-Atlantic Rail Operations Phase II Study, Final Report*.

Capitol Hill Restoration Society. *Map of Capitol Hill Historic District*. http://www.chrs.org/Pages/3_HD1.html. Accessed January 31, 2012.

Capitol Riverfront Business Improvement District, *Capitol Riverfront* (website). <http://www.capitolriverfront.org/>. Access July 25, 2012.

Capitol Riverfront Business Improvement District. *Lower 8th Street, SE Vision Process Summary Report*. November 29, 2010. Retrieved from http://www.jdland.com/dc/files/8thstreet_201012_draftvision.pdf. Accessed January 30, 2012.

Capitol Riverfront Business Improvement District. *The Yards Park*. Retrieved from <http://www.capitolriverfront.org/go/the-yards-park>. Accessed February 12, 2012.

Capitol Riverfront Business Improvement District. *Tingley Plaza*. Retrieved from <http://www.capitolriverfront.org/go/tingey-plaza>. Accessed February 2, 2012.

Capitol Riverfront Neighborhood. *Neighborhood Overview*. Retrieved from <http://www.capitolriverfront.org/neighborhood>. Accessed January 31, 2012.

CIMP Project Team, Naval Facilities Engineering Command (NAVFAC) Washington. *Community Integrated Master Plan* (website). Retrieved from <http://www.sedistrictcimp.com/Default.aspx>. Accessed July 25, 2012.

Clark/Parsons, Joint Venture, Virginia Avenue Tunnel Reconstruction Project – Existing Utilities, Impacts and Proposed Relocations / Modifications, 2012

Council on Environmental Quality (n.d.). NEPA's Forty Most Asked Questions. Retrieved from <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>.

CSX Transportation, Inc. (2010), National Gateway Initiative.

District (of Columbia) Department of the Environment (May 2008). *Anacostia 2032: Plan for a Fishable and Swimmable Anacostia River*. Retrieved from <http://ddoe.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Anacostia2032.pdf>. Accessed January 11, 2012.

District Department of Transportation (January 2012), *District of Columbia Freight Forum, 1*. Retrieved from

<http://www.godcgo.com/Portals/0/Content%20Images/District%20of%20Columbia%20Freight%20Newsletter.pdf>. Accessed 3 September 2012.

District Department of Transportation (July 24, 2008). *Environmental Policy & Process Manual*.

District Department of Transportation, Noise policy, January 10

District of Columbia Water and Sewer Authority (n.d.). *DC Clean Rivers Project Division E – M Street Diversion Sewers, csos 015, 016 and 017*. Retrieved from <http://www.dcwater.com/workzones/projects/pdfs/LTCP-Division-E.pdf>

District of Columbia, Department of Human Services (n.d.). *211 Answers, Please!* (website). Retrieved from <http://app.answersplease.dc.gov/services/resources/programDetails.asp?ssPID=DCAP0586AS&intID=DCAP0586&strLink=/services/resources/organizationResults.asp&intPg=4&intOtherPg=1&strType=browse&txtTitle=undefined&strBrowse=D&chkAKA=1&radWord=undefined>. Accessed February 2, 2012.

District of Columbia, Department of Transportation. *2011 Bicycle Map*. Retrieved from <http://www.dc.gov/DC/DDOT/About+DDOT/Maps>. Accessed February 16, 2012.

District of Columbia, Department of Transportation. *Anacostia Waterfront Initiative (AWI) Projects*. <http://ddot.dc.gov/DC/DDOT/Projects+and+Planning/Capital+Infrastructure+Projects/A+nacostia+Waterfront+Initiative>. Accessed February 29, 2012.

District of Columbia, Office of Planning (n.d.). 2005-2009 American Community Survey Report by Ward. <http://planning.dc.gov/DC/Planning/DC+Data+and+Maps/DC+Data/Reports/Reports+2011/January+2011-+Key+Demographic+Indicators++ACS+2005-2009>. Accessed February 27, 2012.

District of Columbia, Office of Planning (November 18, 2010). Historic Preservation Review Board; Historic Landmark Designation Case No. 11-011; Saint Paul African Union Methodist Protestant Church. Retrieved from <http://planning.dc.gov/OP/hprb%20pdfs/nov/Historic%20Landmarks%20Nomination%20Saint%20Paul%20AUMP.pdf>. Accessed July 25, 2012.

District of Columbia, Office of Planning. *2006 Comprehensive Plan for the Nation's Capitol*. <http://planning.dc.gov/DC/Planning/Across+the+City/Comprehensive+Plan/2006+Comprehensive+Plan>. Accessed January 5, 2012.

District of Columbia, Office of Planning. District of Columbia Profiles of General Demographic and Housing Characteristics: 2000 and 2010. <http://planning.dc.gov/DC/Planning/Planning%20Publication%20Files/OP/State%20Data>

%20Center/2010%20Census%20Data/DC%20Census%202010%20Population%20by%20Census%20Block%20Group.pdf. Accessed February 27, 2012.

District of Columbia, Office of Planning. *District of Columbia Profiles of General Demographic and Housing Characteristics: 2000 and 2010*. Retrieved from <http://planning.dc.gov/DC/Planning/Planning%20Publication%20Files/OP/State%20Data%20Center/2010%20Census%20Data/DC%20Census%202010%20Population%20by%20Census%20Block%20Group.pdf>. Accessed February 27, 2012.

District of Columbia, Office of Planning. *Land Use Map*. Retrieved from <http://planning.dc.gov/DC/Planning/Across+the+City/Comprehensive+Plan/2006+Comprehensive+Plan/Generalized+Policy+and+Future+Land+Use+Maps>. Accessed January 5, 2012.

District of Columbia, Office of Planning. Population by Race and Hispanic or Latino Origin in DC - Census Block Group: 2010.

District of Columbia, Office of Planning. September 2010. *Anacostia Waterfront Initiative*. http://www.capitolriverfront.org/_files/docs/awi10yearprog.pdf. Accessed January 31, 2012.

District of Columbia, Office of Planning. *Urban Design Framework for the Near Southeast (Draft)*. http://jdland.com/dc/files/awi_nearseurbandesignframework_2003.pdf. Accessed 3/1/12.

District of Columbia, Office of Planning. *Ward 6 Development Summary, Fall-Winter 2011*. <http://planning.dc.gov/DC/Planning/In+Your+Neighborhood/Wards/Ward+6/Ward+6+Development+Summary>. Accessed January 5, 2012.

District of Columbia, Office of Zoning. *Summary of Overlay Districts*. Updated November 5, 2010. <http://dcoz.dc.gov/info/overlay.shtm>. Accessed March 1, 2012.

Dupree, Jacqueline (editor). " 'The Yards'/Southeast Federal Center." *JDLand* (website) <http://www.jdland.com/dc/sfc.cfm>. Accessed January 31, 2012.

Dupree, Jacqueline (editor). "DCPS Nixes Idea of Bringing School Within School to Near Southeast." January 19, 2012. *JDLand* (website) <http://www.jdland.com/dc/index.cfm/3617/DCPS-Nixes-Idea-of-Bringing-School-Within-School-to-Near-SE/>. Accessed March 7, 2012.

Dupree, Jacqueline (editor). "New Capper Seniors Building." *JDLand* (website) <http://www.jdland.com/dc/capperseniors.cfm>. Accessed March 5, 2012.

- Dupree, Jacqueline (editor). "New Marine Barracks." *JDLand* (website)
<http://www.jdland.com/dc/barracks.cfm>. Accessed March 5, 2012.
- Dupree, Jacqueline (editor). *JDLand: News and Photos Near Southeast/ Washington Navy Yard/ Capitol Riverfront/ Ballpark District* (website). <http://www.jdland.com/dc/index.cfm>. Accessed March 5, 2012.
- Dupree, Jacqueline (editor).. "Capper/Carrollsborg Housing Redevelopment." *JDLand* (website)
<http://www.jdland.com/dc/capper.cfm?tab=no1>. Accessed January 31, 2012.
- Farmland Protection Policy Act. 7 U.S.C. §4201, et seq.
http://www.farmlandinfo.org/index.cfm?function=article_view&articleID=29480.
Accessed March 29, 2012.
- Federal Transit Administration (FTA) guidelines, *Transit Noise and Vibration Impact Assessment* (2006)
- Friends of Garfield Park (2012). "About the Friends." *Garfield Park – A Capitol Hill Landmark Since 1791*. (website). Retrieved from
http://www.garfieldparkwashingtondc.org/About_the_Friends.html. Accessed December 28, 2012.
- Friends of Garfield Park (2012). *Garfield Park: A Capitol Hill Landmark Since 1791* (website). Retrieved from <http://www.garfieldparkwashingtondc.org/>. Accessed July 23, 2012.
- I-95 Corridor Coalition. 2002. *Mid-Atlantic Rail Operations – Phase I Study*. Retrieved from
<http://www.pooledfund.org/Details/Study/367>. Accessed January 30, 2012.
- I-95 Corridor Coalition. 2009. *Mid-Atlantic Rail Operations – Phase II Study*. Retrieved from
<http://www.pooledfund.org/Details/Study/367>. Accessed January 30, 2012.
- John Milner Associates, Inc. (July 2011). Phase 1B Archeological Survey for the Virginia Avenue Tunnel Railroad Project.
- John Milner Associates, Inc. (November 2009). Phase I Cultural Resources Survey for New Jersey Avenue Track Lowering and Virginia Avenue Tunnel Rail Projects.
- Johnson, Kyle. "Virginia Avenue Park – Plans Likely Delayed until Train Tunnel Project Completed." *Hillrag.com* (website) Retrieved from
http://www.hillrag.com/CCN_Website09/publicationhtml/papers/HR/1209/VirginiaAvePark.html. Accessed December 28, 2011.
- Land and Water Conservation Fund (LWCF) Act, 16 U.S.C. §4601-4 et seq (1964).

-
- Marhamati, Joe. June 2010. *Drawing the Line: Capitol Hill*. Retrieved from http://dc.urbanturf.com/articles/blog/drawing_the_line_capitol_hill/2134. Accessed January 31, 2012.
- McKone, Jonna. May 8, 2010. *Virginia Ave Community Garden Threatened by Development*. <http://dcfoodforall.com/2010/05/virginia-ave-community-garden-threatened-by-development/>. Accessed March 29, 2012.
- Metropolitan Washington Council of Governments (November 17, 2010). *Transportation Improvement Program for the Metropolitan Washington Region: FY 2011-2016*. http://www.mwcog.org/clrp/projects/tip/fy1116tip/DC_FY_11-16_TIP.pdf. Accessed March 1, 2012.
- Mooring, Pamela. "DC Water Breaks Ground on \$2.6 Billion Clean Rivers Project -- Largest Construction Project in DC Since Building of Metro." *District of Columbia Water and Sewer Authority* (website). Retrieved from http://www.dewater.com/news/listings/press_release522.cfm
- Mueser Rutledge Consulting Engineers for Clark-Parsons Joint Venture, Tunnel Walk Report, Virginia Avenue Tunnel, Washington, DC, February 14, 2012
- National Capital Planning Commission (n.d.). Retrieved at <http://www.ncpc.gov/>.
- National Capital Planning Commission (NCPC) (April 1, 2010). *CapitalSpace Plan - Ideas to Achieve the Full Potential of Washington's Parks and Open Space, Final Plan*. <http://www.capitalspace.gov/FinalPlan/Finalplan.htm>. Accessed December 28, 2011.
- National Capital Region Transportation Planning Board (November 17, 2010). *Financially Constrained Long-Range Transportation Plan* (CLRP). Retrieved from http://www.mwcog.org/clrp/projects/tip/fy1116tip/DC_FY_11-16_TIP.pdf. Accessed February 2, 2012 and March 1, 2012.
- National Capital Region Transportation Planning Board and Metropolitan Washington Council of Governments (July 18, 2012). *Transportation Improvement Program For the Metropolitan Washington Region FY 2013-2018; As Approved by the TPD on July 18, 2012*. Retrieved from http://www.mwcog.org/clrp/projects/tip/fy1318tip/FULL_FY13-18_TIP.pdf. Accessed on July 22, 2012.
- National Capitol Planning Commission (1997). *Extending the Legacy: Planning America's Capital for the 21st Century*. Retrieved from [http://www.ncpc.gov/ncpc/Main\(T2\)/Publications\(Tr2\)/iframpages/monumental_core_framework_plan_a.html#LegacyPub](http://www.ncpc.gov/ncpc/Main(T2)/Publications(Tr2)/iframpages/monumental_core_framework_plan_a.html#LegacyPub). Accessed January 25, 2012.
- National Capitol Planning Commission (2006). "Chapter 8: Parks, Recreation and Open Space Element." *Comprehensive Plan for the National Capitol Region*. Retrieved from D.C. Municipal Regulations and D.C. Register (website)

<http://www.dcregs.dc.gov/Gateway/ChapterHome.aspx?ChapterNumber=10-A8>.
Accessed March 29, 2012

National Capitol Planning Commission (2006). *Comprehensive Plan for the National Capitol Region*. Retrieved from
[http://www.ncpc.gov/ncpc/Main\(T2\)/Planning\(Tr2\)/ComprehensivePlan.html](http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ComprehensivePlan.html). Accessed
January 26, 2012.

National Capitol Planning Commission (April 2007). *Freight Railroad Realignment Feasibility Study*. Retrieved from
http://www.ncpc.gov/DocumentDepot/Publications/RailRealignment/FreightRailroadRealigningStudy_SectionOne.pdf. Accessed December 25, 2011.

Ogden Environmental and Energy Services Co., Inc. (November 5, 1998). *Material Evaluation Report of the Virginia Avenue Tunnel*. Washington DC: performed for CSX Transportation, Inc.

Robinson & Associates, Inc. (August 2007). *Garfield Park – Canal Park Connector Project Site History and Significance (95% Draft)*. Retrieved from
http://www.garfieldparkwashingtondc.org/uploads/Garfield_Park_History.pdf.
Accessed December 28, 2011.

Schrank, David, Tim Lomax and Bill Eisele, Texas Transportation Institute (September 2011). The Texas A&M University System 2011 Urban Mobility Report, September 2011.

Section 106 of National Historic Preservation Act, 16 U.S.C. §470f (1966).

Smithsonian Institution, *National Museum of Natural History* (website),
<http://www.mnh.si.edu/> Accessed July 27, 2012.

Southwest Neighborhood Assembly, Inc (2011). *Parks and Recreation Centers*.
http://www.swdc.org/culture_attractions/parks_centers.htm. Accessed December 28,
2011.

Southwest Neighborhood Assembly, Inc (2012). *Development Horizon*.
http://www.swdc.org/neighborhood/development_horizon.htm. Accessed January 31,
2012.

Tatian, Peter et al. for the Urban Institute (September 30, 2008). *State of Washington, D.C.'s Neighborhoods*. UI project no. 08040-000-01.
(http://www.neighborhoodinfodc.org/pdfs/neighborhoodindicators_2008_09_30.pdf).
Accessed January 5, 2012.

Texas Transportation Institute and the Center for Posts and Waterways (December 2007).
Modal Comparison of Domestic Freight Transportation Effects on the General Public,
December 2007 (amended March 2009).

-
- U.S. Department of Agriculture, Soil Conservation Service. July 1976. *Soil Survey of the District of Columbia*. Retrieved from <http://www.sawgal.umd.edu/nrcsweb/DCsoils/maps/images/13wmap.jpg>. Accessed December 29, 2011.
- U.S. Department of Health & Human Services (2012). Prior HHS Poverty Guidelines (2010). Retrieved from <http://aspe.hhs.gov/poverty/figures-fed-reg.shtml>. Accessed February 29, 2012.
- U.S. Department of Interior, National Park Service. *Capitol Hill Historic District*. <http://www.nps.gov/nr/travel/wash/dc81.htm>. Accessed 1/31/12.
- U.S. Department of Transportation (November 3, 2010). Press Release, DOT Releases New Freight Transportation Data.
- U.S. Department of Transportation, Federal Highway Administration (n.d.). Freight Analysis Framework Website, <http://www.ops.fhwa.dot.gov/freight/index.cfm>
- U.S. Department of Transportation, Federal Highway Administration (October 20, 1987). Guidance for Preparing and Processing Environmental and Section (F) Documents.
- U.S. Department of Transportation, Federal Highway Administration, Office of Planning, Environment and Realty; Project Development and Environmental Review (July 20, 2012). *Section 4(f) Policy Paper*. Retrieved from <http://www.environment.fhwa.dot.gov/4f/4fpolicy.asp>. Accessed September 3, 2012.
- U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment (May 2006). *Federal Transit Noise and Vibration Impact Assessment*, FTA-VA-90-1003-06.
- U.S. Department of Transportation, Federal Transit Administration, Office of Planning and Environment (May 2006). *Transit Noise and Vibration Impact Assessment*. FTA-VA-90-1003-06. Retrieved from http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf. Accessed September 3, 2012.
- U.S. Environmental Protection Agency, Region 3. *Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus and Sediment* (2010). Accessed online: http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/FinalBayTMDL/CBayFinalTMDLExecSumSection1through3_final.pdf. Accessed June 10, 2012.
- U.S. General Services Administration. *Southeast Federal Center*. Retrieved from <http://www.gsa.gov/portal/content/104896> and <http://www.gsa.gov/portal/content/103684>. Accessed January 31, 2012.

U.S. Marine Corps. "Marine Barracks Washington History." Official U.S. Marine Corps Web Site <http://www.marines.mil/unit/barracks/pages/barrackshistory.aspx>. Accessed July 22, 2012.

U.S. Marine Corps. "Marine Barracks Washington: 8th and I." Retrieved from <http://www.marines.mil/unit/barracks/pages/welcome.aspx>. Accessed December 29, 2011.

University of the District of Columbia. October 1993. *Ground Water Resource Assessment Study For The District Of Columbia*. Retrieved from http://www.udc.edu/docs/dc_water_resources/technical_reports/report_n_145.pdf. Accessed July 23, 2012.

Virginia Railway Express. 2004. Strategic Plan, 2004-2025.

Washington Metropolitan Area Transit Authority (WMATA), Department of Operations Services (February 18, 2010). *Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems, Section 16, Release 9*.

Wheeler Creek Community Development Corporation, *Wheeler Creek Community Development Corporation* (website) <http://www.wheelerce.org/index>. Accessed July 25, 2012.

THIS PAGE INTENTIONALLY LEFT BLANK.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 9



How tomorrow moves

About CSX

Responsibility

Customers

Community

Investors

Working at CSX

A Great Story To Tell: See Our Ads

Press Releases

Media Contacts

Federal Highway Administration Approves Construction Alternative for CSX's Virginia Avenue Tunnel Project

Final action on Federal environmental review allows CSX to complete design work and seek construction permits

JACKSONVILLE, Fla. (Nov. 4, 2014) – The Federal Highway Administration has approved a preferred construction alternative for CSX's Virginia Avenue Tunnel project, enabling CSX to complete the tunnel's design and initiate the construction permitting process. The decision marks the completion of an extensive environmental review of the project conducted jointly with the District of Columbia Department of Transportation, which incorporates three years of input from residents, businesses and government agencies in the southeast Washington, D.C., neighborhood around the tunnel.

The Federal government approved a proposal to modernize the 110-year old tunnel which will improve the flow of freight traffic through the District of Columbia and eliminate a rail-traffic bottleneck that also impacts commuter and passenger trains in the region. The new structure will accommodate trains that can carry enough freight to remove the equivalent of 280 trucks per train from the nation's highways.

"The Virginia Avenue Tunnel is a critical piece of our national and regional transportation infrastructure," said Louis E. Renjel, Jr., vice president of strategic infrastructure initiatives for CSX. "Reconstructing the aging tunnel will eliminate a long-standing rail bottleneck that impacts freight and commuter rail, and it will increase the network's capacity ahead of anticipated growth in freight-rail traffic. Through CSX's commitment to the community, neighbors will enjoy improved streetscapes, additional green spaces, a new bike trail and other improvements as part of the project.

"While this decision is the end of the Federal environmental review process, it is just the beginning of a new phase of CSX's relationship with the community," Renjel said. "Input from residents shaped many features of this project and we are appreciative of their involvement. We are committed to doing this project the right way; safely, respecting our neighbors and working closely with residents and businesses to minimize impacts and to ensure that they are informed about construction plans."

CSX plans to use a new website, social media, events, briefings and other tools to maintain the flow of information to area residents and businesses. The company has an established community office in the neighborhood that is staffed during regular hours to allow visitors to learn more about the project and ask specific questions of company representatives.

CSX and its design/build contractor, Clark/Parsons, will now finalize the tunnel design and begin applying for construction permits in compliance with D.C.'s established construction-permitting process. Following the initial permitting process, utility relocations and other preliminary efforts will begin. Major construction is expected to begin in the next several months, following receipt of the required permits.

The CSX Virginia Avenue Tunnel team has voluntarily committed to hire workers and select contractors consistent with the spirit of the District of Columbia's First Source and Certified Business Enterprise programs.

In response to feedback from nearby residents, the alternative selected through this process has the shortest construction timespan (30 to 42 months) of any of the construction alternatives considered and ensures that trains will always operate in enclosed tunnels in front of nearby residences. The plan includes significant measures to reduce the construction impacts on nearby residences and businesses, including dust, noise and vibration monitoring and control plans; limited construction hours; and maintenance-of-traffic plans that ensure continued pedestrian access and vehicle mobility for all essential services throughout the process.

The Virginia Avenue Tunnel is part of CSX's National Gateway, an initiative to improve the flow of rail traffic throughout the nation by increasing the use of double-stacked intermodal trains and creating more efficient rail routes that link Mid-Atlantic ports with Midwestern markets for domestic and imported products. It is one of several infrastructure investments CSX is making to meet the growing demand to move more freight by rail across its network. The Virginia Avenue Tunnel, one of the largest components of the National Gateway program, is receiving no Federal funds.

The record of decision is available for review and downloading at www.virginiaavenuetunnel.com.

CSX, based in Jacksonville, Florida, is a premier transportation company. It provides rail, intermodal and rail-to-truck transload services and solutions to customers across a broad array of markets, including energy, industrial, construction, agricultural, and consumer products. For more than 185 years, CSX has played a critical role in the nation's economic expansion and industrial development. Its network connects every major metropolitan area in the eastern United States, where nearly two-thirds of the nation's population resides. It also links more than 240 short-line railroads and more than 70 ocean, river and lake ports with major population centers and small farming towns alike. More information about CSX Corporation and its subsidiaries is available at www.csx.com. Like us on Facebook (<http://www.facebook.com/OfficialCSX>) and follow us on Twitter (<http://twitter.com/CSX>).

Contact:
Rob Doolittle
Rob_Doolittle@csx.com
202-626-4939



The ABCs of rail.
By CSX.
Expand your
train vocabulary
with our Railroad
Dictionary.



Get to
Know CSX
Everything you
ever wanted
to know about
CSX.

About Us

- [Overview](#)
- [Responsibility](#)
- [Suppliers](#)
- [Contact Us](#)

Media

- [Press Releases](#)
- [State Fact Sheets](#)
- [Contact Us](#)

Customers

- [Customer Service](#)
- [Commodities](#)
- [Contact Us](#)

About the Site

- [Site Map](#)
- [Privacy](#)
- [Terms of Use](#)
- [Corporate Structure](#)

Share

- Facebook
- Twitter

[Mobile Version](#)

©2010-2012 CSX Corporation Inc.



**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
 Plaintiff)
)
 v.)
)
 ANTHONY FOXX, Secretary of)
 Transportation, et al.)
)
 Defendants)
)
 _____)

PLAINTIFF'S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 10

ID 20: Committee of 100 on the Federal City

The Committee of 100
on the Federal City



www.committeeof100.net

September 25, 2013

Founded 1923**Chair**

Nancy J. MacWood

Vice-Chair

Monte Edwards

Secretary

Meg Maguire

Treasurer

Carol F. Aten

Trustees

Bill Crews

Dorothy Douglas

Alma Gates

Erik Hein

Cornish Hitchcock

George Idelson

Loretta Neumann

Laura M. Richards, Esq.

Lance Salonia

Marilyn J. Simon

Dr. Beverley Wheeler

Frank Vespe

Bill Wright

Evelyn Wrin

George Clark, Esq., Emeritus

945 G Street, N.W.

Washington, D.C. 20001

202.681.0225

info@committeeof100.net

Michael Hicks, Environmental Engineer
Federal Highway Administration
District of Columbia Division
1990 K Street NW, Suite 510
Washington, DC 20006
Michael.Hicks@dot.gov

Faisal Hameed, Ph.D., Manager
Project Development & Environment Division
District Department of Transportation
55 M Street, SE, Suite 400
Washington DC 20003
Faisal.Hameed@dc.gov

**Re: Comments of the Committee of 100 on the Federal City on the Draft
Environmental Impact Statement & Draft Section 4(f) Evaluation for the
Virginia Avenue Tunnel Reconstruction**

Dear Sirs:

Attached is The Committee of 100 on the Federal City comment on the Virginia Avenue Tunnel Reconstruction, Draft Environmental Impact Statement & Section 4(f) Evaluation. We appreciate the opportunity to submit this comment and look forward to continuing engagement on the Virginia Avenue Tunnel Reconstruction proposal.

If you would like to contact The Committee of 100, please email Monte Edwards, monte.edwards@verizon.net, or phone (202) 543-3504 .

Sincerely,

Nancy Macwood

Nancy Macwood, Chair

Cc: Harriet Tregoning, OP harriet.tregoning@dc.gov
Dan Emerine, OP dan.emerine@dc.gov
Julia Koster, NCPC julia.koster@ncpc.gov

No response required for this section of comment

Committee of 100 on the Federal City Comments on the
Virginia Avenue Tunnel DEIS
September 25, 2013
Page 2

Diane Sullivan, NCPC diane@ncpc.gov
Chris Zimmerman, Arlington County/ TPB - czimmerman@arlingtonva.us
Jim Dougherty, Sierra Club jimdougherty@aol.com
Mark Roeber, VRE mroeber@vre.org
Doug Allen, VRE dallen@vre.org
Beth Purcell, Capitol Hill Restoration Society eap1@mindspring.com
Maureen Cohen Harrington, Capitol Quarter Homeowners Association
cohenharrington@gmail.com

No response required for this section of comment

COMMENTS PERTAINING TO THE

VIRGINIA AVENUE TUNNEL RECONSTRUCTION
DRAFT ENVIRONMENTAL IMPACT STATEMENT
& DRAFT SECTION 4(f) EVALUATION

July, 2013

Submitted to

**FEDERAL HIGHWAY
ADMINISTRATION**
District of Columbia Division

**DISTRICT DEPARTMENT OF
TRANSPORTATION**
Project Development & Environment Division

No response required for this section of comment

THE COMMITTEE OF 100 ON THE FEDERAL CITY

September 25, 2013

Table of Contents

I.	Overview and Executive Summary	1	
II.	Analysis of Purpose and Need Statement	7	
III.	Separation of Freight and Passenger Operations	10	
IV.	Safety and Security Issues	15	
V.	Air Quality	19	
VI.	Identifying Alternative Routes	26	
VII.	Section 4(f) Commentary	31	
VIII.	Conclusion	34	No response required for this section of comment

Overview

The Virginia Avenue Tunnel is functionally obsolete. Its single track creates a chokepoint for traffic along the East Coast and its inability to accommodate double-stacked containers imposes limits on freight trains traveling through DC to or from points south. CSX is proposing to rebuild the Virginia Avenue Tunnel as part of its National Gateway Project.

While the NEPA process, by law, requires consideration of a “no build” alternative, its function isn’t simply to decide whether a project is necessary or unnecessary. It is to determine, after analyzing a variety of realistic alternatives, the best way to solve specific problems and/or to meet specific needs.

In this DEIS, only one approach is being considered – rebuilding the tunnel in approximately the same location, but with two tracks and sufficient clearance for double-stacking.¹ All three “alternatives” are just variations on this approach. In fact, even the “no build” option is cast in this form – the choice presented is between reconstructing the tunnel in its current location on an emergency basis (the “no build” option) rather than as a planned infrastructural improvement. The rebuilding of the Virginia Avenue Tunnel is treated as inevitable – the only real questions are when and how.

In part, the failure to consider a range of alternatives stems from an overly narrow Statement of Purpose and Needs that focuses only on CSX’s needs, ignoring impacts on other users of rail infrastructure as well as the priorities established by federal and local planning efforts. The DEIS’s tendency to treat the Virginia Avenue Tunnel in isolation, rather than to establish logical termini for analyzing the project compounds this problem.² Finally, the analysis is hampered by the absence of data that is necessary for a meaningful evaluation of the comparative costs and benefits of alternative approaches.

The DEIS, written solely from CSX’s perspective, begs two crucial public policy questions: (1) is it necessary and desirable to increase the volume of “through” freight traffic in the Virginia Avenue Tunnel rather than to reroute freight traffic to avoid this chokepoint? and (2) what long-

¹ As the Capitol Quarter Community Association’s comments point out, the range of alternatives is narrowed even further by the fact that all three build scenarios involve running CSX traffic along Virginia Avenue throughout the construction phase. Even the possibility of temporary re-routing or a partial diversion of current traffic has been taken off the table.

²See 23 CFR 771.111(f):

In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in each EIS or finding of no significant impact (FONSI) shall:

- (1) Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
- (2) Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if o additional transportation improvements in the area are made; and
- (3) Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

20-1

Response to Comment 20-1

Chapter 2 of the FEIS was revised to include discussion regarding the independent utility and logical termini of the project.

20-2

Response to Comment 20-2

Order of magnitude cost estimates were obtained or developed for the concepts considered for this project. Section 3.3.1.7 of the DEIS addresses this comment.

20-3

Response to Comment 20-3

This project’s purpose and need is to address the deficiencies of the Virginia Avenue Tunnel. Section 5.15 of the DEIS describes how passenger rail and freight coexist in the region. This project does not preclude future discussions on other passenger and freight rail projects.

term impact will this proposed change in infrastructural capacity have on other users – specifically on passenger and commuter rail services? | 20-4

Our contention is that any meaningful analysis of the environmental impact of expanding the Virginia Avenue Tunnel must consider the comparative costs and benefits of expanding the tunnel vs. rerouting freight traffic. We also believe that if such an analysis were to be done, the likely conclusion would be that now is the time to separate passenger and commuter rail from freight rail, so that we can meet our expanding needs for both services and to do so in a way that routes freight around -- rather than through -- DC's Monumental Core and population centers. Expanding rail capacity doesn't have to be a zero-sum game that pits freight against passenger and commuter rail. It is in the long-term public interest that we avoid investments that further one of those interests at the expense of the other.

We find the Virginia Avenue Tunnel Draft Environmental Impact Statement to be excessively narrow and self-serving in defining purpose and need, thus failing to consider a number of important factors:

- ♥ The importance of passenger and commuter service and the need to expand those transportation services is not considered.
- ♥ The negative effect of expanded CSX service on passenger and commuter operations is ignored.
- ♥ The safety and security considerations of expanded CSX service are not addressed.
- ♥ The effect of increased diesel emissions due to expanded CSX operations is not addressed.
- ♥ The inability of passenger and commuter rail to use electric instead of diesel locomotives to mitigate those environmental impacts because of CSX restrictions is ignored.
- ♥ Practical options for rerouting CSX that would eliminate the problems of freight, passenger and commuter rail being forced to share the same rail tracks are not evaluated.

Executive Summary

A series of drafting choices have produced a DEIS that is excessively narrow and that fails to develop a legitimate range of alternatives and to comprehensively analyze the implications of rebuilding an enlarged freight tunnel at the current Virginia Avenue location.

Response to Comment 20-4

Sections 5.17 and 5.18 were revised in the FEIS to include discussion of the indirect and cumulative effects to passenger rail service, respectively.

Response to Comment 20-5

This is a private project that requires permits from FHWA, DDOT and other federal and District agencies as appropriate. Therefore, expansion of passenger and commuter rail service is outside the scope of this project. However, the EIS should and does address relevant freight rail transportation and public impacts of this project. In response to specific remarks in this comment: (1) Although the project is not meant to improve passenger rail service, the improved efficiency of freight rail transportation should benefit passenger service (see Sections 5.15.1 of the FEIS for further information); (2) Section 5.3 was revised for the FEIS to include the long-term safety and security impacts of rebuilding Virginia Avenue Tunnel; (3) The long-term air quality impacts of the project were addressed in Section 5.5 of the DEIS; (4) Rebuilding Virginia Avenue Tunnel does not affect the types of locomotives used by passenger rail service; and (5) Although the project is not meant to improve passenger rail service, it does not preclude other solutions to better to manage rail traffic in and around the District among freight and passenger users.

20-5

Most strikingly, CSX has failed to demonstrate how a downstream freight, passenger and commuter rail would be impacted by a rebuilt Virginia Avenue Tunnel. 20-6

An alternative solution to CSX’s own capacity problems (and well as to other unacknowledged needs) would be to separate passenger and freight rail to enable both to expand in the future. But in this draft of the EIS, that alternative is not being considered.

We think it needs to be. What is at stake here is whether the continued shared use of the SW tracks and Long Bridge by freight, passenger, and commuter rail threatens to undermine the national and local planning goals articulated in the Federal Workplace Element of the Comprehensive Plan, the Union Station Master Plan, and the SW Ecodistrict Plan. An overarching goal (and premise) of these initiatives is that alternatives to automobility should be promoted in both transportation and land use planning and they all envision substantial increases in both passenger and commuter rail (including through-running MARC trains to Virginia).

We believe that the DEIS, as currently written, fails to provide a useful decision-making tool and that the “no build” option should be adopted until a revised DEIS that develops genuine alternatives and analyzes each in a comprehensive, detailed, and even-handed way has been issued and commented upon.

The Purpose and Need Statement is Unduly Narrow

The proposed rebuilding of the Virginia Avenue tunnel serves only the interests of freight rail. To provide efficient freight rail transportation service the DEIS defines the “needs” to be met as those that are exclusively related to CSX’s self-interest. The detrimental impacts of the expansion on passenger and commuter rail are neither acknowledged nor evaluated in the DEIS. Nor are a series of other local and national needs related to the replacement of obsolete rail infrastructure. 20-7

The Importance of Passenger and Commuter Rail is Neither Acknowledged Nor Examined

The proposed solution of rebuilding the Virginia Avenue tunnel will remove a significant freight rail bottleneck, but in so doing will very likely create a major passenger and commuter rail bottleneck on the SW rail tracks and the Long Bridge. Expanding the capacity of the Virginia Avenue Tunnel will force passenger and commuter rail to compete with an even greater number of freight trains for use of the SW tracks and the Long Bridge, both of which are owned and controlled by CSX, and both of which are aging pieces of infrastructure. This is a scenario in which freight benefits at the expense of passenger and commuter rail. That outcome is neither desirable nor inevitable if we think ahead and consider a wider range of impacts and options. 20-8

Response to Comment 20-6

Section 5.15 of the DEIS describes how passenger rail and freight coexist in the region. Sections 5.17 and 5.18 were revised in the FEIS to include discussion of the indirect and cumulative effects to passenger rail service, respectively.

Response to Comment 20-7

This is a private project that requires permits from FHWA, DDOT and other federal and District agencies as appropriate. Therefore, expansion of passenger and commuter rail service is outside the scope of this project. However, the EIS should and does address relevant freight rail transportation and public impacts of this project. Rebuilding the VA tunnel is being done in anticipation of increased demand for freight rail service. With or without the project, the amount of freight moving through the District will increase. As described in Section 5.15.1, the Build Alternatives will allow CSX to accommodate this growth in freight transportation demand more efficiently, which may benefit passenger service using CSX rail lines in Virginia and the District. Making the tunnel double stack capable allows twice the amount of intermodal container freight to be carried per train. Additionally, eliminating the single track bottleneck at the Virginia Avenue Tunnel increases the fluidity of both freight and passenger rail service on this portion of the network. In 2013, more than 368,000 carloads of rail freight originated in or was delivered to the District by CSX. As of 2013, CSX provides serves three customers in the District and two just over the District border in Maryland. There are also other properties in the District that connect to CSX’s line, and CSX is currently engaged in discussions with two new potential rail customers in the District. There are also efforts by the City Council to preserve existing industrial zoning for properties with rail connections and outreach to promote further economic development in the District. The products received and shipped by these District customers include lumber, scrap metal, recycling materials, transformers, and aggregate.

Response to Comment 20-8

The project eliminates a bottleneck (existing single-track Virginia Avenue Tunnel). It does not create one. Please see Chapter 2 of the FEIS for discussion on why the existing conditions represent a bottleneck, and revised Section 3.7 for more information on the need for eliminating a bottleneck. Rebuilding the VA tunnel is being done in anticipation of increased demand for freight rail service. With or without the project, the amount of freight moving through the District will increase. As described in Section 5.15.1, the Build Alternatives will allow CSX to accommodate this growth in freight transportation demand more efficiently, which may benefit passenger service using CSX rail lines in Virginia and the District.

Safety and Security Issues Are Not Addressed

Given that the Virginia Avenue tunnel will soon be obsolete for freight traffic, before investing in expanding it, we should consider whether we actually want to route significantly more freight through the Monumental Core, especially when Washington, DC is neither the point of origin for that freight nor its destination. Serious safety and security risks of freight moving through the nation’s capital in close proximity to the Capitol, the Mall and numerous federal offices are not considered in the DEIS. The potential for terrorism and sabotage is not examined in the DEIS, nor is there any reference to the Transportation Security Administration’s *National Strategy for Rail Transportation Security*. The tracks in Southwest Washington contain several changes from double to triple to single track operation involving switches and curves that increase the danger of derailment, particularly as the tracks become more congested with the proposed doubling of commuter and passenger rail operations and freight operations. With certain types of cargo, such a derailment would result in tragic loss of life, and unimaginable damage to our government, its institutions and memorials.

20-9

The Impact on Air Quality is Not Considered

The shared use of freight rail infrastructure means that, because of CSX restrictions, commuter and passenger trains will not be able to use currently available and unused electric locomotives that would provide significant air quality benefits.

By limiting the environmental impacts to the relatively small reconstruction area and the time frame of the reconstruction activity, the DEIS does not consider the impact on other rail operations or the emissions that CSX will produce after reconstruction of the tunnel. Airborne emissions affecting air quality will increase as the rebuilt tunnel accommodates the increase in the number of freight trains, and probably an even greater increase in the number of locomotives because the heavier double-stacked container trains will likely require double-locomotives. Nowhere does the DEIS quantify this increase in emissions or its impact on air quality.

20-10

Impacts on air quality should be included in the DEIS and CSX should be required to compute the projected level of those emissions. Such analysis is necessary to evaluate the need to reroute CSX diesel trains to reduce the level of contaminants in the downtown and in the Monumental Core areas as well as to project the level of environmental mitigation if the SW tracks were electrified.

Alternative Routing is Not Adequately Considered

The DEIS confines its consideration of the alternatives to routing freight through the Virginia Avenue Tunnel, the heavily used SW tracks and Long Bridge to the routes NCPC examined in its 2007 *Freight Railroad Realignment Feasibility Study* and simply rejects those routes. The DEIS does not explore any other pragmatic alternatives such as a Potomac River crossing from

20-11

Response to Comment 20-9

The CSX rail route in the District from the Long Bridge to the Anacostia Bridge is a secure corridor that is managed and monitored by CSX in conjunction with the United States Department of Homeland Security. If the tunnel is rebuilt the modern infrastructure and new technologies that will be applied inside the tunnel, including a state of the art roadbed, will provide a greater level of safety than the existing tunnel or Alternative 1. The safe transportation of hazardous materials is regulated by the Federal Railroad Administration (FRA). The Transportation Security Administration determines the routes for shipment of certain hazardous materials. CSX does not transport explosive, toxic by inhalation (TIH), or poisonous by inhalation (PIH) materials through the District. The composition of freight passing through the District will not change as a result of this project. For security reasons CSX does not publicly disclose information about the materials it transports. However, CSX regularly provides a list of the top 25 hazardous materials (by rail car count) shipped through the District to the D.C. Homeland Security and Emergency Management Agency (HSEMA), the District Fire & EMS and Police Departments, as well as the U.S. Department of Homeland Security. CSX delivered an updated list to these agencies on December 5, 2013. Safety procedures relative to railroad operations at construction sites, for all Class I railroads such as CSX, fall under the purview of the FRA. In accordance with the FRA’s safety regulations, there are formal rules with specific protocols that railroads are required to follow to ensure the safety of trains moving through construction sites, the safety of workers involved, and the safety of the general public. If the tunnel is reconstructed the project site will be under 24/7 surveillance and the construction area will be kept secured from outside intrusion, while still maintaining north-south access for motorists, cyclists and pedestrians. CSX has established a community office near the project at New Jersey Avenue and added three additional police officers to patrol the proposed construction site. This adds additional security for the community as well as the ability for real-time information and on-site coordination of emergency officials. All railroad workers, including CSX employees and its contractors that work on or near railroad tracks, are required to be formally trained and undergo what is called “Roadway Worker Protection Training” per FRA statutory requirements. In addition, each roadway worker is required to undergo security training. All railroad contractors undergo a criminal background check every two years under the requirements of the industry’s e-RAILSAFE program. CSX regularly meets with District first responders regarding freight rail transportation issues including: response procedures, coordination and communications during incident response, and training. CSX has supported and will continue to support rail incident training for District first responders. District of Columbia emergency responders regularly participate in specialized safety training provided by CSX for emergency planning assistance and response. In 2010, more than 220 D.C. Fire & EMS personnel participated in hands-on training on how to respond to a railroad incident at CSX’s Benning Rail Yard. In addition CSX and District emergency responders participate in table-top drills, crisis management exercises and other coursework designed to meet the needs of the District Fire & EMS. Since 2007, CSX has sponsored training for thirteen D.C. Fire & EMS hazmat team members to attend a week-long training session at the Association of American Railroads Security and Emergency Response Training Center in Pueblo, Colorado. If the project moves forward, the District Department of Transportation will approve all maintenance of traffic plans. This will ensure that appropriate emergency access is maintained in and around the project site during the project. Additionally, a collaborative Emergency Action Plan (EAP) will be developed by the CSX project team, the CSX Public Safety department, and D.C. Fire & EMS. The plan will outline specific incident responses based on best-practice responses to situations and hazards common to construction and to the general area. The EAP will be reviewed periodically and will be updated as needed as the project progresses. The EAP will include step-by-step specific procedures to deal with emergency situations during construction.

Safety and Security Issues Are Not Addressed

Given that the Virginia Avenue tunnel will soon be obsolete for freight traffic, before investing in expanding it, we should consider whether we actually want to route significantly more freight through the Monumental Core, especially when Washington, DC is neither the point of origin for that freight nor its destination. Serious safety and security risks of freight moving through the nation's capital in close proximity to the Capitol, the Mall and numerous federal offices are not considered in the DEIS. The potential for terrorism and sabotage is not examined in the DEIS, nor is there any reference to the Transportation Security Administration's *National Strategy for Rail Transportation Security*. The tracks in Southwest Washington contain several changes from double to triple to single track operation involving switches and curves that increase the danger of derailment, particularly as the tracks become more congested with the proposed doubling of commuter and passenger rail operations and freight operations. With certain types of cargo, such a derailment would result in tragic loss of life, and unimaginable damage to our government, its institutions and memorials.

20-9

The Impact on Air Quality is Not Considered

The shared use of freight rail infrastructure means that, because of CSX restrictions, commuter and passenger trains will not be able to use currently available and unused electric locomotives that would provide significant air quality benefits.

By limiting the environmental impacts to the relatively small reconstruction area and the time frame of the reconstruction activity, the DEIS does not consider the impact on other rail operations or the emissions that CSX will produce after reconstruction of the tunnel. Airborne emissions affecting air quality will increase as the rebuilt tunnel accommodates the increase in the number of freight trains, and probably an even greater increase in the number of locomotives because the heavier double-stacked container trains will likely require double-locomotives. Nowhere does the DEIS quantify this increase in emissions or its impact on air quality.

20-10

Impacts on air quality should be included in the DEIS and CSX should be required to compute the projected level of those emissions. Such analysis is necessary to evaluate the need to reroute CSX diesel trains to reduce the level of contaminants in the downtown and in the Monumental Core areas as well as to project the level of environmental mitigation if the SW tracks were electrified.

Alternative Routing is Not Adequately Considered

The DEIS confines its consideration of the alternatives to routing freight through the Virginia Avenue Tunnel, the heavily used SW tracks and Long Bridge to the routes NCPC examined in its 2007 *Freight Railroad Realignment Feasibility Study* and simply rejects those routes. The DEIS does not explore any other pragmatic alternatives such as a Potomac River crossing from

20-11

Response to Comment 20-10

Electrification of CSX's mainline is not a part of this project. General [transportation] conformity was followed as defined by USEPA. The air quality modeling presented in the DEIS uses the appropriate USEPA modeling methodology, as described in the tech report included as an appendix to this document. It properly reflects the projected air quality impacts of this construction project.

Response to Comment 20-11

This proposal is not a reasonable alternative because it presents a number of infirmities including the rerouting of a major railroad from an existing longstanding right-of-way through a new structure over the Potomac River and then using another right-of-way that is of critical importance to the DC government for other purposes. Section 3.2 of the DEIS identified all the alternatives considered, including concepts that would temporarily or permanently reroute the mainline freight rail network outside of the District, and provided the reasons why none of the reroute concepts were selected for further consideration. Refer to Chapter 3 for details on the alternatives screening process.

Virginia to Anacostia (using a bridge or a tunnel), using the ROW that formerly supplied chemicals to Blue Plains, discussed more fully in Section 5. This is but one example of alternative routing that the DEIS needs to evaluate in order to separate freight from passenger and commuter rail operation. 20-11

Logical Termini Were Not Chosen

By biasing the Purpose and Needs statement to favor rebuilding the existing tunnel, and then limiting the evaluation of environmental effects to the area and time-frame of the construction activity, the DEIS fails to consider the adverse effects of the continued use of the tunnel on other parts of that alignment, including the Anacostia River Bridge and its adverse effects on boating access to the river, allowing the Anacostia channel to be dredged further upstream to facilitate greater boating use, improving neighborhood access to the river, and the fact that Anacostia Park will continue to be divided by the approach tracks to that bridge. The failure to select logical termini has also contributed to the arbitrary limitation of alternatives under consideration and a failure to recognize the systemic effects that rebuilding the Virginia Avenue Tunnel would have on parties other than CSX. 20-12

Response to Comment 20-12

Chapter 2 of the FEIS was revised to include discussion regarding the independent utility and logical termini of the project.

The Section 4(f) Evaluation is Flawed

The Evaluation concedes that the temporary “use” of Virginia Avenue, a contributing element to the L’Enfant Plan, which is listed in the National Register and thus a historic site of national significance, during reconstruction and enlargement of the tunnel will not be *de minimis*, would not be minor and the use would be adverse in terms of the National Historic Preservation Act Section 106. The Evaluation fails to address the permanent use of a significant part of Virginia Avenue, because of the proposed enlargement of the tunnel beyond its present dimensions. The Evaluation did not consider the full range of feasible and prudent alternatives that would avoid “use” of Virginia Avenue. The evaluation of the alternatives that were considered in the Evaluation used the wrong standard: the biased Purpose and Needs statement that permeates the entire DEIS. 20-13

Response to Comment 20-13

As described in Section 5.11 of the DEIS, the adverse effect to the L’Enfant Plan of the City of Washington, DC would only occur during construction. The Section 4(f) evaluation considered all the concepts identified in Section 3.2, which included reroute concepts. Also, please see response to Comment 20-5.

Conclusion

There is a whole segment of our rail infrastructure that is obsolete and problematic for a variety of reasons. CSX wants to fix the one piece that affects only their business, and to do so in a way that (a) is likely to commit us to decades of continued reliance on a route that should be retired and (b) not only fails to solve but actually exacerbates a number of existing problems (safety/security, disruption to urban fabric and parklands, air quality, constraints of passenger/commuter rail, navigability of the Anacostia). Everybody agrees that the Virginia Avenue Tunnel is obsolete, so why are the only two alternatives this DEIS is considering (1) wait until the tunnel starts falling apart and then rebuild it on a much larger scale in approximately the same place and (2) rebuild it now on a much larger scale in approximately the

same place? For a host of reasons, re-routing freight traffic has to be considered and considered objectively in terms of the potential costs and benefits associated with replacing our obsolete rail infrastructure.

No response required for this section of comment

Analysis of Purpose and Need Statement

CSX’s Proposed Purpose and Need Statement Biases the DEIS

The proposed rebuilding of the Virginia Avenue Tunnel serves only the interests of freight rail. The detrimental impacts of the expansion on passenger and commuter rail are neither acknowledged nor evaluated in the DEIS.

The Purpose and Need Statement (DEIS S.3) states: “The purpose of the proposed action is to preserve, over the long-term, the continued ability to provide efficient freight transportation services in the District of Columbia, the Washington Metropolitan Area and the eastern seaboard.”

To accomplish that purpose, the DEIS states that it will be necessary to meet three needs. However, some of these “needs” could be met in alternative ways and some of these “needs” fail to consider facts beyond the narrow self-interest of CSX:

Need #1. *Address the structural and operational deficiencies of the century-old Virginia Avenue Tunnel.* This is a misleading framing of the issue. The current desire to rebuild the tunnel is based exclusively on capacity constraints (in light of anticipated increases in demand) rather than any concern about the tunnel’s structural integrity. The DEIS implicitly acknowledges this fact when it claims that “a major structural deficiency could materialize over the next few decades, possibly due to the continued aging of the tunnel’s masonry structure.” (DEIS 2.1.3) This is conjecture. The DEIS notes the now-obsolete construction methods used to build the tunnel, but states that the “overall structure [of the tunnel] is in relatively good shape” (*id.*). Yes, the tunnel is old and it has drainage problems, but the DEIS specifically disclaims any near-term danger of collapse stating “the tunnel is in no danger of collapsing in part due to tunnel reinforcements and reconstruction made in late 1985 and early 1986.” (*id.*)

Operational deficiencies are due to the inability of the tunnel to accommodate two-way traffic of double stacked intermodal containers in the existing one-way tunnel. The DEIS pre-empts the question of whether the deficiency should be addressed by finding an alternative to sending freight traffic through the tunnel rather than by reconstructing the tunnel.

Need #2. *Accommodate expected increases in freight transportation that, in part, would stem from the Panama Canal expansion scheduled for 2015.* This statement unreasonably limits the DEIS to the expected increases in freight transportation instead of encompassing expected increases in rail traffic generally, including passenger and commuter operations; the impact of CSX increases on their operations; the impacts of all of these increases on air quality, safety and security; and the potential to address these issues through different rerouting alignments. In addition, the estimates for construction, ranging between 30 and 66 months, put the completion

20-14

20-15

20-16

20-17

20-18

Response to Comment 20-14

This is a private project that requires permits from FHWA, DDOT and other federal and District agencies as appropriate. Section 5.15 of the DEIS describes how passenger rail and freight coexist in the region. Sections 5.17 and 5.18 were revised in the FEIS to include discussion of the indirect and cumulative effects to passenger rail service, respectively.

Response to Comment 20-15

The physical conditions of the tunnel described in Section 2.1.3 of the DEIS were based on information obtained through engineering inspections. The fact that the tunnel is showing evidence of “distress” and yet the “overall structure [of the tunnel] is in relatively good shape” are not inconsistent. The evidence of distress is early indicators that the tunnel needs to be replaced. The evidence does not suggest there is an immediate danger that any section of tunnel would collapse. Adopting Alternative 1 will result in an increased risk of structural failure over time. A new modern tunnel will have a lower risk of structural failure. Moreover, the transportation industry in the US is engaged in comprehensive infrastructure improvement to meet 21st century demands and to promote the nation’s economy; this project is just one of many.

Response to Comment 20-16

Section 2.1.3 of the DEIS reports two facts about the existing tunnel: (1) it contains just one set of tracks, with two sets of tracks immediately outside the portals; and (2) it does not have adequate vertical clearance to allow double-stack container operations, which is the industry standard.

Response to Comment 20-17

Rebuilding the VA tunnel is being done in anticipation of increased demand for freight rail service. With or without the project, the amount of freight moving through the District will increase. As described in Section 5.15.1, the Build Alternatives will allow CSX to accommodate this growth in freight transportation demand more efficiently, which may benefit passenger service using CSX rail lines in Virginia and the District. The purpose and need section of an EIS does not consider the impacts. Please refer to revised Sections 5.17 and 5.18 in the FEIS for discussion of the indirect and cumulative effects to passenger rail service, respectively.

Response to Comment 20-18

The transportation demand need described in the DEIS is a long-term need, based on the freight growth expected from the opening of the Panama Canal.

date of the Virginia Avenue Tunnel between 2016 and 2019 (DEIS, pp. 3-53). These dates do not include local and federal review and permitting time, of which the EIS process is one part. Adding the projected review and approval time to the various construction schedules, it will be some years before the Virginia Avenue Tunnel “catches up” to the potential increases in freight rail generated by the Panama Canal expansion. 20-18

Need #3. *Ensure that during construction freight transportation services remain uninterrupted while the functions of the tunnel are being replaced with a new facility.*

This is basically a restatement of the second need and goes to CSX’s anticipated expansion. Existing freight transportation services would remain uninterrupted if nothing were to be done and the level of freight transportation did not increase. Even if freight transportation were to increase, CSX has alternate routings, some of which it claims to be using now for hazardous cargo that could accommodate increases in freight transportation. 20-19

The DEIS’s Statement of Purpose and Need Should be Revised

The Statement of Purpose and Need needs to be revisited and to incorporate needs and purposes beyond the narrow interests of CSX. Additional purposes and needs worth considering include:

- ♥ Accommodate the expansion of passenger and commuter rail capacity.
- ♥ Contribute to a coordinated solution of the problems created by outmoded infrastructure – including but not limited to the Virginia Avenue Tunnel, the Long Bridge, shared tracks in SW DC, the Anacostia River Rail Bridge – rather than simply relocate chokepoints.
- ♥ Mitigate safety and security concerns related to the proximity of the current freight rail system to the Monumental Core of Washington, DC and the U.S. Capitol. 20-20
- ♥ Minimize the impact of increasing rail traffic on air quality – e.g. facilitate electrification and enable mode shifts from driving to passenger/commuter rail as well as from trucking to freight rail.
- ♥ Be consistent with other local and national planning initiatives to redevelop and repair the urban fabric in this area.
- ♥ Respect and, where possible, repair parks and natural resources by eliminating, for example, existing impediments to navigability and public access to the Anacostia River.

Response to Comment 20-19

This is not a restatement of the second need. The second need is long term or post-construction, while the third is a construction-period need.

Response to Comment 20-20

This is a private project that requires permits from FHWA, DDOT and other federal and District agencies as appropriate. Therefore, expansion of passenger and commuter rail service is outside the scope of this project. However, the EIS should and does address relevant freight rail transportation and public impacts of this project. In response to specific remarks in this comment: (1) Although the project is not meant to improve passenger rail service, the improved efficiency of freight rail transportation should benefit passenger service (see Sections 5.15.1 of the FEIS for further information); (2) Section 5.5 was revised for the FEIS to include the long-term safety and security impacts of rebuilding Virginia Avenue Tunnel; (3) The long-term air quality impacts of the project were addressed in Section 5.5 of the DEIS; (4) Rebuilding Virginia Avenue Tunnel does not affect the types of locomotives used by passenger rail service; and (5) Although the project is not meant to improve passenger rail service, it does not preclude other solutions to better to manage rail traffic in and around the District among freight and passenger users.

The rehabilitation of Virginia Avenue Park will be conducted immediately after construction of the new tunnel. This work is part of the overall project. The planning process to determine post-construction amenities in Virginia Avenue Park will be controlled by the DC Department of Parks and Recreation. The project team will work with DPR to ensure that the park is properly restored and meets the requirements of DPR. CSX, DDOT and FHWA will work together to determine the streetscape of the restored Virginia Avenue SE, and will coordinate with the community during this process. This will also include the post-construction condition of the area under I-695 at 2nd Street SE. Revised Section 3.6 of the FEIS includes a description of the conceptual design of the post-construction streetscape of Virginia Avenue SE. Details of this plan will be subject to community and stakeholder input, and agency reviews.

Logical Termini Should be Chosen

Because the Virginia Avenue Tunnel is a small piece of a larger section of aging rail structure that imposes capacity constraints, it is important to establish logical termini to ensure that proposed alternatives actually eliminate rather than relocate chokepoints. At a minimum, we would suggest that the analysis encompass shared rail infrastructure including Long Bridge, the Southwest tracks, as well as the Union Station and the Virginia Avenue Tunnel. Another possibility would be to define the termini to encompass both the Potomac and the Anacostia River rail crossings.

20-21

Response to Comment 20-21

Chapter 2 of the FEIS was revised to include discussion regarding the independent utility and logical termini of the project.

Separation of Freight and Passenger Operations

Expanded commuter and passenger rail service is necessary to provide commuters and travelers with viable alternative to automobile travel. Currently, such expansion is limited by constraints imposed on commuter and passenger rail operations that share CSX-owned tracks with freight rail operations.

20-22

Response to Comment 20-22

The purpose and need of the Project does not involve or include improving passenger rail service for the District.

Why Increasing Commuter Rail is Essential

The Problem: Two-thirds of the cars on DC’s streets during rush hour are from out of state and those cars impose increasing demands on parking and pressures on congestion. Of US cities with more than 100,000 residents, DC has the highest daytime percentage increase in population due to commuters, and in terms of absolute numbers of people coming into the city each workday, we’re second only to Manhattan.

Our car problem is largely a commuter problem.

Our major challenge is getting large numbers of people in and out of the city efficiently. And this is a problem that will only get bigger in the future. As the Metrorail system reaches capacity and starts to lose riders due to crowded conditions and unreliability, commuter rail has been gaining ridership.³

In terms of the percentage of those commuters using cars, trucks or vans, DC again has the highest percentage at 54%, compared to Manhattan at 13% and Boston at 50%. DC is the lowest in the use of commuter rail: DC 2.8%, Manhattan 11% and Boston 8%. Manhattan has just under three times the number of commuters coming in each day as DC does, but more than 12 times as many traveling by commuter rail.⁴ Our regional transportation priorities must include a serious focus on how to expand passenger rail service into the District through MARC and VRE, as well as Amtrak.⁵

The Approach: *One obvious solution is to separate freight and passenger rail operations in Southwest by building an additional Potomac River rail crossing so the volume and imperatives of freight traffic don’t constrain the growth of commuter rail.*

³ Kytja Weir, “Commuter trains attract riders even as numbers flag on Metro,” May 29, 2013 <http://washingtonexaminer.com/commuter-trains-attract-riders-even-as-numbers-flag-on-metro/article/2530789>

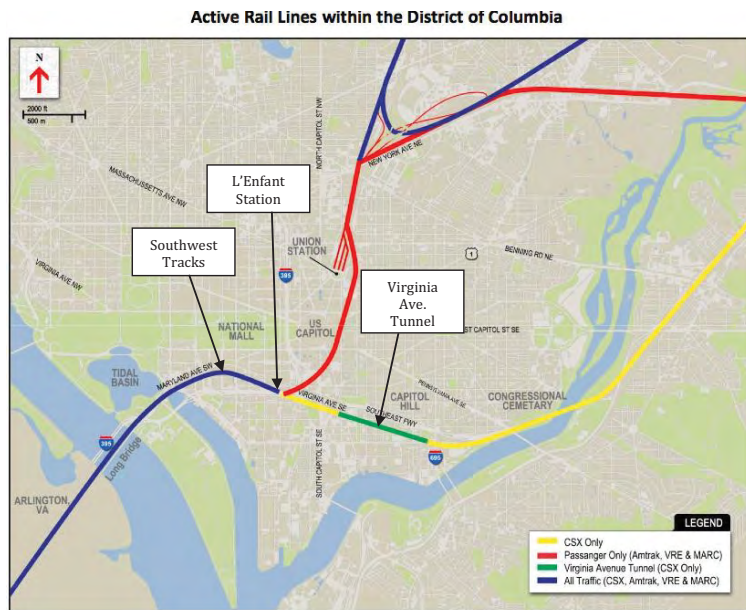
⁴ US Census Bureau, 2007-2011 American Community Survey 5-Year Estimates:

	Total Commuters	Work in Place of Residence	Commute by Car/Truck/Van	Commute by Railroad
District of Columbia	773,735	220,409	420,454	21,523
Manhattan	2,334,100	769,884	321,070	270,690
Boston	555,227	209,100	278,990	44,295

Continued Investment in the Virginia Avenue Tunnel Will Compromise Commuter and Passenger Rail Service

CSX uses the SW tracks to access the Virginia Avenue Tunnel. Passenger and commuter trains use those same SW tracks to access Union Station. The rail tracks from Virginia are double-tracked across the Long Bridge, until they reach 12th Street SW where they become triple-tracked, with double-tracks for passenger and commuter trains branching off to the north to Union Station through the First Street Tunnel. At Twelfth Street, double tracks for freight trains continue east until they become a single track entering the Virginia Avenue Tunnel.

These SW tracks provide the **only** means for passenger and commuter trains to access Union Station from the south and for trains originating at Union Station to travel south.



To the extent that rebuilding the Virginia Avenue Tunnel will result in additional CSX trains using the SW tracks, it will limit the expansion of passenger and commuter rail options running south of Union Station. If the number CSX trains increases substantially, reconstruction of the tunnel may even force a decrease in commuter and passenger rail service.

20-23

Response to Comment 20-23

Rebuilding the VA tunnel is being done in anticipation of increased demand for freight rail service. With or without the project, the amount of freight moving through the District will increase. As described in Section 5.15.1, the Build Alternatives will allow CSX to accommodate this growth in freight transportation demand more efficiently, which may benefit passenger service using CSX rail lines in Virginia and the District. Making the tunnel double stack capable allows twice the amount of intermodal container freight to be carried per train. Additionally, eliminating the single track bottleneck at the Virginia Avenue Tunnel increases the fluidity of both freight and passenger rail service on this portion of the network.

VRE's expansion is already being limited by its agreement with CSX – at this point its rush hour trains are filled to capacity and typically have standees, trains are as long as existing platforms allow, and bi-level cars are in use. Thirty-six of forty slots allocated to VRE are currently in use, which means that only one more round-trip train can be added to each of the two routes that operate along this route.⁶ MARC, too, has seen the expansion of its Brunswick line constrained by CSX.⁷ Both locally and nationally, CSX's leadership has been quite vehement that it will resist any passenger rail proposals that threaten its own bottom line:

CSX Corp. CEO, President and Chairman Michael Ward told Bloomberg News yesterday that he “can’t be part of” President Barack Obama’s push for high speed rail.

Ward said high-speed passenger rail service won’t make enough money and freight rail systems can’t withstand trains moving as fast as 110 mph. Class I railroads have expressed concern over high-speed rail’s impact on their freight rail systems, but Ward’s recent criticism takes a more aggressive stance.

“I’m a corporation. I exist to make money, OK?” Ward said. “You can’t make money hauling passengers, so why would I want to do that? That wouldn’t be fair to my shareholders.”⁸

If we want to expand both freight and commuter/passenger rail capacity, then dedicated tracks, with the level of service optimized for each use, should be provided. Faced with a similar situation in Baltimore, and armed with sufficient funding to study the issue comprehensively, the Federal Railroad Administration concluded that “In the environment of Baltimore’s topography and development patterns, the needs of freight and passenger service differ so greatly as to mandate separate freight and passenger facilities.”⁹

No response required for this section of comment

How Shared Infrastructure Constrains Passenger and Commuter Rail Service

The constraints that restrict increasing commuter and passenger rail because of the shared tracks in SW are considerable:

- A Single River Crossing for All Rail Users. Currently, freight, passenger and commuter trains share the double-tracked Long Bridge, the only Potomac River rail crossing within 70 miles, as well as rail tracks in Southwest (SW). According to the National Capital Region Transportation Planning Board, two-thirds of the traffic on the Long Bridge is passenger or commuter rather

⁶Parsons Brinckerhoff, *VRE System Plan Operations Board Workshop Summary Report*, August 2013, pp.2, [http://www.prtctransit.org/docs/commission/Sep2013/Item_10C_VRE_Info--VRE_System_Plan_Operations_Board_Workshop_Summary_Report_\(08-13\).pdf](http://www.prtctransit.org/docs/commission/Sep2013/Item_10C_VRE_Info--VRE_System_Plan_Operations_Board_Workshop_Summary_Report_(08-13).pdf)

⁷ Michele Whelley, “MARC: Rolling in the Right Direction,” *The Baltimore Sun*, May 26, 2013; http://articles.baltimoresun.com/2013-05-26/news/bs-ed-marc-expansion-20130526_1_marc-penn-line-camden-line-marc-service

⁸ Mark Szakonyi, “CSX CEO Ward rejects high-speed rail,” *Jacksonville Business Journal*, April 7, 2011 http://www.bizjournals.com/jacksonville/blog/trade_trucks_trains/2011/04/csx-ceo-ward-rejects-high-speed-rail.html

⁹Federal Railroad Administration, *Report to Congress: Baltimore’s Railroad Network (2005), Part II: Alternatives*, p. 9-3. <http://www.fra.dot.gov/eLib/Details/L04159>

than freight rail.¹⁰ And the SW tracks reflect this balance – after the Bridge, the route is triple-tracked, with two tracks providing passenger and commuter train with access to Union Station and the third track providing freight trains access to the single-tracked Virginia Avenue Tunnel.

- CSX-Imposed Schedules. The current operating agreement for the Potomac River rail crossing at the Long Bridge precludes any increase in the frequency of VRE commuter trains. In the future, with the increase in freight traffic, the competition for rail crossings will only increase. Unfortunately, CSX has consistently declined to disclose their expected increase in freight traffic and the amount of additional river crossing capacity that is available on the Long Bridge as currently configured.¹¹ In the absence of that data it is reasonable to conclude that the increased traffic on the Long Bridge will be to CSX's benefit and the detriment of passenger and commuter rail.

- CSX-Dictated Motive Power. MARC's Penn Line is electric, the Brunswick and Camden Lines (which operate on CSX tracks) are diesel and VRE is diesel (as required by CSX). Because of the lack of electric catenaries along the CSX-owned SW tracks, Amtrak must change locomotives at Union Station to use diesel to the south and electric to the north, losing time, delaying passengers and prolonging service times. Electrification of the tracks south of Union Station is environmentally desirable for passenger and commuter trains, but opposed by CSX because of possible interference with their planned double-stacked container trains.

No response required for this section of comment

- CSX-Controlled Track and Operations. CSX designs their rail lines for freight loads, not for passenger loads. Freight operations are typically slower and less time-critical than passenger rail. As a result, signaling, scheduling, platforms, speed and logistics generally are optimized for CSX's freight operations.

Can Shared Infrastructure Handle Significant Simultaneous Increases in Both Passenger and Freight Rail Operations?

In 2005, the Federal Railroad Administration estimated that the number of CSX trains traveling between Washington and Baltimore would increase from 33 trains a day in 2012 to a high of 56 trains a day in 2050.¹² In the same time frame, the Union Station Master Plan proposes to triple

¹⁰Karin Foster, Memorandum re 2013 TPB Freight Transportation Highlighted Projects, dated 18 September 2013, p. 12. <http://www.mwco.org/uploads/committee-documents/a11aXFZf20130912133457.pdf>

¹¹According to the FHWA, this is precisely the sort of data that NEPA analysis requires: “[r]ather than simply stating that additional capacity is needed between two points, information on the adequacy of current facilities to handle the present and projected traffic (e.g. What capacity is needed and the level of service for the existing and proposed facilities) should be discussed.” *NEPA and Transportation Decisionmaking: The Importance of Purpose and Need in Environmental Documents*, <http://environment.fhwa.dot.gov/projdev/tmneed.asp>

¹²This projection did not take into account the increased freight traffic that would result from expansion of the Panama Canal. So 56 CSX trains a day is a conservative estimate of future freight demand. *Report to Congress: Baltimore's Railroad Network*, p. 4-13.

the number of passengers and double the number of passenger and commuter trains¹³ and the SW Ecodistrict Plan proposes through-running MARC trains to Virginia and increasing the number of commuter trains using L'Enfant Station.¹⁴ The combined pressure of increased freight and passenger/commuter rail demand seems likely to overwhelm the carrying capacity of the Long Bridge and the SW rail tracks. Since those facilities are owned by CSX, it is likely that CSX will resolve that competition in its own favor and thereby frustrate the proposed increases in Amtrak, VRE, and MARC service.

20-24

Why the EIS Should Consider the Implications for Passenger and Freight Rail, as well as Freight Rail in its Analysis of Whether the Virginia Avenue Tunnel Should be Reconstructed

The current balance between freight and passenger/commuter rail operations on the CSX-owned shared-use infrastructure south of Union Station is an artifact, in part, of the limitations on freight rail capacity imposed by the current configuration of the Virginia Avenue Tunnel. Even with that constraint on freight volume in place, VRE's access to this infrastructure is already being rationed. Quadrupling the capacity of the Virginia Avenue Tunnel, without coordinated increases in the capacity of the Long Bridge and the SW tracks creates the very real possibility that CSX will satisfy its own needs for increased rail capacity at the expense of other rail users.

20-25

This is why it is important to revise the DEIS to include a more comprehensive statement of needs, a broader range of alternatives, a larger segment of rail infrastructure, and more detailed and relevant data. Looking solely at the Virginia Avenue Tunnel, exclusively from the perspective of freight rail, turns the NEPA process into a pointless exercise rather than a useful decisionmaking tool.

Response to Comment 20-24

CSX will continue to work with AMTRAK, VRE and MARC to accommodate passenger operations on the CSX network. The purpose and need of the Project does not involve or include improving passenger rail service for the District. Although delays do not currently occur due to available time for scheduling windows for passenger service, Virginia Avenue Tunnel is a bottleneck and inhibits the flow of train traffic. Future growth is likely to cause these windows to shrink and create potential conflicts. The reconstruction of this tunnel, particularly with two tracks, will provide additional capacity for freight movements.

Response to Comment 20-25

Rebuilding the VA tunnel is being done in anticipation of increased demand for freight rail service. With or without the project, the amount of freight moving through the District will increase. As described in Section 5.15.1, the Build Alternatives will allow CSX to accommodate this growth in freight transportation demand more efficiently, which may benefit passenger service using CSX rail lines in Virginia and the District. Making the tunnel double stack capable allows twice the amount of intermodal container freight to be carried per train. Additionally, eliminating the single track bottleneck at the Virginia Avenue Tunnel increases the fluidity of both freight and passenger rail service on this portion of the network.

¹³ *Union Station Master Plan*, Washington, DC (July 25, 2012), Executive Summary, page 2.

¹⁴ The recently adopted *Southwest Ecodistrict Plan* proposes transportation strategies to revitalize and reconnect the community that will "build on existing road, rail and bus infrastructure to enhance transportation capacity . . . and better connect all modes of travel." (Page 13) The SWE Plan builds on the District's Maryland Avenue SW Small Area Plan through an expanded L'Enfant commuter rail station that will serve VRE, MARC, and Amtrak commuters.

Safety and Security Issues

The DEIS fails to address two serious safety and security considerations from increased rail freight in close proximity to the US Capitol, the Mall and numerous federal offices.

A Train Derailment, or an Accidental Spill Could Lead to a Catastrophic Event | 20-26

CSX is required to select the “safest and most secure routes” for its most dangerous cargos, generally defined as substances posing a poison or toxic inhalation hazard, explosives, and radioactive materials (49 CFR Parts 171-180) and providing alternate routes for hazardous materials. However, CSX unilaterally makes the decision about what material should be rerouted and applies its own weighting to the federal designated “routing factors” that include security, safety and economics. The decision is made without public disclosure.¹⁵ Nor does the Federal Railroad Administration (FRA) have authority to approve the railroad routing decisions or to override them. FRA’s oversight of the freight routing decisions is merely to evaluate the railroad’s routing choices after they have been implemented.

CSX’s unilateral decision-making presents the possibility of human error in identifying, classifying or handling materials that are dangerous or hazardous. As we will see below, all of these errors can result in great harm. CSX has provided assurances that the most dangerous substances are not routed on the SW tracks and through the Virginia Avenue Tunnel; however, there are several types of less dangerous or potentially dangerous cargo that CSX has determined do not require rerouting, including denatured alcohol, terephthalic acid, fluorolytic acid and sodium chlorate. These, and other materials may be transported through Washington. The possible occurrence of human error together with outmoded running stock, including the DOT-111 tank car creates a volatile mix that has resulted in disastrous damage in recent derailments in other locations as close as the city of Baltimore.

Let us consider several recent derailments and their consequences:

The Lac-Maginet Derailment: On July 6, 2013 a petroleum train derailed in Lac-Maginet, Quebec, resulting in catastrophic explosions and fire that claimed the lives of 47 people and destroyed roughly half of the downtown area.¹⁶ The tank cars carrying the oil were DOT-111

¹⁵ The procedures of Circular No.OT-55-L, December 13, 2010 limit the disclosure of information. Upon written request, AAR members will provide bona fide emergency response agencies or planning groups with specific commodity flow information covering at a minimum the top 25 hazardous commodities transported through the community in rank order. The request must be made using the form included as Appendix F by an official emergency response or planning group with a cover letter on appropriate letterhead bearing an authorized signature. **The form reflects the fact that the railroad industry considers this information to be restricted information of a security sensitive nature and that the recipient of the information must agree to release the information only to bona fide emergency response planning and response organizations and not distribute the information publicly in whole or in part without the individual railroad’s express written permission.** [Emphasis added]

¹⁶ Petroleum spills from tank cars are not uncommon. An analysis of U.S. Transportation Department data found less than one incident of oil spills involving pipelines per billion ton-miles, compared with 19.95 incidents per billion ton-miles for trains.

Response to Comment 20-26

Please see response to Comment 20-9.

cars, known for their tendency to split open during derailments.¹⁷ It should be noted that approximately 70% of the US tank car fleet is composed of DOT-111 tank cars. Such a split occurred in Lac-Magnet causing five of the tank cars to explode, setting off massive explosions and fires fueled by the contents of other rail cars.

The Cherry Valley Derailment: On June 19, 2009 a Canadian National Railway train carrying denatured alcohol derailed at a grade crossing in Cherry Valley, Illinois. Of the 19 DOT-111 tank cars that derailed, 13 of them ruptured and caught fire. The resulting fire engulfed several motor vehicles stopped at the crossing, resulting in personal injuries, including one fatality, a mandatory evacuation within a half-mile radius and property damages estimated at \$7.9 million dollars. The NTSB noted the history of rupture problem with the DOT-111 tank cars, and described the demonstrated need for extra protection such as heat shields, tank jackets, more robust fittings and other modifications. At the time of the Cherry Valley derailment, the American Association of Railroads (AAR) opposed modification or retrofitting of existing tank cars but has increased the crashworthiness of newly constructed DOT-111 tank cars. The DOT-111 tanks cars, identical to those in the Lac-Magnet derailment,¹⁸ remained in service.

The Cherry Valley Derailment: Pipeline Damage: An additional hazard at the site of the Cherry Valley derailment was a 12-inch diameter underground natural gas transmission pipeline, installed deeper underground than required by industry standards and exceeding federal standards. Although it was 11 feet underground (deeper than required by standards), and protected inside a 16-inch diameter casing, during the derailment a railcar wheel and axle deformed the casing and caused damage to the pipe. The NTSB concluded that if the pipeline had been installed with minimum cover, it would have been ruptured as a result of being struck by the derailed equipment, and contributed high-pressure natural gas to the fire. The NTSB explained that while data is not collected about the number of incidents in which pipelines are damaged by train derailments, this and other derailments illustrate that pipelines can and have been damaged when present near railroad accident scenes.¹⁹ The inherent dangers posed by the rupture of several gas lines in the vicinity of the proposed Virginia Avenue Tunnel reconstruction (DEIS, pp. 5-56) in the dense urban environment of Washington DC is unacknowledged and unaccounted for in the DEIS. Nowhere in the EIS is there any description of the gas, electric and other utility lines that presently exist under the SW tracks or the Virginia Avenue Tunnel. The DEIS needs to list all such lines, the nature

No response required for this section of comment

While pipelines spill more oil in absolute numbers because of the nation's vast pipeline network -- an average of 6.6 million gallons of petroleum products were released accidentally from pipelines each year from 2005 to 2009-- during the same period road transportation spilled an average 477,600 gallons a year and trains spilled 83,800 gallons.
<http://fuelfix.com/blog/2013/07/15/canada-train-disaster-could-inspire-new-us-regulations/>

¹⁷ <http://www.pressherald.com/news/Obama-administration-delays-oil-train-safety-rules.html?pagenum=full>

¹⁸ National Transportation Safety Board, Safety Recommendation, March 2, 2012. Pages 1-9 (copy attached).

¹⁹ *Id.*, pp. 9-10.

and extent of the productive conduit in which they are encased and the depth they are located below the tracks.

The Cherry Valley Derailment: Identifying Hazardous Cargo: The Cherry Hill derailment also underscores the high cost of human errors in correctly identifying hazardous materials. Train operators are required to have a “train consist” that accurately identifies the hazardous or dangerous cargo and the position of the rail cars containing hazardous cargo. The train consist for the Cherry Valley train had only 3 of the 76 cars in their proper position.²⁰ The NTSB report did not address the error rates for CSX or other train operators, but it clearly demonstrates that human error can and does occur in administering the Hazardous Materials Regulation.

The Rosedale Derailment: On May 26, 2013 a CSX train (traveling from Selkirk, NY to Waycross, GA, along CSX’s Eastern Seaboard Freight Rail Corridor that includes the Virginia Avenue Tunnel) carrying sodium chlorate, terephthalic acid and a partially empty tank car containing fluorolytic acid derailed in Rosedale, Maryland, a Baltimore suburb. This derailment resulted in a fire and explosions that were felt and heard across Baltimore. Billowing smoke could be seen for hours and resulted in road closures.²¹ Fortunately, damage was limited because the derailment occurred in a rail yard. However, the event underscores the dangers of certain materials that, evaluated individually, CSX apparently considered to be safe enough to transport through densely populated areas. Yet when these materials interacted, they created an explosion of the sodium chlorate that in turn ignited the terephthalic acid that fueled the long burning fire.²²

Terrorism Remains a Threat | 20-27

The Transportation Security Administration has recognized that a terrorist attack on freight rail could have a devastating impact on the nation’s economy. Such an attack could cause a tragic loss of life and have a catastrophic impact on the operation of the American government as well.²³ Unfortunately, the DEIS does not assess the consequences of a terrorist attack.

²⁰ *Id.*, p. 10

²¹ <http://www.usatoday.com/story/news/nation/2013/05/28/train-derails-in-maryland-explosion-reported/2366957/>.

²² <http://www.cnsnews.com/news/article/csx-md-train-explosion-caused-chemical-cargo>

²³ TSA has developed a national strategy for rail transportation security outlined below:

Goal 1: Prevent and deter acts of terrorism using, or against, the transportation system.

Terrorists may use attacks to directly disrupt the freight rail transportation system or use the cargo transported by a railroad to carry out larger attacks against the American people. The Sector aims to prevent and deter terrorist attacks before they happen without disrupting the free flow of commerce or compromising civil liberties.

Goal 2: Enhance the all-hazard preparedness and resilience of the global transportation system to safeguard U.S. national interests.

The resilience of the freight rail sector can be improved by increasing its ability to accommodate and absorb damage from natural disasters or terrorist attacks without catastrophic failure. Resilience-improving strategies include a wide variety of mitigation activities, including support of response and recovery activities.

Response to Comment 20-27

Please see response to Comment 20-9.

The DEIS must address how rebuilding the Virginia Avenue Tunnel and the associated increase in the volume of freight traffic contribute to increased national security threats, both from sabotage of trains and from explosives in container cars or concealed cargo like the Cuban anti-aircraft missiles hidden in intermodal containers in a North Korean vessel going through the Panama Canal. Worst-case scenarios should be an important, if not decisive, component of the DEIS analysis.

Conclusion

Future congestion on the SW rail tracks, and the greater speed that will be allowed in an enlarged tunnel,²⁴ increase the risk of derailment. In addition, double-stacked container trains increase both the odds that a critical mass of harmful material will occur more frequently and the potential magnitude of damage. Lessons from other derailments underscore the real-world risks of fatalities, massive fires, explosions or other catastrophic events. There are the separate and real possibilities of acts of terrorism and sabotage that could result in a tragic loss of life and have a catastrophic impact on the operation of the American government as well.

20-28

Response to Comment 20-28

The operation of double-stack intermodal container freight trains would not decrease the level of safety and security within the new tunnel. Please see response to Comment 20-9.

All of these considerations lead to the conclusion that these most important topics for the health, life and safety of residents, visitors and workers in metropolitan DC have been inadequately considered in the DEIS.

Goal 3: Improve the effective use of resources for transportation security.

²⁴ Currently the speed in the tunnel is limited to 15 mph, but outside the tunnel (and presumably after reconstruction) the speed is 40 mph (DEIS p. 2.5).

Air Quality

Diesel train operations have a negative and measurable effect on air quality. And an increase in the volume of rail freight being transported through the District of Columbia will lead to an increase in emissions and degradation of air quality. 20-29

The DEIS fails to include any calculations regarding such long-term impacts.

There is no reason to assume that the volume of freight entering Washington, DC would be the same regardless of whether the Virginia Avenue Tunnel is rebuilt. While CSX has failed to provide any data regarding anticipated increases in freight volume,²⁵ it is proposing to quadruple the volume of freight that can travel through the District by rail. CSX has not provided any data indicating what percentage of this traffic either originates from or has a final destination in the Metropolitan Washington area. This omission subverts the NEPA process which is designed to gather the information necessary to make an objective assessment of the relative costs and benefits of a variety of approaches to solving a problem. 20-30

In point of fact, the impetus behind the National Gateway Project (under which the proposed tunnel rebuilding falls) is to create improved connections between East Coast ports and Midwestern markets on CSX-controlled routes – i.e. to improve and upgrade the freight carrying capacity on CSX lines. The vast majority of this freight will be “through traffic” – which should raise the question of whether it is desirable to route significantly more freight through Washington DC’s Monumental Core and densely-populated neighborhoods along capacity-constrained infrastructure that is shared with highly successful passenger and commuter rail services.

And it is disingenuous to suggest (or assume) that trucking is the only alternative. Norfolk Southern operates freight rail services that connect the same markets without sending cargo through Washington, DC or along the congested Northeast Corridor. [See the route map on the page following.] And CSX itself ships hazardous materials using an alternative route. 20-31

Moreover, continued reliance on an expanded Virginia Avenue Tunnel degrades local air quality both by constraining the expansion of popular commuter rail services in a growing economy and by preventing electrification of intercity passenger and commuter rail to and from points south of

²⁵ As-FHWA states in *NEPA and Transportation Decisionmaking: The Importance of Purpose and Need in Environmental Document*, “[R]ather than simply stating that additional capacity is needed between two points, information on the adequacy of current facilities to handle the present and projected traffic (e.g. what capacity is needed and the level of service for the existing and proposed facilities) should be discussed” and then explicitly concludes that “It is not sufficient to state that the project is needed to provide increased capacity and improve safety. Supporting data must be provided.”

Response to Comment 20-29

As described in Section 5.5 of the DEIS, operational emission levels were predicted to be below U.S. Environmental Protection Agency General Conformity de minimis thresholds, and the National Ambient Air Quality Standards. The commenter fails to distinguish between the volume of rail freight being transported and the number of trains that it takes to transport that freight. This project is intended to allow the railroad to more efficiently handle the growing volume of freight that is expected whether or not the tunnel is improved.

Response to Comment 20-30

As described in Section 5.15.1 of the DEIS, the FHWA estimated that total U.S. freight shipments would grow by 50 percent over the next 30 years. A large percentage of this growth will be accommodated by freight rail. Within the corridor, freight transportation demand will increase regardless of the project. Passenger service does not currently operate through the Virginia Avenue Tunnel, but any of the Build Alternatives will allow CSX to accommodate this growth more efficiently, which will benefit passenger service through enhance network fluidity using CSX rail lines in Virginia and the District, and eliminate emissions associated with stopping and starting to pass through the single tracked tunnel and reducing potential emissions with double stack technology. In 2013, more than 368,000 carloads of rail freight originated in or was delivered to the District by CSX. As of 2013, CSX provides serves three customers in the District and two just over the District border in Maryland. There are also other properties in the District that connect to CSX’s line, and CSX is currently engaged in discussions with two new potential rail customers in the District. There are also efforts by the City Council to preserve existing industrial zoning for properties with rail connections and outreach to promote further economic development in the District. The products received and shipped by these District customers include lumber, scrap metal, recycling materials, transformers, and aggregate.

Response to Comment 20-31

Section 3.2 of the DEIS addressed the possibility of rerouting freight rail traffic outside of Washington, DC.

THE MIDWEST CONNECTION

CSX Corp. and Norfolk Southern Corp.'s initiatives to improve connections from East Coast ports to the Midwest will make the ports more attractive to shippers than their West Coast competitors.



Washington, DC. From an environmental perspective, getting freight out of trucks and onto trains in a way that keeps commuters in cars and off of trains could be a Pyrrhic victory, even if it enhances CSX's bottom line. Similarly, while the DEIS recognizes diesel rail's environmental superiority to trucking, it also needs to acknowledge that electric rail would be preferable to diesel and that the expansion of diesel traffic on CSX-owned and controlled shared rail infrastructure prevents electrification of these tracks for other users.

20-32

Response to Comment 20-32

Electrification of CSX's mainline is not a part of this project. General [transportation] conformity was followed as defined by USEPA. The air quality modeling presented in the DEIS uses the appropriate USEPA modeling methodology, as described in the tech report included as an appendix to this document. It properly reflects the projected air quality impacts of this construction project. Rebuilding Virginia Avenue Tunnel will not constrain passenger rail service.

Quantifying Airborne Emissions

The DEIS takes an arbitrarily narrow view of the impacts of rebuilding the Virginia Avenue Tunnel by limiting the analysis only to impacts that may occur during construction of the tunnel. The appropriate time frame should encompass the expansion of the Panama Canal, the planned Union Station expansion and implementation of the SW Ecodistrict Plan. Neither the Union Station Master Plan for expansion, nor the SW Ecodistrict Plan, is even acknowledged in the DEIS.

20-33

Response to Comment 20-33

The scope of the EIS is appropriate since the proposed action involves replacing infrastructure and any significant adverse impacts are likely to occur during construction, as evident throughout the DEIS. Nevertheless, the project will not affect implementation of the Union Station Master Plan and Southwest Ecodistrict Plan.

CSX Rail Operations are Likely to More Than Double

CXS is currently running 20-30 trains over the SW tracks and through the Virginia Avenue Tunnel (DEIS, p.2-7). CSX has not provided long term projections of the number of trains that CSX will likely operate after the tunnel is rebuilt and after CSX begins to carry the increased freight that will result from the Panama Canal expansion, other than the general statement (DEIS p. 2-5):

According to the FHWA's 2011 Freight Analysis Framework (FAF) forecasts, overall freight tonnage would increase by 50 percent in 2040 from 2010 levels.

This is not a projection of the increased freight that CSX will carry. With the Panama Canal expansion, and the fact that initially only the New York/Newark, Baltimore, and Newport News ports will be able to accommodate those larger container ships, a substantial part of the increased freight will travel over the CSX tracks. (DEIS p.2-6):

As the largest freight railroad company on the east coast, CSX is anticipating the impact of the expanded Panama Canal on freight transportation demand from east coast ports, and is anticipating the need to carry a greater amount of freight between east-coast ports and Midwest markets.

But CSX does not quantify that increase on "freight transportation demand" and has elected not to provide information about the number of CSX trains that are projected over the SW tracks and through the Virginia Avenue Tunnel after the Panama Canal expansion is completed²⁶ when the number of CSX trains is likely to exceed 56 a day.²⁷ The estimate of 56 trains is based on CSX's 2005 growth prediction, without considering the Panama Canal expansion. It is an understatement of what will probably happen after CSX begins carrying increased freight when the larger container ships begin arriving at Newport News, Baltimore and Newark/New York beginning in 2015. But, that freight increase, being supplied by ships delivering intermodal

²⁶ Submitted May 21, 2012 On Behalf of the Committee of 100 and available on the Virginia Avenue Tunnel website (<http://www.virginiaavenuetunnel.com/public-involvement/>):

Requests For Information

1. What is the projected number of trains that will traverse the tunnel each day (north/south) after the tunnel is completed? Five years after completion?
2. What is the amount of fuel consumed to cross from the Potomac to the Anacostia for an average freight train?
3. What is the average emissions of the CSX locomotive fleet to pull an average freight train in terms of units of NOx and particulates and other emissions expressed per unit of fuel and per mile at the speeds the trains will traverse the tunnel after it is rebuilt?

Response:

CSX: CSX is not allowed to respond to such requests until they have been approved by DDOT.

DDOT: The requests are outside the scope of the proceeding.

²⁷ In 2005, the Federal Railroad Administration issued its Report to Congress: Baltimore's Railroad Network: Challenges and Alternatives, and projected that the number of CSX trains traveling between Washington and Baltimore will increase from 33 trains a day in 2012 to a high of 56 trains a day in 2050. Page 4-13. This projection, performed in 2005, did not take into account the increased freight that will result from expansion of the Panama Canal.

20-34

Response to Comment 20-34

As described in Section 5.15.1 of the DEIS, the FHWA estimated that total U.S. freight shipments would grow by 50 percent over the next 30 years. A large percentage of this growth will be accommodated by freight rail. Within the corridor, freight transportation demand will increase regardless of the project. Any of the Build Alternatives will allow CSX to accommodate this growth more efficiently, which will benefit passenger service using CSX rail lines in Virginia and the District. Passenger service does not currently operate through the Virginia Avenue Tunnel. The Union Station Master Plan and the SW Ecodistrict Plan are not relevant to the project.

containers, would likely be carried by CSX on double stacked container trains, resulting in heavier loads, requiring double locomotives. Even today, a large number of the CSX trains coming through our City use double locomotives. For the purpose of estimating diesel emissions, the relevant unit is the number of locomotives rather than of trains. 20-34

The Number of Commuter Rail and Amtrak Trips Is Projected to Double

The goal of the Union Station expansion is to triple the number of riders and double the number of passenger and commuter trains using the station.²⁸ The southbound tracks at Union station will be designed for expanded commuter rail as well and Amtrak’s Superliner and the tracks will be equipped with an overhead catenary system to accommodate electric locomotives (*USMP*, page 11). Between 2018 and 2022, all new tracks will run through the First Street tunnel to points south of DC (*id.* page 22). Additional future tracks could be extended to the south, enabling extension of high-performance, high-speed rail service to Virginia, North Carolina and the southeastern United States (*id.* page 13).

A cornerstone of the recently adopted Southwest Ecodistrict Plan is to through-run MARC service from Maryland to Virginia and to increase the number of commuter and Amtrak trains using L’Enfant Station. The Plan relies upon these transportation strategies to revitalize and reconnect the community²⁹ The SWE Plan builds on the District’s Maryland Avenue SW Small Area Plan through an expanded L’Enfant commuter rail station that will serve VRE, MARC, and Amtrak commuters with convenient access to the L’Enfant Plaza Metro Station’s Blue/Orange and Yellow/Green Line service (*SWEP*, page 31).

The DEIS Needs to be Revised to Estimate Airborne Emissions Associated with an Expanded Range of Alternatives, Including the Separation of Freight and Passenger/Commuter Rail with Freight Rail Re-Routed Outside the Monumental Core 20-35

Response to Comment 20-35

The DEIS considered the concept of rerouting freight outside the Monumental Core and eliminated it as an alternative for this proposed action. The alternatives included in the DEIS, and their evaluation, are sufficient given the purpose and need of the Project.

The estimates should be based on the following information:

- ♥ Projected Increases in Freight, Passenger and Commuter Rail Services
- ♥ Number, Types, and Ages of Locomotives and Associated Airborne Emissions
 - Where Possible, Make Short-Term Calculations Based on Existing Fleet
 - Emissions from Passenger and Commuter Rail Services Should be Computed for Both Diesel and Electric Locomotives

²⁸ *Union Station Master Plan*, Washington, DC, July 25, 2012, Executive Summary, page 2.

²⁹ The plan is to increase the number of jobs and residents and to “build on existing road, rail and bus infrastructure to enhance transportation capacity ... and better connect all modes of travel.” (Page 13)

- Where Electrification is Assumed, Include Emissions Associated with the Generation of Electricity

- ♥ Estimated Travel Times for Each Type of Service

- ♥ Increases in Automotive VMT and Associated Emissions if Commuter Rail Growth is Constrained

- ♥ For Alternatives Involving Re-Routing:
 - Baseline Air Quality
 - Population Subject to Exposure
 - Environmental Equity Analysis³⁰

Air Quality Benefits of Rerouting CSX

Studies that have been done about concentrations of vehicle emissions near major highways also apply to the diesel emission levels from trains traversing the SE tracks and the Virginia Avenue Tunnel. There is substantial documentation that people living or otherwise spending significant time within 200 meters +/- of major highways and freeways are exposed to freshly-emitted air pollutants of particulate matter, oxides of nitrogen and carbon monoxide more so than persons living at a greater distance, even compared to living on busy urban streets. Relative concentrations of these airborne emissions decrease exponentially between 17 and 150 meters downwind from the highways, while at 300 meters measurable emissions concentrations were the same as at upwind sites.³¹ An Australian study observed that the distance from highways at which concentrations of airborne pollutants created by vehicles using the highway decreased by 50% varied from 100 to 375 meters depending on the wind speed and direction.³²

Rerouting CSX trains away from the SW tracks and the Virginia Avenue Tunnel would result in dilution of the airborne emissions proportionate to the distance of the relocation. Relocating the CSX tracks more than 1,000 feet to the east would mean lower levels of diesel emission and less harmful effects to the residents, workers and visitors as well as harm to the limestone and marble of the Capitol, the Mall and government buildings that are adjacent to the SW tracks and the Virginia Avenue Tunnel.

The Implications of These Airborne Pollutants

20-36

Response to Comment 20-36

The focus of this EIS is on the reconstruction of the Virginia Avenue Tunnel. Among the concepts considered were a tunnel under the entirety of DC as well as rerouting around the DC metropolitan area and they were not included as alternatives for this proposed action. It is not clear how the commenter proposes to relocate the tracks 1000 feet to the east.

³⁰ See, e.g., NCPC and DDOT, *Freight Railroad Realignment Feasibility Study: Securing Freight Rail Transportation in the National Capital Region*, April 2007, pp. ES-8 and 9 and pp. 67-71.

³¹ <http://www.ehjournal.net/content/6/1/23>

³² Hitchens J, Morawska L, Wolff R, Gilbert D. Concentrations of submicrometre particles from vehicle emissions near a major road. *Atmospheric Environment*. 2000;34:51-59. doi: 10.1016/S1352-2310(99)00304-0.

Nitrogen Oxides (NOx) are a key precursor to ozone and secondary Particulate Matter (PM) formation. As the EPA explained in evaluating the comments about adopting the now current Locomotive emissions standards³³:

Ozone and PM2.5 are associated with serious public health problems including premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function. These engines also emit hazardous air pollutants or air toxics, which are also associated with serious adverse health effects. These engines emissions are of particular concern, as exposure to diesel exhaust has been judged likely to pose a lung cancer hazard for humans as well as a hazard from non-cancer respiratory effects.

The area in the vicinity of the Virginia Avenue Tunnel and the SW rail tracks is currently a maintenance area for CO, a marginal nonattainment area for O3 and a nonattainment area for PM2.5 (DEIS page 4-35).

Nitrogen Oxide emissions also pose threats to natural resources and to the built environment. The EPA provided the following summary³⁴:

The Northwest Environmental Defense Center, et al. noted that recent Forest Service studies have shown that NOx and other emissions from sources in and around the Columbia River Gorge contribute to acid rain formation, resulting in damage to crops, ecosystems, and cultural artifacts, including ancient Native American rock images.

No response required for this section of comment

The limestone and marble buildings on the Mall, as well as other federal buildings, are adjacent to the SW tracks and the Virginia Avenue Tunnel, and the U.S. Capitol is only four blocks away.

As EPA has noted:

The deposition of airborne particles can reduce the aesthetic appeal of culturally important articles through soiling, and can contribute directly (or in conjunction with other pollutants) to structural damage by means of corrosion or erosion.³⁵

Reducing the emission of NOx will benefit the air quality in terms of the health of workers and residents in the area as well as visitors to the Mall and preservation of the limestone and marble memorials and museums of the Mall and the U.S. Capitol.

Conclusion

³³ EPA420-R-08-006 March 2008, page 2-1 to 202

³⁴ Id. at 2-15

³⁵ Id at 2-18.

Dedication of the SW tracks and the Long Bridge for use only by passenger and commuter rail will allow electrification of those tracks. The emissions associated with the amount of electric generation to power those locomotives should be far less than the emissions associated with using diesel locomotives to move commuter and passenger trains. By rerouting CSX trains away from the Monumental Core, freight emissions will be diluted to the point that their harmful effects would be greatly reduced by the time they reach the Mall, the Capitol and the downtown area.

20-37

Response to Comment 20-37

Electrification of CSX's mainline is not a part of this project. General [transportation] conformity was followed as defined by USEPA. The air quality modeling presented in the DEIS uses the appropriate USEPA modeling methodology, as described in the tech report included as an appendix to this document. It properly reflects the projected air quality impacts of this construction project. Rebuilding Virginia Avenue Tunnel will not constrain passenger rail service. The DEIS considered the concept of rerouting freight outside the Monumental Core and eliminated it as an alternative for this proposed action. As described in Section 3.2, rerouting concepts were considered, but eliminated from further consideration. Alternative 3 was selected as the Preferred Alternative.

Identifying Alternative Routes

The Virginia Avenue Tunnel is a product of late-19th century decisionmaking about appropriate locations for rail facilities. It is one of the last remnants of a time when trains ran up and down the national Mall. Now that even its owner acknowledges that this tunnel is obsolete and no longer meets CSX’s needs, the Committee of 100 believes that it is imperative that we re-examine the question of location as we update our rail infrastructure to prepare for 21st century technology and traffic volumes.

The fact that the DEIS, as currently written, has not fully evaluated any re-routing alternative renders it a pointless bureaucratic exercise rather than a useful comparison of the environmental costs and benefits associated with a range of possible solutions to the problem of capacity constraints imposed on rail service by antiquated infrastructure. In both DC and Baltimore, when independent agencies looked comprehensively at this issue their conclusion was that separating freight rail from passenger and commuter rail was an essential step toward creating a rail system that can meet future needs.³⁶

Yet this draft EIS summarily dismisses that possibility and starts from the premise that the only alternatives worth considering are those that involve substantial reinvestment in perpetuating a system that is already proving unworkable. Rather than assume that the only approach to solving the problems posed by the Virginia Avenue Tunnel is to make the Tunnel bigger, the DEIS should fully evaluate a different possibility – that abandoning the Virginia Avenue Tunnel, separating freight and rail traffic, and re-routing most freight traffic around rather than through the center of the city may be the most environmentally responsible approach.

20-38

The DEIS’s failure to develop and analyze genuine alternatives (rather than minor variations on a theme) stems from four fundamental flaws in this NEPA process thus far:

- ♥ An unduly narrow Statement of Purpose and Need, which ignored the interests of stakeholders other than the applicant (CSX) 20-39
- ♥ An exclusive focus on the Virginia Avenue Tunnel, and a corresponding failure to define logical termini – which FHWA warns is likely to result in a project that will “cause unexpected side effects” and/or “only peripherally meet project needs”³⁷ 20-40

Response to Comment 20-38

As the EIS demonstrates, the goal of this project is to improve aging infrastructure in time to meet the anticipated demand of additional freight traffic from the expanded Panama Canal. The extended period to implement a rerouting concept does not satisfy this goal. However, moving forward with this project does not preclude the implementation of a rerouting concept at some point in the future.

Response to Comment 20-39

This project’s purpose and need is to address the deficiencies of the Virginia Avenue Tunnel. Section 5.15 of the DEIS describes how passenger rail and freight coexist in the region.

Response to Comment 20-40

This is a private project that requires permits from FHWA, DDOT and other federal and District agencies as appropriate. Therefore, expansion of passenger and commuter rail service is outside the scope of this project. However, the EIS should and does address relevant freight rail transportation and public impacts of this project. Chapter 2 of the FEIS was revised to include discussion regarding the independent utility and logical termini of the project.

³⁶ See National Capital Planning Commission and District Department of Transportation, *Freight Railroad Realignment Feasibility Study: Securing Freight Rail Transportation in the National Capital Region*, April 2007, pp. 101-02; and Federal Railroad Administration, *Report to Congress: Baltimore’s Railroad Network (2005), Part II: Alternatives*, p. 9-3. <http://www.fra.dot.gov/eLib/Details/L04159>

³⁷ *NEPA and Transportation Decisionmaking: Development and Evaluation of Alternatives*, <http://environment.fhwa.dot.gov/projdev/tdmalts.asp>

♥ The absence of the specific data necessary to evaluate project costs, benefits, and needs. (e.g. current and projected traffic volumes, infrastructural capacity, origins/destinations of freight traveling through Washington DC) 20-41

♥ A largely a-contextual approach to project evaluation, rather than an assessment of compatibility with other relevant local and national transportation and land use planning initiatives. 20-42

Rerouting Concepts Have Been Summarily Dismissed

CSX is only interested in looking at scenarios that involve expanding the existing tunnel because that approach is the fastest, cheapest, and easiest way for them to solve their immediate problem. But one of the reasons we have a NEPA process is that corporate decisionmaking on this model frequently yields results that have major externalities and impose long-term costs on other parties and on the public sphere that far exceed the savings incurred by the decisionmaker. As we have been arguing throughout these comments, the expansion of the Virginia Avenue Tunnel seems quite likely to be just this sort of decision.

It is therefore imperative that the NEPA process produce a factual, detailed, and comprehensive analysis of the comparative costs and benefits of alternative approaches to solving the problems that compel the replacement of our antiquated rail infrastructure. The Draft EIS released in July falls far short of this mark.

The DEIS Needs to Be Redone to Evaluate Additional Concepts

The DEIS has simply lifted from the 2007 NCPC Railroad Realignment Study the concepts that would provide for rerouting of CSX away from the Virginia Avenue Tunnel, without examining any other rerouting concepts considered in the past, or any variation of those alternative concepts. We suggest that NCPC be asked to update its 2007 analysis and to propose the route(s) that they believe offer the most promising alternatives to expansion of the Virginia Avenue Tunnel. We believe that opportunities for new alignments may have presented themselves since that report. For example, The Potomac River Generating Plant, owned by GenOn, just north of Alexandria has been decommissioned and is currently undergoing demolition and environmental clean up. This location provides a clean slate for constructing the Virginia side of a new Potomac River crossing. 20-43

The current track configuration is depicted on the CSX website. [See the map on the following page.] Just north of Alexandria a spur line heads to the Potomac River, to serve Robinson Terminal.

The two short stubs off of that spur line were used to serve the Potomac Generating Plant. On the Anacostia side the rail tracks that served Blue Plains and other customers, the same tracks to which the 1997 NCPC realignment would have connected, have been enhanced for visibility.

Response to Comment 20-41

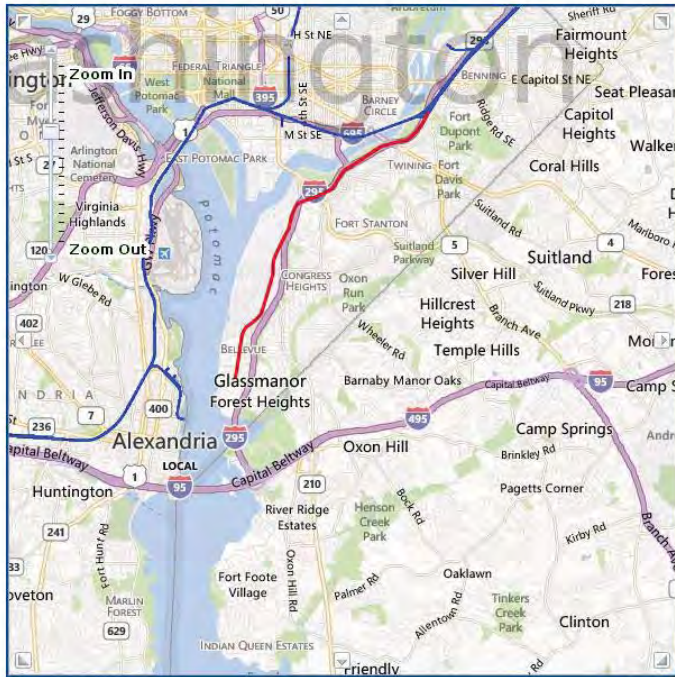
Sections 2.2 and 2.3 have been revised in the FEIS to address these concerns.

Response to Comment 20-42

Rebuilding the VA tunnel is being done in anticipation of increased demand for freight rail service. With or without the project, the amount of freight moving through the District will increase. As described in Section 5.15.1, the Build Alternatives will allow CSX to accommodate this growth in freight transportation demand more efficiently, which may benefit passenger service using CSX rail lines in Virginia and the District. Making the tunnel double stack capable allows twice the amount of intermodal container freight to be carried per train. Additionally, eliminating the single track bottleneck at the Virginia Avenue Tunnel increases the fluidity of both freight and passenger rail service on this portion of the network. This project does not preclude future discussions on other passenger and freight rail projects.

Response to Comment 20-43

This proposal is not a reasonable alternative because it presents a number of infirmities including the rerouting of a major railroad from an existing longstanding right-of-way through a new structure over the Potomac River and then using another right-of-way that is of critical importance to the DC government for other purposes.



Legend
 — CSX Rail Network
 — Blue Plains Line

To identify alternative routings, CSX’s basic requirements should be supplemented with additional criteria, encompassing a broader range of needs, interests, and stakeholders. An alternative route should:

- 1: Provide a continuous double-tracked railway to accommodate double stacked container trains;
- 2: Accommodate expansion of passenger and commuter rail services
- 3: Separate passenger and commuter rail infrastructure from freight infrastructure, allowing each system to be optimized for its specific use

20-44

Response to Comment 20-44

The additional criteria suggested are not consistent with the purpose and need of the project. Moreover, your criteria 6 and 7 would not favor a reroute concept.

- 4: Address the safety and security concerns associated with high-volume freight operations near population centers and national landmarks;
- 5: Locate freight tracks at least 1000 feet away from the Capitol and Monumental Core to provide dilution of the emissions that CSX diesel locomotives would continue to produce;
- 6: Minimize the amount of new and rebuilt tracks and
- 7: Utilize existing tracks and rights of way to the extent possible

20-44

Consider A New Potomac River Rail Crossing

The separation of freight and passenger/commuter rail infrastructure may require a new Potomac River crossing. This cross could be either a bridge or a tunnel. In the *MidAtlantic Rail Operations Phase I Report* of 2002, CSX proposed an additional Potomac River double track bridge at a cost of \$300 million (*Mid-Atlantic Rail Operations Phase II Report*, December 2009 page 2-11) that amounts to a current estimate of \$327 million for a new Potomac River rail bridge.³⁸ A tunnel would also be a viable option. Locating the tunnel below the bed of the Potomac River, which at this point is about 30 feet deep, would require greatly reduced approach slopes, a shorter total length and much less expense than the 80 foot deep, nine mile long tunnel that the DEIS considered as Concept 8.³⁹

We now have the equipment to bore a tunnel under the Potomac River, and if necessary, under the Blue Plains right-of-way. In April of this year, WASA unveiled *Lady Bird*, a massive tunnel boring machine that is now being used to drill a huge 4-mile long tunnel from Blue Plains, under the Potomac, and up the Anacostia, to the Main Sewage Pumping Station near Nationals Stadium. Boring machines have been successfully used in railway applications.⁴⁰

20-45

Response to Comment 20-45

This proposal is not a reasonable alternative because it presents a number of infirmities including the rerouting of a major railroad from an existing longstanding right-of-way through a new structure over the Potomac River and then using another right-of-way that is of critical importance to the DC government for other purposes.

For some alignments, such as Blue Plains, tunnel boring under existing rights-of-way may be more practical than attempting to reconstruct surface tracks, given subsequent redevelopment. Another possibility would be to lower the tracks and deck over them, like the SW tracks along a part of Maryland Avenue or perhaps a Virginia Avenue type of shallow tunnel in order to coexist with the development that has occurred in this area. The possibility of using a tunnel boring machine for all or part of this work needs to be evaluated.

³⁸ The conversion from 2009 dollars to 2013 dollars used the CPI inflation calculator. <http://data.bls.gov/cgi-bin/cpicalc.pl?cost1=300&year1=2009&year2=2013>

³⁹ NCPC proposed a rail tunnel under the Potomac River between Virginia and Anacostia in their 1997 plan *Extending the Legacy: Planning America's Capital for the 21st Century*.

⁴⁰ In 1993, The Canadian National Ry. Co. (CN) constructed a new bored railroad tunnel between Port Huron, MI, and Sarnia, Ontario, to replace a 100-year old tunnel in order to accommodate trains of double-stack container cars. The cost of the one-mile tunnel was estimated at \$155 million or about \$250 million in today's dollars.

Conclusion

The above discussion is meant to illustrate, on a conceptual level, that there are alternative alignments, alternative configurations and alternative construction methods that could re-route CSX trains away from the SW tracks and the Long Bridge, and by doing so, save the cost and physical disruption of having to reconstruct the Virginia Avenue tunnel. The Committee of 100 strongly recommends that these and other possible alternate alignments be further developed and included in the DEIS.

20-46

Response to Comment 20-46

Three of the reroute concepts included a new Potomac River crossing, two by bridge and one by tunnel. They were all eliminated from further consideration, as described in the DEIS. Please see revised Section 3.7 in the FEIS on alternatives selection process. Alternative 3 was selected as the Preferred Alternative.

Section 4(f) Commentary

The Draft Section 4(f) Evaluation of the DEIS addresses Section 4(f) of the U.S. Transportation Act of 1966 (49 U.S.C. §303). This Act pertains to the use of publicly-owned parks, recreation areas and land of a historic site. That “use” includes temporary or permanent occupancy of any of those designated properties or resources and is permitted only if there is no feasible and prudent avoidance alternative. Reconstruction of the Virginia Avenue Tunnel, by means of any of the three tunnel rebuild alternatives, would require use of 4(f) resources or properties. That use requires the approval of Federal Highway Administration. Before that use can be approved by the FHWA an evaluation of the Section 4(f) properties or resources is required to determine if there are any feasible and prudent avoidance alternatives. The evaluation is required to take into account all possible planning to minimize harm to the section 4(f) properties or resources (23 CFR §774.17). The Evaluation is required to encompass resources or properties that will be directly affected by the reconstruction, what is referred to in the DEIS as the “limits of disturbance”. According to the Evaluation, the affected properties are (page 5):

Virginia Avenue Tunnel
The L’Enfant Plan of Washington, DC
Capitol Hill Historic District
Virginia Avenue Park

The Evaluation Fails to Address Permanent Use

The Evaluation addresses the impact on Virginia Avenue only during construction and in terms of the need to temporarily occupy part of Virginia Avenue to accomplish trenching to provide space for construction and to provide different configurations of “run around” tracks for continued CSX operations while the existing tunnel is demolished and then rebuilt.

The Evaluation concedes that the “use” would not be a *de minimis* impact, the trenching would not be minor, and the use would be adverse in terms of Section 106 “due to the temporary occupancy of a contributing element (Virginia Avenue SE) to the L’Enfant Plan” (page 12). But the Evaluation fails to address the permanent use of a part of Virginia Avenue.⁴¹ 20-47

While the Section 4(f) Evaluation does not discuss this permanent incursion into public space, page 3-5 of the DEIS concedes this fact, but without quantifying the amount of incursion:

⁴¹ Alternative 2 would shift the center line of the tunnel seven feet south, Alternative 3 would shift the center line 25 feet to the south and Alternative 4 would shift the center line 17 feet to the south (DEIS 3.2.1.1-3.2.1.4). Because these measurements are framed in terms of the “center line” only, it is unclear how far the tunnel footprint is being expanded to accommodate the second track proposed by each alternative. The tunnel footprint appears to shift by up to 50 feet. These would be permanent increases in the footprint of the tunnel. The run-around tracks and construction access space required during construction that would extend even further beyond the 1901 right-of-way.

Response to Comment 20-47

Section 8.2 of the Draft Section 4(f) Evaluation stated that Virginia Avenue SE will be restored at the end of construction.

Because all three Build Alternatives described in this Draft EIS contemplate that the reconstructed tunnel would only be located within CSX owned or public property, rather than intruding into or under any private property, no additional detail beyond those already presented here is warranted [emphasis added].

The right-of-way for the Virginia Avenue tunnel was granted pursuant to 1901 statute. All of the proposed alternatives for rebuilding the tunnel involve widening the tunnel beyond that 1901 right-of-way into the right-of-way of Virginia Avenue.⁴²

In addition to the L’Enfant alignment of Virginia Avenue, there are also DC-owned (or administered) rights-of-way for Virginia Avenue for places where the present Virginia Avenue alignment deviates from the L’Enfant alignment. For example, between 4th and 5th/₆th Streets SE “the alignment bows to the south, deviating from the original L’Enfant Plan alignment” (Evaluation, page 26). Thus, in addition to the L’Enfant property use, there is also the proposed permanent use of publicly-owned property that is not addressed in the DEIS: the rights-of-way of the changed alignment of Virginia Avenue. Neither the proposed permanent use of the L’Enfant property nor the proposed use of publicly-owned property (the DC administered rights-of-way due to the current Virginia Avenue alignment) is addressed in the Evaluation.

20-48

Response to Comment 20-48

As described in Section 8.2 of the Draft Section 4(f) Evaluation, the Section 4(f) use of the L’Enfant Plan of the City of Washington, DC would only occur during construction.

The Evaluation Did Not Consider Feasible and Prudent Alternatives

The project cannot use Section 4(f) properties or resources unless it is determined that there is no feasible and prudent avoidance alternatives and the evaluation takes into account all possible planning to minimize harm to the section 4 (f) properties (23 CFR §774.17).

These are feasible and prudent avoidance alternatives and both the DEIS and Evaluation need to be redone to evaluate these alternatives and to perform realistic and pragmatic planning to minimize harm to the Section 4 (f) properties, and also to evaluate impacts to commuter rail, Amtrak, air quality and safety and security.

20-49

Response to Comment 20-49

The Section 4(f) Evaluation in the FEIS concludes there is no feasible and prudent alternative that avoids the use of the identified Section 4(f) resources.

As explained in the Revisiting Alternative Routes section above, neither the DEIS nor the Evaluation addresses the tunnel crossing from Alexandria, south of National Airport, to Anacostia, that would connect to the existing CSX track at the Benning Yard as proposed by NCPIC in their 1997 report.

20-50

Response to Comment 20-50

Thank you for providing your comment. Your comment has been noted. At the commenter’s request we have reexamined the 4(f) request and concluded it satisfies all requirements.

Neither the DEIS nor the Evaluation considered the recent decommissioning of the Potomac River generating plant as a potential beginning point for such a a crossing to Anacostia that would connect with the Blue Plains tracks and right-of-way.

⁴² See 31 Stat 767 (Feb. 12, 1901). The DEIS does not cite any authority that might interpret this 1901 statute as granting right-of-way to CSX beyond the boundaries of the current tunnel. Nor does the DEIS cite any subsequent statutory or other authority granting CSX additional right of way for the tunnel.

Nor did the DEIS or the Evaluation consider whether a tunnel or a bridge would be most appropriate for such a crossing or whether it would be feasible to recondition the surface tracks that formerly supplied Blue Plain or whether a tunnel or decked-over tracks under that right-of-way would be more appropriate.

20-51

Response to Comment 20-51

This proposal is not a reasonable alternative because it presents a number of infirmities including the rerouting of a major railroad from an existing longstanding right-of-way through a new structure over the Potomac River and then using another right-of-way that is of critical importance to the DC government for other purposes.

The Evaluation Used the Wrong Standard

In evaluating impacts of the alternative routings on each of the four Section 4(f) resources and properties the Evaluation rejects all of the alternative routings that were considered, primarily because they do not meet the Purpose and Needs for the project. The problems associated with the biased Statement of Purpose and Needs have already been discussed. The impacts of alternative routings need to be re-evaluated after a revised Statement is issued. That revision should:

- Develop a Purpose and Need Statement to address the deficiencies explained in these comments;
- Allow for expansion of Amtrak as described in the *Union Station Master Plan*;
- Allow for expansion of commuter rail as described in the *SW Ecodistrict Plan*;
- Quantify the commuter benefits of expanded Amtrak and commuter rail service;
- Provide for continued (and expanded) operation of passenger and commuter rail on the tracks in SW DC that connect to the First Street Tunnel leading to Union Station;
- Eliminate any restrictions that would prevent electrification of those tracks;
- Compute the environmental effects of those changes; and
- Evaluate the safety and security benefits of rerouting CSX away from downtown, the Monumental Core and the U.S. Capitol.

20-52

Response to Comment 20-52

As described in Section 9 of the Draft Section 4(f) Evaluation, the avoidance alternatives were evaluated based on their feasibility and prudence in addressing the purpose and need of the project.

The alternatives that would reroute CSX away from the Virginia Avenue Tunnel, the SW Tracks, the Long Bridge and the Anacostia Lift Bridge all assume that the Virginia Avenue tunnel would have to “remain to service Washington Metropolitan Area regional customers” (Evaluation, page 15). The apparent rationale for this statement is that CSX has freight delivery customers in SW that it will have to continue to serve. In fact, the only existing customer is the Capitol Heating Plant, now fueled by natural gas, with coal as a back-up fuel. But the plant is being converted to a co-generation plant, fueled by natural gas, and the back-up fuel will be oil. By the time that any of the tunnel rebuild Alternatives could be accomplished, there will no longer be CSX freight delivery customers along the SW tracks.

20-53

Response to Comment 20-53

In 2013, more than 368,000 carloads of rail freight originated in or was delivered to the District by CSX. As of 2013, CSX provides serves three customers in the District and two just over the District border in Maryland. There are also other properties in the District that connect to CSX’s line, and CSX is currently engaged in discussions with two new potential rail customers in the District. There are also efforts by the City Council to preserve existing industrial zoning for properties with rail connections and outreach to promote further economic development in the District. The products received and shipped by these District customers include lumber, scrap metal, recycling materials, transformers, and aggregate. CSX is anticipating the continuation of service to Metropolitan Washington customers into the future.

Conclusion

The Committee of 100 recommends that the DEIS be revised to address the deficiencies described in these comments, and that the DC Department of Transportation and the Federal Highway Administration adopt the No-Build Option until such time as the DEIS can be substantially revised to adequately consider serious operational and physical concerns and consider the short and long term benefits of the separation of freight from commuter and passenger rail service. The revised DEIS should:

- Address the deficiencies identified in these comments;
- Facilitate the proposed expansion of Amtrak service at Union Station;
- Facilitate the proposed expansion of commuter rail service;
- Quantify the commuter benefits of these changes;
- Eliminate any restrictions that would prevent electrification of SW DC tracks;
- Compute the environmental effects of electrification; and
- Evaluate the safety and security benefits of rerouting CSX away from dense population areas including the downtown, the Monumental Core and the U. S. Capitol grounds.

No response required for this section of comment

Respectfully Submitted,

Monte Edwards, Vice-Chair, Committee of 100
Richard Houghton, AIA, LEED AP, Planning Subcommittee Chair
Sue Hemberger

Additional Contributors:

Meg Maguire, Committee of 100 Transportation Subcommittee Chair
George Clark, Committee of 100 Past Chair
Thomas J. Grahame, CHRS Board Member Emeritus
Maureen Cohen Harrington, Virginia Avenue Resident
Beth Purcell, CHRS Past President

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
Plaintiff)
v.)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
Defendants)
_____)

PLAINTIFF'S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 11

Chapter 3

Alternatives

Chapter 3 Alternatives

3.1 Overview

This chapter describes the reasonable alternatives considered for the Project, including the 'no action' alternative, as required by the National Environmental Policy Act (NEPA), and the 'build' alternatives that involve the reconstruction of Virginia Avenue Tunnel at its current location. One of the Build Alternatives was selected as the Preferred Alternative. Prior to the development of the alternatives, 12 different design concepts were developed, which were shared with the agencies and the public. Following a detailed screening process, some of the concepts were eliminated from further consideration. Others were carried forward and developed into the four candidate alternatives, all of which underwent rigorous evaluation as documented in this Final EIS.

In the initial phases of project development, 12 concepts were developed and analyzed to determine whether they meet eight criteria based on the Project's Purpose and Need. After applying these criteria, four of those 12 concepts were retained in the EIS for detailed analysis as formal NEPA alternatives, including a "no build" scenario. The three Build Alternatives underwent additional engineering design modifications largely to ensure that the demolition of existing tunnel structures and the construction of new facilities minimize risks to the structural integrity of I-695, which is aligned immediately to the north of the tunnel. In addition and regardless of the Build Alternative, the Project will extend the east portal by approximately 330 feet to a location northeast of the 12th Street and M Street T-intersection.

West Tunnel Portal at 2nd Street SE



East Tunnel Portal at 11th Street SE



The four alternatives retained for detailed analysis in the EIS are as follows:

- Alternative 1 - No Build (originally *Concept 1*): The No Build alternative is automatically carried forward into the NEPA process. The tunnel would not be rebuilt under this alternative. However, the railroad would continue to operate trains through the tunnel and at some point, emergency or unplanned major repairs or rehabilitation could be

required to this critical, aging infrastructure that might prove equally disruptive to the community than the Build Alternatives.

- **Alternative 2 - Rebuilt Tunnel / Temporary Runaround Track (originally *Concept 2*):** This alternative involves rebuilding the existing Virginia Avenue Tunnel. It would be rebuilt with two railroad tracks and enough vertical clearance to accommodate double-stack intermodal container freight trains. It would be rebuilt in generally the same location, except aligned approximately seven feet to the south of the existing tunnel center line. It would be rebuilt using protected open trench construction methods. During construction, freight trains would be temporarily routed through a protected open trench outside the existing tunnel (runaround track). The runaround track would be aligned to the south and generally parallel to the existing tunnel, and would be located below street level. Due to new columns associated with the rebuilt 11th Street Bridge, the runaround track would slightly separate from the tunnel alignment on the east end starting just west of Virginia Avenue Park. Safety measures such as securing fencing would be used to prevent pedestrians and cyclists from accessing the runaround track.
- **Alternative 3 - Two New Tunnels (originally *Concept 5*):** Alternative 3 was identified as the Preferred Alternative. Hereinafter, this alternative will be referred to as the Preferred Alternative. The Preferred Alternative involves replacing the existing Virginia Avenue Tunnel with two new permanent tunnels constructed sequentially. Each new tunnel will have a single railroad track with enough vertical clearance to allow double-stack intermodal container freight trains. A new parallel, south side tunnel will be built first as trains continue operating in the existing Virginia Avenue Tunnel. After the south side tunnel is completed, train operations will switch over to the new tunnel and the existing Virginia Avenue Tunnel will be demolished and rebuilt. With the exception of operating in a protected open trench for approximately 230 feet immediately east of the 2nd Street portal (within the Virginia Avenue SE segment between 2nd and 3rd Streets SE), trains will operate in enclosed tunnels throughout construction under the Preferred Alternative. Throughout most of the length of the rebuilt tunnel, the two tunnels will be separated by a center wall. This center wall will be the new centerline of the two tunnels, and it will be aligned approximately 25 feet south of the existing tunnel centerline, between 2nd and 9th Streets SE. Due to new columns associated with the rebuilt 11th Street Bridge, the tunnels will be separated on the east end starting just west of Virginia Avenue Park, resulting in two separate single-track tunnels and openings at the east portal.
- **Alternative 4 - New Partitioned Tunnel / Online Rebuild (originally *Concept 6*):** Alternative 4 would result in a new tunnel with two permanent tracks. Similar to the Preferred Alternative, the new tunnel would be partitioned and have enough vertical clearance to allow double-stack intermodal container freight trains. It would be aligned approximately 17 feet south of the existing tunnel's centerline. The new tunnel would be built using protected open trench construction methods. The rebuild would occur 'online' meaning that during the period of construction, the protected open trench would accommodate both construction activities and train operations. Maintaining safe and reliable temporary train operations is a more complicated endeavor under Alternative 4 than under the other two Build Alternatives due to the online rebuild approach.

This chapter is organized as follows:

- Rationale for identifying Alternative 3 as the Project's Preferred Alternative;
- Description of the "No Action" or "No Build" alternative, Alternative 1;
- Description of the Build Alternatives
- Construction period descriptions of the Preferred Alternative and the other Build Alternatives, which include:
 - Limits of disturbance needed to construct the Project,
 - Construction phasing,
 - Construction haul routes,
 - Maintenance of traffic plan,
 - Safety and security measures,
 - Cost estimate and duration of construction, and
- Post-construction condition of the new Virginia Avenue SE; and
- Explanation of the process that led to the selection of the three Build Alternatives and the elimination of design concepts from consideration.

3.2 Selection of the Preferred Alternative

Alternative 3 was selected as the Preferred Alternative. The primary reasons for selecting Alternative 3 as the preferred alternative include the ability of this alternative to best meet the project Purpose and Need while minimizing environmental impacts and addressing community concerns. This alternative reduces the construction duration for the Project to the greatest extent possible as well as accommodates the train operations in a closed tunnel thereby addressing community concerns about operation of trains within an open trench near residents. This alternative also enhances the safety of the tunnel and rail road operations by providing a center wall in the new tunnel separating the two sets of tracks, which will provide the benefit of isolating any derailment within the tunnel. The wall will also provide maintenance flexibility if an operational shutdown is required. Although the outer surface of the southern wall under Alternative 3 will be located approximately 25 feet south of the existing tunnel's outer southern wall, the new enclosed structure, track ballast/bed and concrete floor will serve to prevent proximity effects from train-related vibration to nearby buildings.

Alternative 3 was developed in direct response to community concerns about trains temporarily operating in an open trench during construction near neighborhoods. These concerns were repeated and further elaborated upon during the Draft EIS comment period as manifested in a range of air quality, safety, noise, vibration and general quality of life concerns expressed by a number of residents who live near the proposed construction area.

Moreover, although the centerline of the new Virginia Avenue Tunnel under Alternative 3 will be 25 feet south of the existing tunnel centerline or 18 and 8 feet further south than tunnels under Alternative 2 or 4, respectively, the additional design features, such as the new enclosed structure, track ballast/bed and concrete floor, will serve to prevent proximity effects from train-related vibration to nearby buildings. The vibration analysis indicates there will not be building

damage or human annoyance as a result of trains passing through the new tunnel (see Section 5.7). However, it is recognized that these concerns must continue to be addressed.

Alternative 1 was not selected as the Preferred Alternative because it would not address the Project's Purpose and Need. Additionally, ongoing train operations would continue in the current tunnel with emergency or unplanned repairs potentially required at some point in the future. The tunnel's existing and ongoing structural limitations would eventually require major rehabilitation or replacement of the tunnel.

While Alternative 2 would meet the project's Purpose and Need, it was not selected as the Preferred Alternative. Alternative 2 would employ runaround train operations in an open trench during construction (see Sections 3.7.1.1 and 3.4.2). Although the open trench, which would be completely within the construction area, would not affect the health and safety of both construction workers and nearby residents, runaround operations in an open trench raised several concerns. In addition, the new tunnel would not have a center wall separating the two sets of tracks, which as noted above, provides long-term benefits.

While Alternative 4 would meet certain elements of the Purpose and Need, it would do so to a slightly lower degree than the Preferred Alternative and Alternative 2. Alternative 4 would employ train operations during construction, but instead of its own open trench, train operations would occur within the same trench as other tunnel reconstruction activities (see Sections 3.7.1.6 and 3.4.3). This will make the construction of the tunnel far more complicated and would increase construction duration and impacts. Alternative 4 would have substantially longer construction duration (see Section 3.5.6) and hence much longer construction impacts than the other Build Alternatives. Other disadvantages of Alternative 4 in comparison to the other two Build Alternatives include a greater risk of construction delays due to train operations and/or interruptions to train operations due to construction activity, and longer construction duration within Virginia Avenue Park. For the reasons provided above, Alternative 4 was not selected as the preferred alternative

3.3 Alternative 1 - No Build

Full consideration is given in this Final EIS to the environmental consequences of taking no action to meet Project's Purposes and Need described in Chapter 2. For the purposes of analyzing the impacts of the Project, Alternative 1, or the No Build alternative, provides a baseline condition with which to compare the consequences associated with the proposed action.

Under Alternative 1, the existing single-track tunnel would remain the same, and still in use. It would continue to be part of the mainline eastern seaboard freight rail corridor for commercial freight traffic for the Washington Metropolitan Area and other markets, such as those throughout the Mid-Atlantic and Midwest states. However, the existing Virginia Avenue Tunnel cannot accommodate double-stack intermodal container rail cars -- rail cars that vertically stack two intermodal containers and thus carry twice the load as an ordinary single-stack rail car. Intermodal containers are metal containers that move from ship, to truck, to rail, without any

adjustments needed. Under Alternative 1, modern freight rail operations, which use double-stack intermodal container freight trains, would not be possible along the increasingly busy eastern seaboard freight rail corridor. Virginia Avenue Tunnel would also remain a bottleneck to the network with its single-track configuration, and along with the inability to accommodate double-stack intermodal container trains, makes this single, relatively small segment of the I-95 corridor a limiting factor in preventing substantial improvements to the freight carrying capacity of the entire network in the Mid-Atlantic.

Alternative 1 does not include any major repairs or rehabilitation of the tunnel in the near future. However, given its 100-year plus age, the tunnel could require emergency or unplanned repairs at some point in the future to maintain commercial freight movements and protect the safety of railroad personnel and the public. Such a repair may require closure of at least part of Virginia Avenue SE in order for CSX to make the necessary repairs similar to what occurred in 1985 when a 150-foot section of the tunnel roof collapsed and had to be repaired under emergency conditions. In addition, the tunnel would eventually require rehabilitation or replacement, which may occur under an unplanned condition, and possibly at a time when the surrounding neighborhood is more fully developed with increased traffic as a result. Unplanned repair or rehabilitation would not only inconvenience the surrounding community, but has the potential to severely affect commercial freight rail operations with wide implications to regional and/or national freight movements.

3.4 Build Alternatives

This section provides detailed descriptions of the Preferred Alternative and Alternatives 2 and 4. Together, these alternatives are referred to in this Final EIS as the 'Build Alternatives'. Alternative 1 is referred to as the 'No Action' or 'No Build' Alternative. To meet the Project's Purpose and Need, each of the candidate Build Alternatives will require the demolition of the existing Virginia Avenue Tunnel and the construction of a new Virginia Avenue Tunnel that has two railroad tracks that could accommodate double-stack intermodal container freight trains. Under each of the Build Alternatives, the need to provide proper grading of the existing tracks west of the new rebuilt tunnel will mean that the vertical clearance underneath New Jersey Avenue SE will be able to accommodate double-stack intermodal container freight trains.

The three Build Alternatives were developed from three design concepts, which were among a wider range of design concepts for the Project (see Section 3.7). Following a detailed screening process, some of the concepts were eliminated from further consideration. Concepts 2, 5 and 6 were carried forward as the Project's Build Alternatives (see Section 3.7.3) and subsequent to the series of public meetings leading up to the release of the Draft EIS, additional engineering evaluation was done on the selected Build Alternatives. The notable engineering modifications of the alternatives from their original concepts were made mainly to avoid risking the structural integrity of the nearby and adjacent I-695. In order to assure that the structural integrity of I-695 and associated infrastructure remains intact, most of the existing north wall of the tunnel (the wall nearest to I-695) is expected to remain in place under all three Build Alternatives.

Regardless of Build Alternative, the total length of the rebuilt Virginia Avenue Tunnel will be extended by approximately 330 feet on the east end. The new east tunnel portal will be located northeast of the existing M Street SE / 12th Street SE T-intersection.

Due to the proximity of the new rail line configuration (two tracks) immediately west of the 2nd Street portal, the existing columns supporting the I-695 viaduct near the portal will be strengthened where applicable to meet American Railway Engineering and Maintenance-of-Way (AREMA) requirements for pier protection as well as CSX requirements for pier protection, which are more stringent than the AREMA requirements.

3.4.1 Preferred Alternative (Alternative 3) – Two New Tunnels

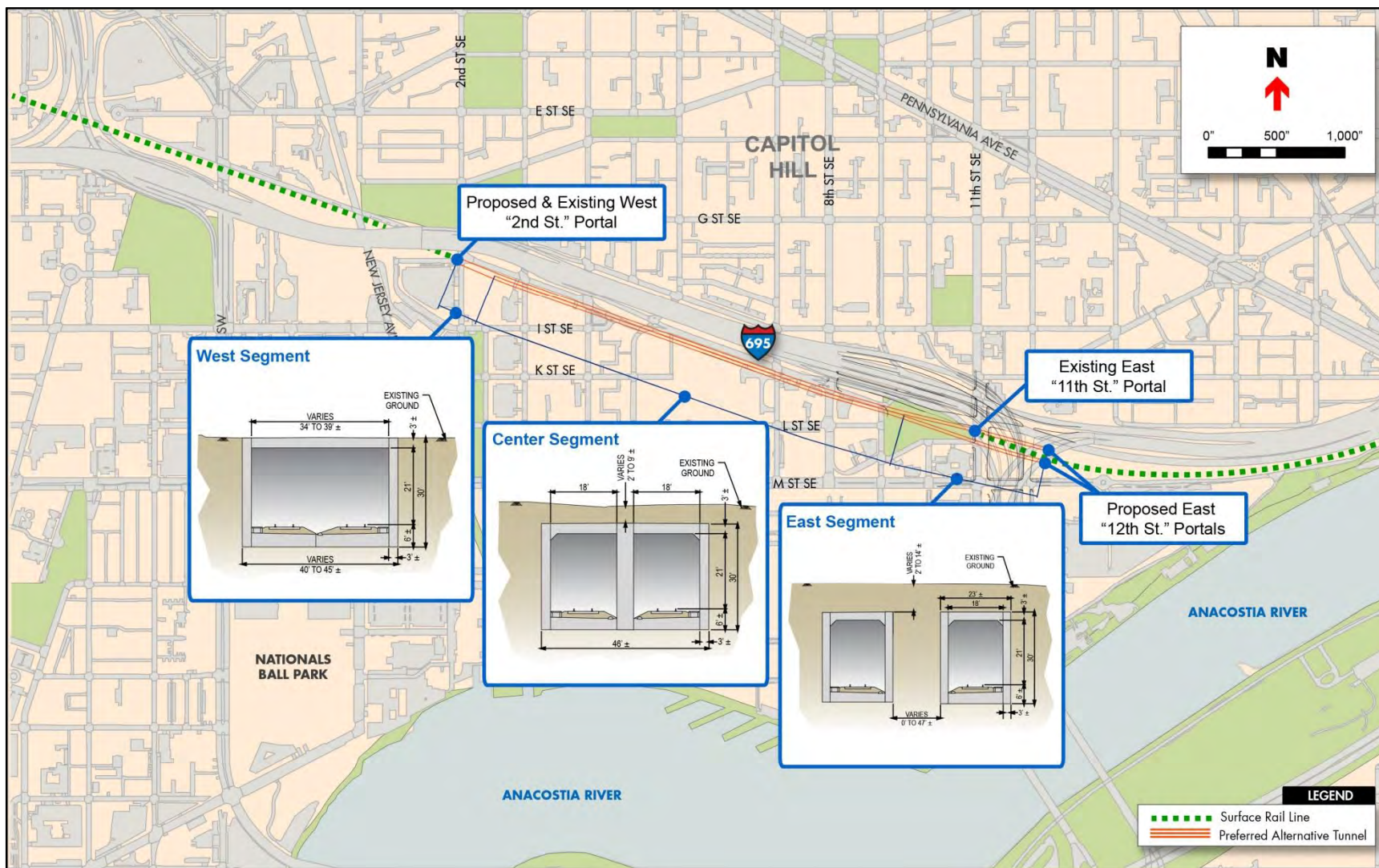
The Preferred Alternative (Alternative 3) was developed from Concept 5 (see Section 3.7.1.5). Essentially, Concept 5 avoids having to construct temporary facilities to maintain freight operations during construction. The south side single-track/double-stack tunnel will be constructed first. During construction of the south side tunnel, freight traffic will continue to use the existing Virginia Avenue Tunnel. After the new south side tunnel is completed, train traffic will cut over to this new tunnel and the existing, older tunnel will be reconstructed and converted into a new single-track/double-stack tunnel.

When developed into Alternative 3, the west portal at 2nd Street SE was changed to a single two-track portal rather than two single-track portals because additional engineering found that there is not sufficient space between the piers of the I-695 viaduct to allow separate tunnels. The double track, single tunnel is shown on Figure 3-1 within the west section, which is approximately 230 feet long and is located immediately east of the 2nd Street portal (within the Virginia Avenue SE section between 2nd and 3rd Streets SE). This modification means that during construction, freight trains will operate in a protected open trench within this west section. Within the remainder of the tunnel limits, freight trains will operate in an enclosed tunnel throughout the construction duration. The construction phasing along the west section of the tunnel is described in Section 3.5.2.

From approximately midway between 2nd and 3rd Streets to just east of 9th Streets SE under Virginia Avenue Park, the two single railroad track tunnels will be separated by a center wall (see center section in Figures 3-1 and 3-2). The centerline of the two tunnels, represented by the center wall, will be aligned approximately 25 feet south of the existing tunnel centerline. The construction phasing along this center section of the tunnel is described in Section 3.5.2.

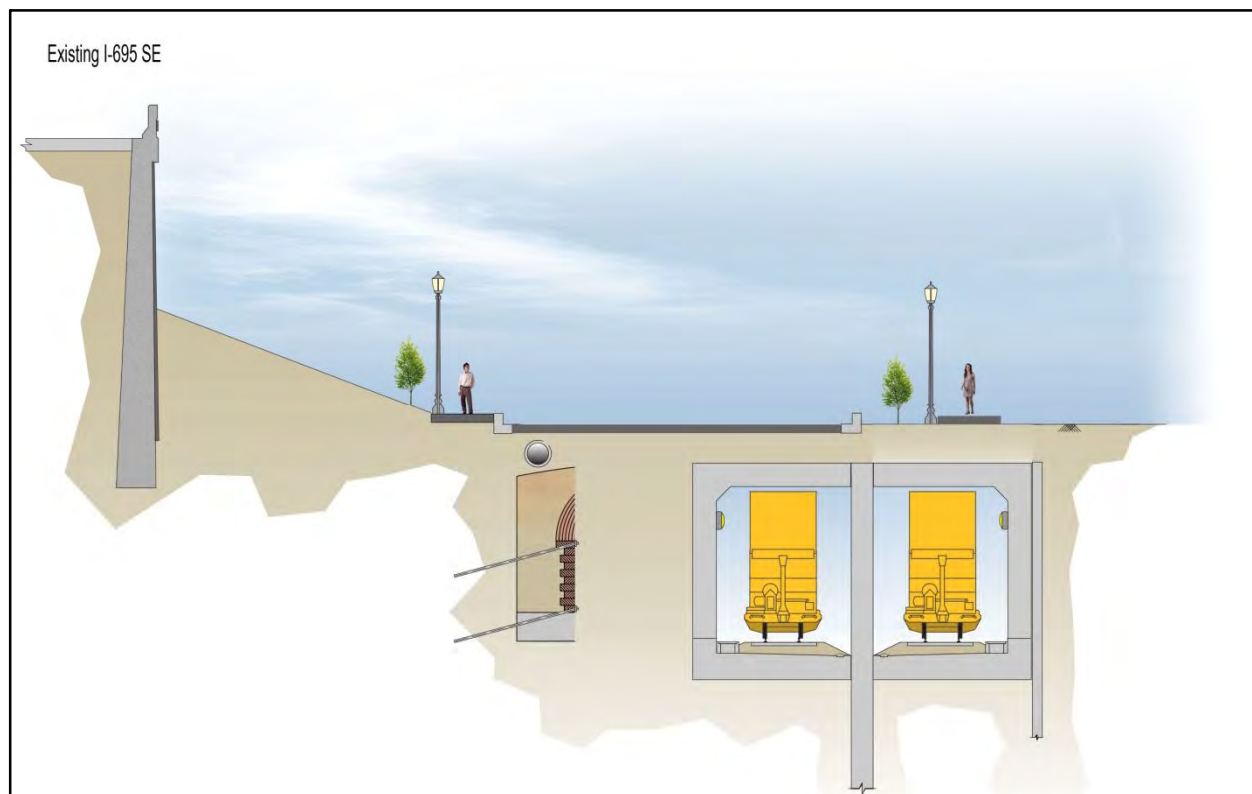
From just east of 9th Street SE to the east portal at 12th Street SE, the tunnels will be separated, resulting in two single-track tunnels (see Figure 3-1). This is due to the locations of new concrete columns associated with the rebuilt 11th Street Bridges. The existing clearance available between these columns does not provide enough space to build a new double track single tunnel box adjacent to the existing tunnel without requiring demolition of the existing tunnel. The existing tunnel needs to remain in place to maintain train operations until construction of the new south tunnel is completed. The separation between the tunnels will be widest at the east tunnel portal where it will be approximately 65 feet centerline to centerline. Therefore, the east

Figure 3-1
Typical Sections of the Preferred Alternative by Section



tunnel portal, at completion, will consist of two single-track tunnel openings and will require more space than under Alternatives 2 and 4.

Figure 3-2
Cross Section View of Post-Construction Preferred Alternative
between 3rd and 9th Streets SE



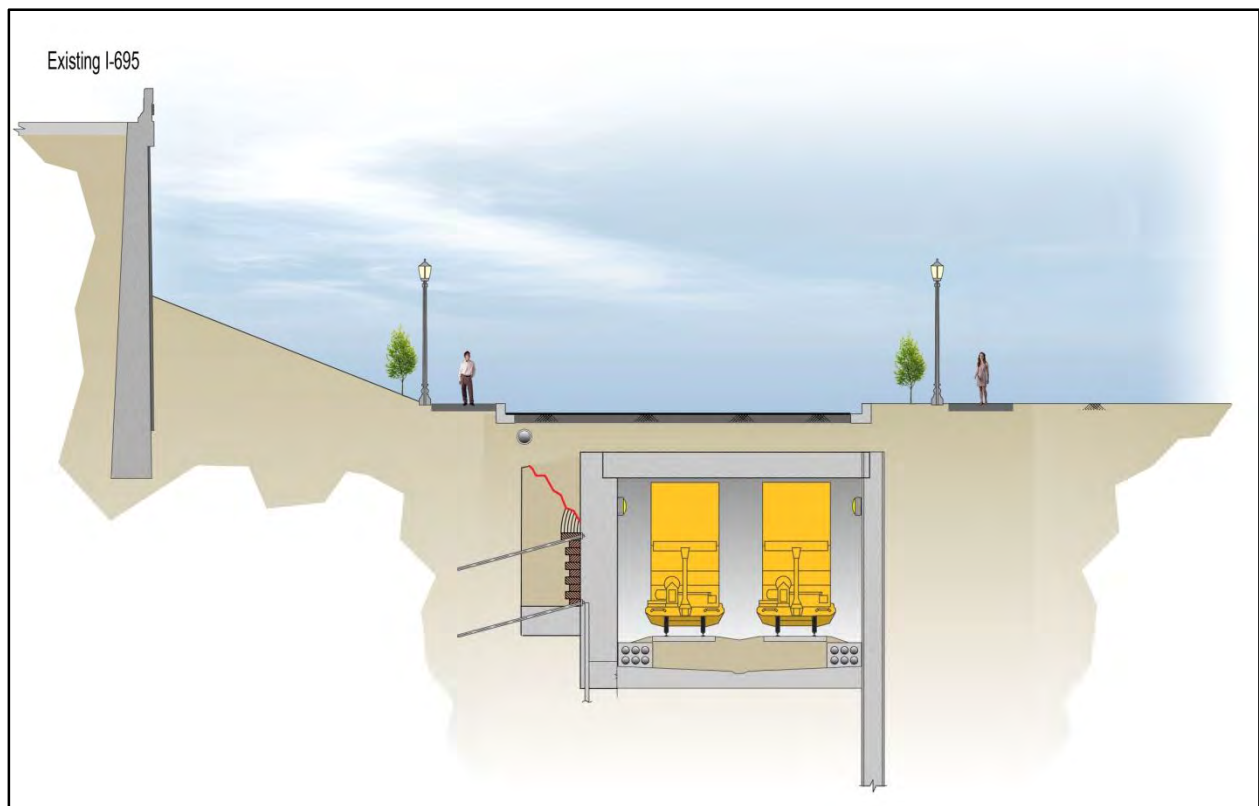
3.4.2 Alternative 2 - Rebuilt Tunnel / Temporary Runaround Track

The Alternative 2 was developed from Concept 2 (see Section 3.7.1.1). Concept 2 maintains freight traffic during construction of the new tunnel by providing a temporary runaround track placed inside a protected trench constructed immediately south of the existing tunnel alignment. While train traffic is shifted to the runaround track, the existing tunnel is demolished and in its place, a new double track tunnel would be constructed. Upon completion of the rebuilt Virginia Avenue Tunnel under Alternative 2, the runaround track would be removed and the protected trench would be backfilled.

When developed into Alternative 2, the temporary runaround track was re-aligned starting just west of Virginia Avenue Park due to new columns associated with the rebuilt 11th Street Bridges. The alignment for the temporary track along this segment would be the same as the south side tunnel under the Preferred Alternative. In addition, the centerline of the rebuilt two-track tunnel

would be aligned approximately seven feet south of the existing tunnel centerline. The centerline of the existing tunnel is located approximately at the middle of the existing rails. Concept 2 showed a centerline as being the same as the existing tunnel. The centerline of the rebuilt tunnel under Alternative 2 would be located half way between the two sets of rails. The shift is smallest at the west portal. It becomes approximately 10 feet roughly east of 3rd Street SE. A typical cross section of post-construction Virginia Avenue Tunnel under Alternative 2 between 3rd Street and 9th Street SE is shown at Figure 3-3. Although the surface above the tunnel would vary (e.g., different Virginia Avenue SE streetscapes, restored Virginia Avenue Park, etc.), the cross section of the rebuilt tunnel would be the same from portal to portal, which is unlike the new tunnel under the Preferred Alternative.

Figure 3-3
Cross Section View of Post-Construction Alternative 2
between 3rd and 9th Streets SE



3.4.3 Alternative 4 - New Partitioned Tunnel / Online Rebuild

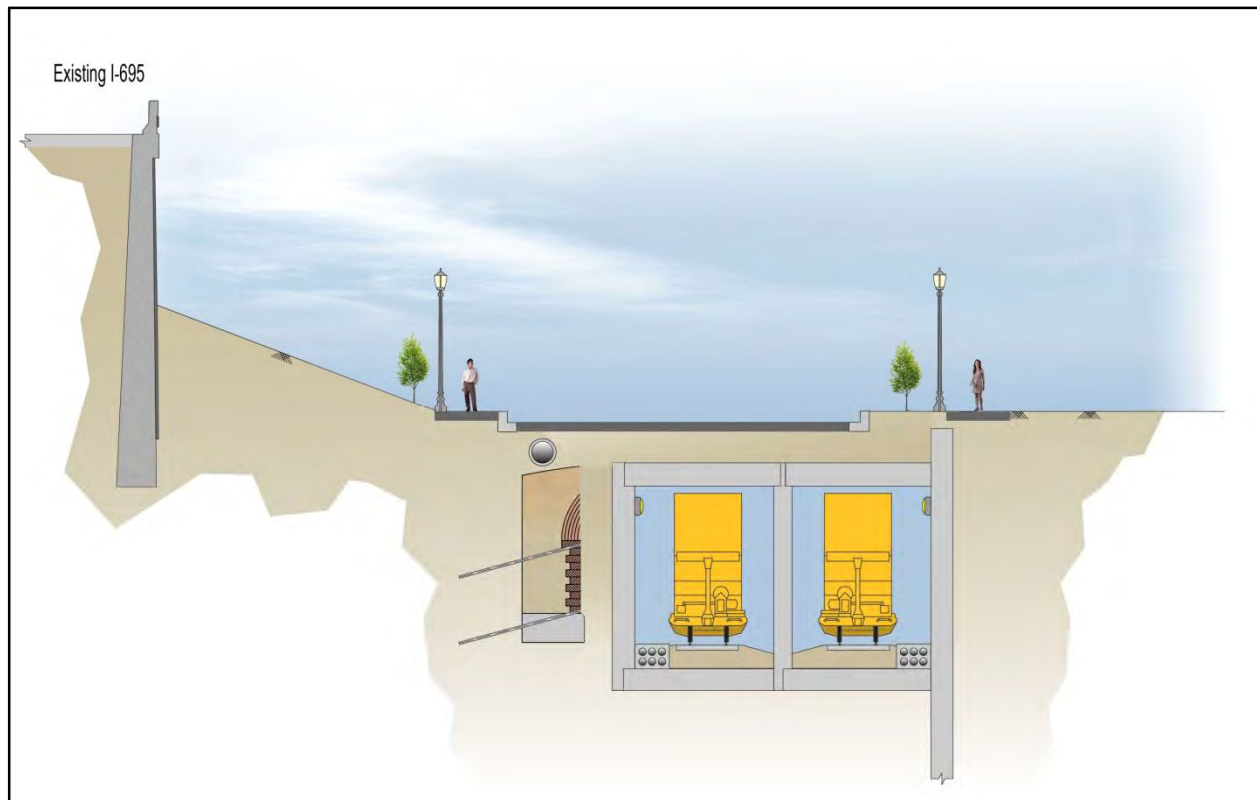
The Alternative 4 was developed from Concept 6 (see Section 3.7.1.6). Concept 6 would involve construction of a new permanent tunnel in short segments while maintaining freight rail traffic in one half of the tunnel or construction trench at all times. Demolition of the old tunnel and construction of the new tunnel would occur in numerous stages with regularly shifting track

alignments and all work occurring in very close proximity to live train traffic, allowing trains to continue to use the tunnel though the construction work area on a daily basis.

When developed into Alternative 4, additional engineering analysis showed that a larger trench would be needed for both maintaining freight rail operations and rebuilding the tunnel. Unlike the other Build Alternatives, Alternative 4 would require removal of the north tunnel wall along the east end of the tunnel in order for this alignment to fit within modifications of the 11th Street Bridges currently being done by DDOT.

From the west portal to the general vicinity of 3rd Street SE, the rebuilt Virginia Avenue Tunnel under Alternative 4 would be the same as under Alternative 2. However, the additional engineering analysis changed the finished tunnel between 3rd Street to the east portal from a single two-track tunnel to a tunnel that would consist of two single-track tunnels separated by a center partition wall (see Figure 3-4). Also, the centerline of the rebuilt tunnel along most of the tunnel length, represented by the center partition wall, would be aligned approximately 17 feet south of the existing tunnel centerline.

Figure 3-4
Cross Section View of Post-Construction Alternative 4
between 3rd and 9th Streets SE



3.5 Construction Period Conditions

Regardless of the Build Alternative, the construction-period conditions will be the same or be very similar. The construction-period description under the Preferred Alternative or the other two Build Alternatives includes:

- Limits of disturbance, which includes the construction staging and stockpiling areas, and identifying streets that will be closed during construction;
- Phasing plan, which describes the general construction methods and activities for each Build Alternative;
- Access points and haul routes for construction vehicles;
- Maintenance of traffic (MOT) plan that will indicate how public traffic will be accommodated with the planned street closures and how properties located along or near street closures will keep their public access;
- Safety and security measures;
- Estimated duration of construction; and
- Estimated construction costs.

3.5.1 Limits of Disturbance

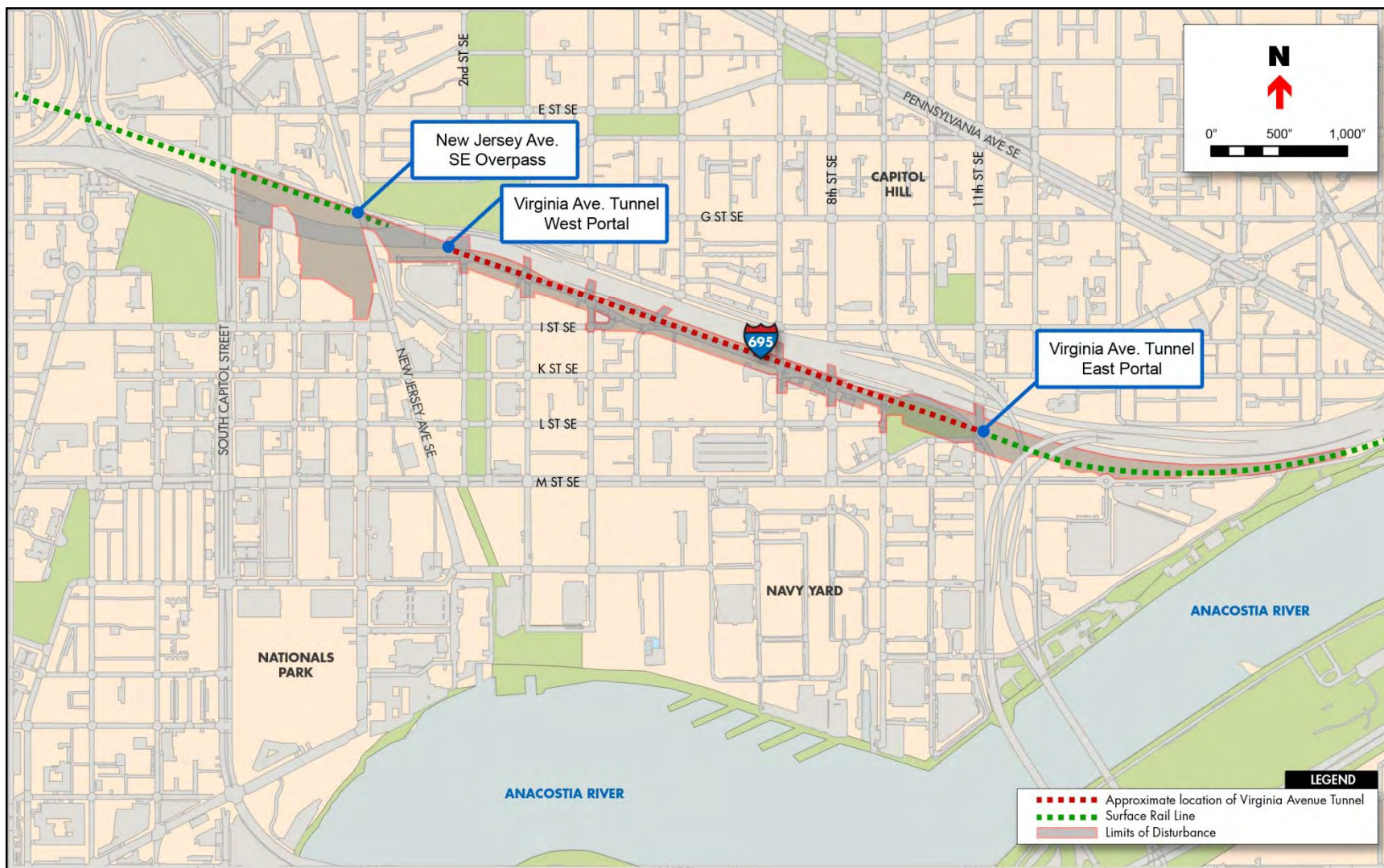
The Limits of Disturbance (LOD), which is depicted in Figure 3-5, means all areas where construction will take place, including areas needed for staging, materials stockpiling, utility relocations, and temporary freight train operations. More detailed depictions of the proposed LOD for the Build Alternatives are provided in Appendix C. The LOD basically represents the areas affected by construction and will be restricted from the general public, except Virginia Avenue's cross streets, which will remain open for public passage throughout construction by means of temporary bridges (see Sections 3.5.2 and 3.5.4). Other areas outside of the LOD will be subject to minor construction work associated with MOT detours, such as re-striping, removing or modifying parking meters, modifying curb lines at intersections for turning movements, modifying existing traffic signal systems including adding temporary signals, widening roadway pavement as required, and resurfacing affected areas. These areas are shown in the depictions provided in Appendix C.

The Preferred Alternative and Alternative 2 have identical LODs because the alignments of the temporary runaround track/trench under Alternative 2 and the new south side single-track tunnel under the Preferred Alternative are the same.

The Preferred Alternative or Alternative 2's LOD will encompass the following areas, and involve various construction activities as noted below:

- CSX-owned rail right-of-way between the South Capitol Street Overpass and the Virginia Avenue Tunnel west portal. For the Preferred Alternative or Alternative 2, this area will be used to convert the single-track configuration to a double-track configuration immediately west of the tunnel portal at 2nd Street SE, and to provide proper grading of the existing tracks west of the new rebuilt tunnel.

Figure 3-5
Limits of Disturbance during Construction under the Preferred Alternative or Alternative 2



- Virginia Avenue SE (eastbound) public right-of-way between 2nd and 9th Streets SE, which will be needed to construct:
 - Temporary runaround track/ protected trench and rebuilt two-track Virginia Avenue Tunnel (Alternative 2), or
 - Partitioned single-track tunnels (Preferred Alternative or Alternative 4).
- Virginia Avenue Park between 9th Street and 11th Street SE: Same as Virginia Avenue SE (eastbound) right-of-way. A portion of the park will be temporarily used for the LOD. This will not include the portion of the park used as a community garden and the picnic benches located along Potomac Avenue SE. For the Preferred Alternative or Alternative 2, the LOD will be wider from just west of Virginia Avenue Park to the 11th Street Bridge right-of-way than under Alternative 4. The alignment of the temporary runaround track (Alternative 2) and the south side permanent single-track tunnel (Preferred Alternative) would bend slightly south to avoid new columns installed for the current 11th Street Bridge Project. This widening will require a section of L Street SE adjacent to the park to be included in the LOD. The park and the affected section of L Street SE will be restored to at least their pre-construction condition at the end of construction.
- Area between Virginia Avenue Park and 11th Street Bridge public right-of-way between I-695 and Potomac Avenue SE: Same as Virginia Avenue SE (eastbound) right-of-way.
- CSX-owned rail right-of-way and DDOT public space between the east tunnel portal and approximately 1700 feet east: For all Build Alternatives, this area will be used to convert the single-track configuration to a two-track configuration immediately east of the tunnel portal just west of 12th Street SE, and to provide for proper grading of the existing tracks east of the tunnel to accommodate the new elevation of the rebuilt tunnel. Under the Preferred Alternative, the two tracks will be split by approximately 75 feet at the two tunnel portals. These tracks will transition back to the existing side-by-side tracks several hundred feet east of the portals, but within the eastern limits noted above.
- Public right-of-way directly beneath the I-695 structure between Garfield Park and Virginia Avenue SE in the vicinity of 2nd Street SE: This area is needed to relocate a large sewer line (Tiber Creek & New Jersey Avenue High Level Intercepting Sewer) under all three Build Alternatives.
- Portions of 2nd to 9th Streets SE public right-of-way at their intersections with Virginia Avenue SE: These areas will be used to maintain surface traffic during construction, including the installation of temporary bridges to maintain cross-street traffic. See Section 3.5.4 for further information.
- L Street between 8th and 9th Streets SE: This area will be used to maintain surface traffic during construction, but no construction will be needed other than installation of

temporary traffic signals and re-striping for two-way operations. This area is not considered part of the LOD. See Section 3.5.4 for further information.

- Approximately 40 feet wide section of U.S. Marine Corps property between Capper Senior Homes and 7th Street SE: This area will be used to construct the temporary runaround track/ protected trench (Alternative 2), or the south side single-track tunnel (Preferred Alternative). The Marine Corps property may also be used to relocate certain utilities affected by the Project. The property will be restored to at least the pre-construction condition at the end of construction.
- Jersey Rail Yard, a CSX-owned property located directly south of the CSX rail right-of-way between New Jersey Avenue SE and South Capitol Street: This area will be used for construction staging, vehicle and equipment storage, worker parking, contractor offices, for the temporary materials stockpiles and a community outreach office.

The LOD for Alternative 4 would be the same as the LOD for the Preferred Alternative or Alternative 2 except along the south edge of Virginia Avenue between 2nd and 11th Streets SE portals, and in Virginia Avenue Park. The Alternative 4's LOD along Virginia Avenue SE would be a few feet narrower and be slightly smaller in the park.

While it is possible that the LOD may be adjusted later during final design or construction due to new information, DDOT will be informed of any adjustment that increases the size of the LOD. Most of the LOD is constrained, especially along Virginia Avenue SE and the CSX right-of-way. The LOD does not include private property, nor will it be expanded into private property during final design.

3.5.2 Phasing

Construction of the Project will be complex. This section provides an explanation of the major steps needed to complete the construction for each of the Build Alternatives, which are illustrated in Tables 3-1 through 3-3. It should be noted that the cross sectional views of the Preferred Alternative and Alternatives 2 and 4 shown on these tables are different than what are described in Sections 2.2.1.1, 2.2.1.5 and 2.2.1.6 for Concepts 2 (Alternative 2), 5 (Preferred Alternative) and 6 (Alternative 4), respectively. This is due to additional engineering design work that was performed specifically on these alternatives. Although completion of final design of the Project is unlikely to change the steps described in Tables 3-1 through 3-3, there may be situations unknown at this time in which deviations from these steps may be necessary.

Table 3-2 shows the construction phasing within the center segment of the Preferred Alternative, which encompasses the majority of the tunnel length (see Figure 3-5). As described in the introduction of this section, the Preferred Alternative's tunnel within the west and east segments will be different from the tunnel in the center segment. Although the east segment tunnels will be spaced apart, the construction phasing as shown in Table 3-2 will be the same, in particular train operations will be within an enclosed tunnel at all times. However, within the 230-foot long west segment, trains will operate within an open trench throughout the majority

Table 3-1
Alternative 2 Construction Phasing

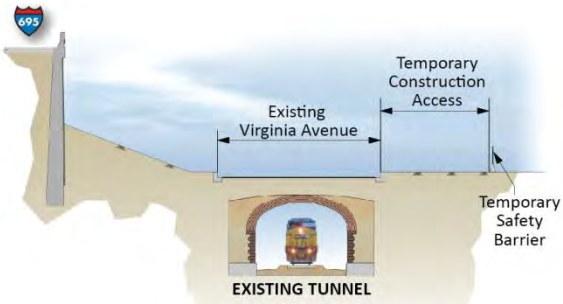
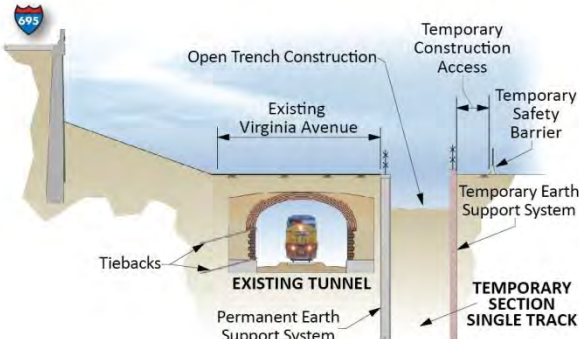
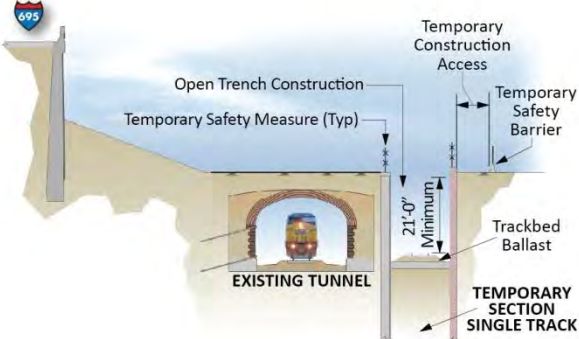
Step	Major Activities
<p data-bbox="451 373 529 407">Step 1</p> 	<ul style="list-style-type: none"> • Set up the maintenance of traffic (MOT) measures • Partially close Virginia Avenue SE to traffic • Initiate utility relocations (concurrent with other activities) • Remove roadway asphalt and other hard surfaces. • Erect temporary bridge crossings at intersections over temporary runaround trench location • Install safety barriers around construction site • Install temporary bridge crossings over runaround trench
<p data-bbox="451 852 529 886">Step 2</p> 	<ul style="list-style-type: none"> • Install a temporary earth support system on the south side of the runaround trench • Install a permanent earth support system on the north side of the runaround trench (this would form the south side wall of the rebuilt tunnel) • Begin excavation of the runaround trench from the top (open trench construction) • Install tiebacks in the existing tunnel's north side wall
<p data-bbox="451 1331 529 1365">Step 3</p> 	<ul style="list-style-type: none"> • Complete trench excavation • Install track bed ballast, temporary tracks and other train operations signals and communication equipment

Table 3-1 (Continued)
Alternative 2 Construction Phasing

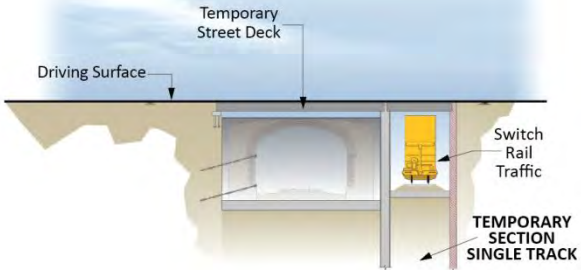
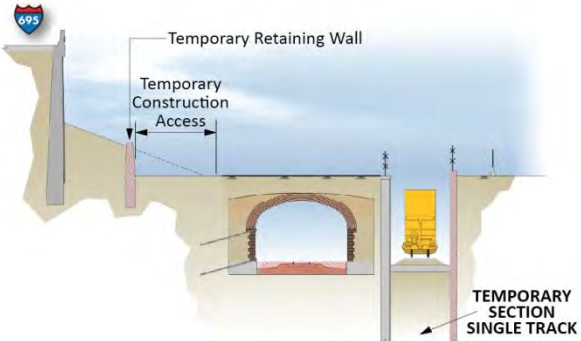
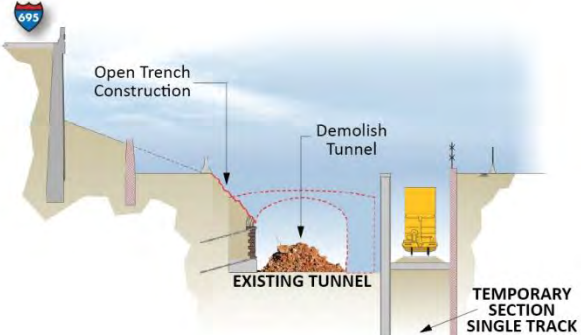
Step	Major Activities
<p data-bbox="451 373 532 405">Step 4</p> 	<ul data-bbox="824 380 1398 632" style="list-style-type: none"> • Install temporary bridge crossings over existing tunnel alignment • Install track cut-over at each end of the tunnel to switch train route from the existing tunnel to the temporary runaround trench • Begin operating trains through the temporary runaround trench and remove all train operations from existing tunnel
<p data-bbox="451 852 532 884">Step 5</p> 	<ul data-bbox="824 858 1422 1016" style="list-style-type: none"> • Partially cut toe of embankment slope on the north side of Virginia Avenue SE and install temporary retain wall • Provide construction access on the north side of the existing tunnel
<p data-bbox="451 1331 532 1362">Step 6</p> 	<ul data-bbox="824 1337 1430 1430" style="list-style-type: none"> • Demolish the tunnel (roof, south side wall, utilities, track work) from the top (open trench construction); north side wall remain

Table 3-1 (Continued)
Alternative 2 Construction Phasing

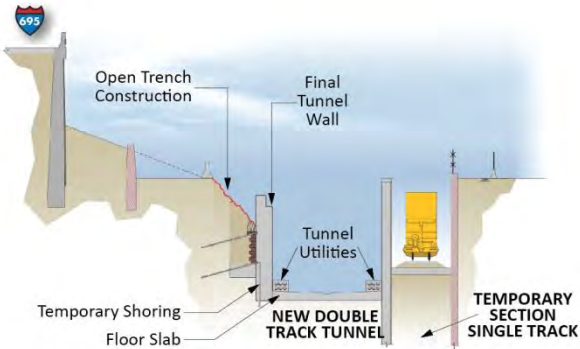
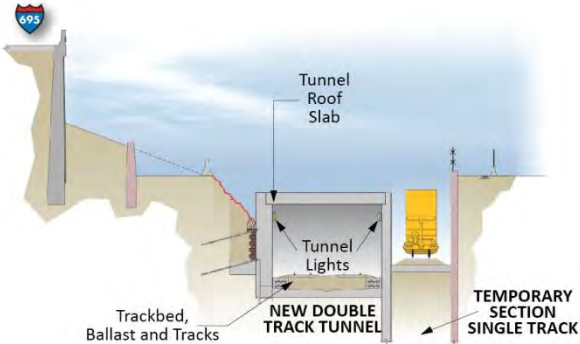
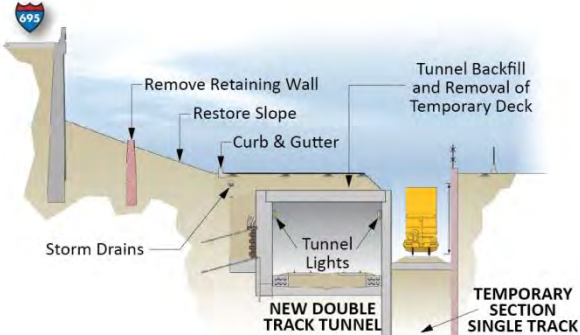
Step	Major Activities
<p data-bbox="451 373 532 407">Step 7</p> 	<ul data-bbox="824 378 1380 577" style="list-style-type: none"> • Install temporary shoring along north side wall • Complete excavation of the new tunnel floor • Install concrete floor • Install new north side wall (inside old north side wall) • Begin utility installations
<p data-bbox="451 852 532 886">Step 8</p> 	<ul data-bbox="824 856 1364 987" style="list-style-type: none"> • Install new track bed and ballast • Install tunnel roof slab • Install new tracks and related equipment (e.g., lighting)
<p data-bbox="451 1331 532 1365">Step 9</p> 	<ul data-bbox="824 1335 1380 1564" style="list-style-type: none"> • Backfill on top of tunnel roof • Remove embankment retaining wall and restore slope on the north side of Virginia Avenue SE • Remove temporary street decks over the rebuilt tunnel • Install storm drains • Begin construction of curbs and gutters

Table 3-1 (Continued)
Alternative 2 Construction Phasing

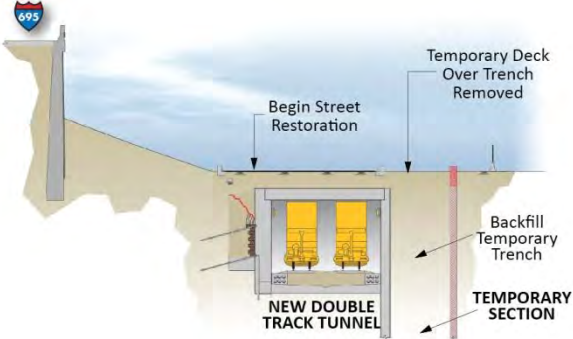

Step	Major Activities
<p data-bbox="446 373 537 405">Step 10</p> 	<ul style="list-style-type: none"> • Move trains to rebuilt tunnel • Remove temporary track work in the runaround trench • Backfill runaround trench and remove upper portion of temporary earth support on the south side of the trench (the bottom portion would remain) • Remove temporary street deck over temporary trench • Begin street restoration • Continue construction of storm drains, curbs and gutters
<p data-bbox="446 852 537 884">Step 11</p> 	<ul style="list-style-type: none"> • Complete roadway surface restoration (street paving, sidewalks, lighting, striping etc.) and landscaping • Remove all remaining temporary barriers • Open Virginia Avenue SE to traffic

Table 3-2
Preferred Alternative Construction Phasing

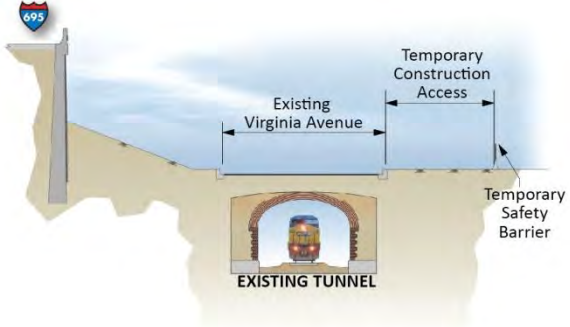
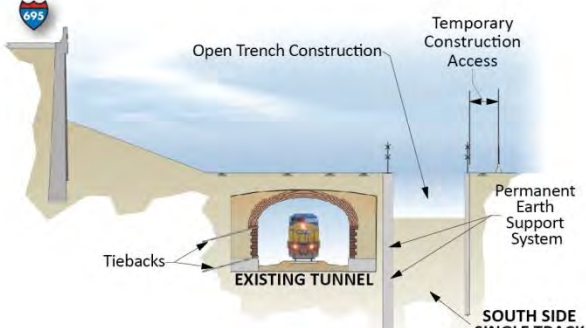
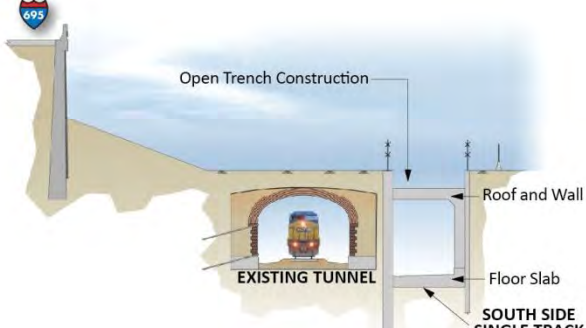
Step	Major Activities
<p data-bbox="451 373 529 405">Step 1</p> 	<ul data-bbox="824 373 1430 701" style="list-style-type: none"> • Set up the maintenance of traffic (MOT) measures • Partially close Virginia Avenue SE to traffic • Initiate utility relocations (concurrent with other activities) • Remove roadway asphalt and other hard surfaces. • Erect temporary bridge crossings at intersections over south side tunnel alignment • Install safety barriers around construction site • Install temporary bridge crossings over excavation of new south side tunnel <p data-bbox="824 737 1203 768">Estimated Duration: 5 to 6 Months.</p>
<p data-bbox="451 852 529 884">Step 2</p> 	<ul data-bbox="824 852 1430 1115" style="list-style-type: none"> • Install permanent earth support systems on both the north and south side of the south side tunnel alignment (north side support system would form the tunnel wall for both the south and north tunnels) • Begin excavation for the south side tunnel from the top (open trench construction) • Install tiebacks in the existing tunnel's north side wall <p data-bbox="824 1146 1203 1178">Estimated Duration: 3 to 4 Months.</p>
<p data-bbox="451 1331 529 1362">Step 3</p> 	<ul data-bbox="824 1331 1406 1461" style="list-style-type: none"> • Complete excavation needed for the south side tunnel • Install concrete floor slab for the south side tunnel • Install south side tunnel's roof and south wall <p data-bbox="824 1493 1203 1524">Estimated Duration: 6 to 8 Months.</p>

Table 3-2 (Continued)
Preferred Alternative Construction Phasing

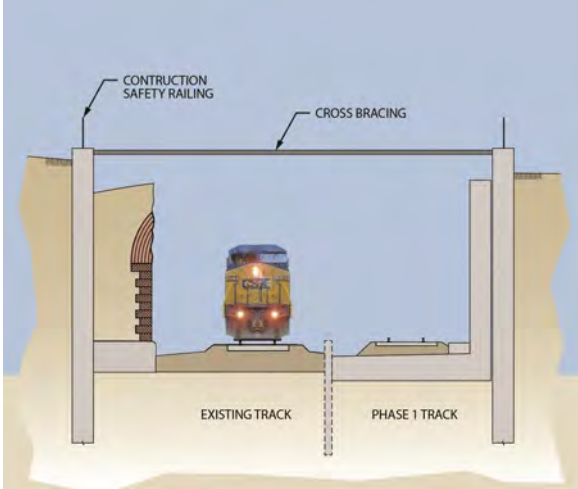

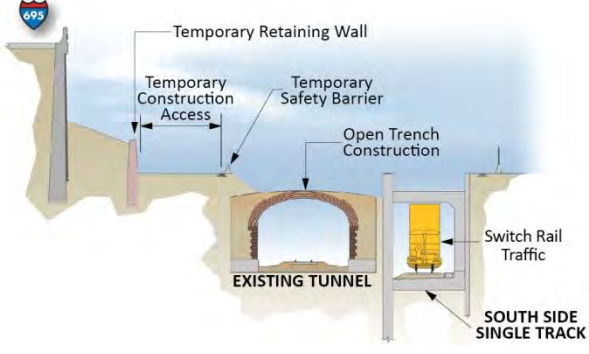
Step	Major Activities
<p data-bbox="347 373 636 407">Step 3A (West Segment)</p> 	<ul data-bbox="824 373 1419 470" style="list-style-type: none"> • For west segment, trains will continue operating on the existing tracks while the portion of tunnel with the new south side track is being constructed
<p data-bbox="451 911 529 945">Step 4</p> 	<ul data-bbox="824 911 1403 1037" style="list-style-type: none"> • Install utilities in the tunnel • Install track bed ballast, tracks and other train operations signals and communication equipment for the south side tunnel <p data-bbox="824 1075 1208 1108">Estimated Duration: 1 to 2 Months.</p>
<p data-bbox="308 1392 675 1425">Step 5 (Between Intersections)</p> 	<ul data-bbox="824 1392 1435 1822" style="list-style-type: none"> • Install track cut-over from existing tunnel to south side at each end of the tunnel • Begin to operate trains through the south side tunnel, and remove all train operations from existing tunnel • Partially cut toe of embankment slope on the north side of Virginia Avenue SE and install temporary retain wall • Provide construction access on the north side of the existing tunnel • Begin excavation over the existing tunnel • Install temporary bridge crossings over existing tunnel alignment at intersections <p data-bbox="824 1852 1208 1885">Estimated Duration: 1 to 2 Months.</p>

Table 3-2 (Continued)
Preferred Alternative Construction Phasing

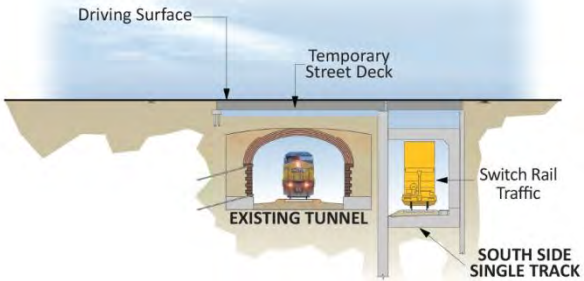
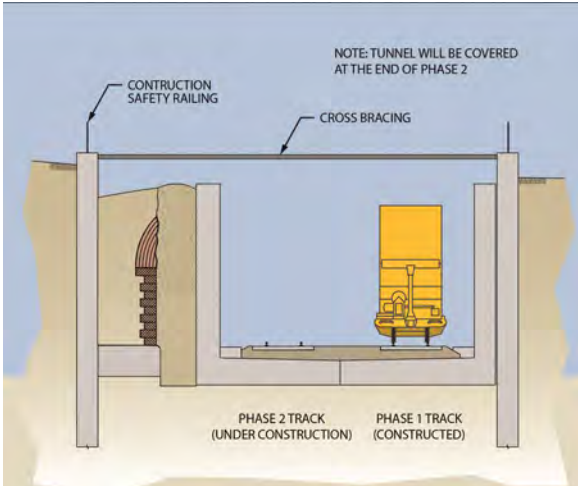
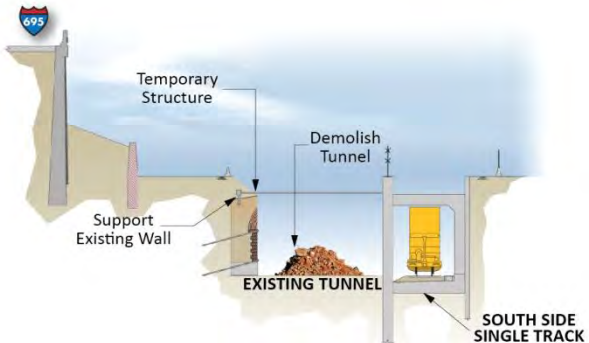
Step	Major Activities
<p data-bbox="347 373 636 407">Step 5 (At Intersections)</p> 	
<p data-bbox="347 852 636 886">Step 5A (West Segment)</p> 	<ul data-bbox="824 852 1430 947" style="list-style-type: none"> • At west segment, train traffic will switch to the south side track while the north side of the tunnel and track are being constructed
<p data-bbox="451 1388 532 1421">Step 6</p> 	<ul data-bbox="824 1388 1430 1549" style="list-style-type: none"> • Install temporary struts between existing wall and new wall • Demolish the tunnel (roof, south side wall, utilities, track work) from the top (open trench construction); north side wall remain <p data-bbox="824 1583 1203 1612">Estimated Duration: 2 to 3 Months.</p>

Table 3-2 (Continued)
Preferred Alternative Construction Phasing

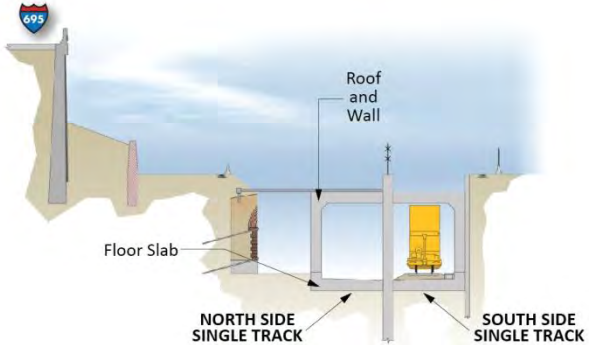
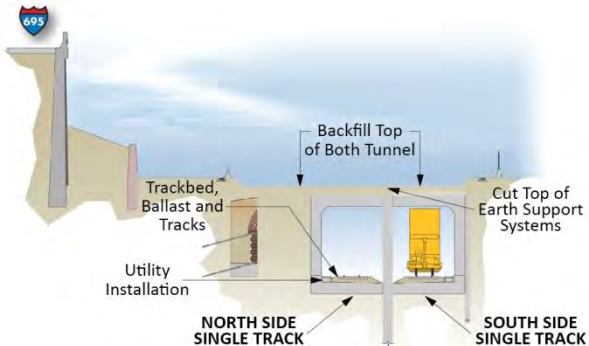
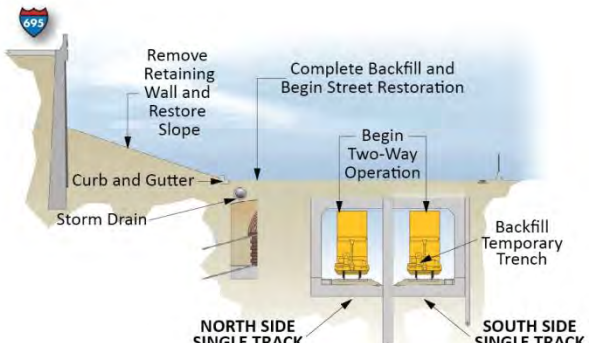
Step	Major Activities
<p style="text-align: center;">Step 7</p> 	<ul style="list-style-type: none"> • Install concrete floor slab for the north side tunnel • Install north side tunnel's roof and north wall <p>Estimated Duration: 6 to 8 Months.</p>
<p style="text-align: center;">Step 8</p> 	<ul style="list-style-type: none"> • Install track bed ballast, tracks and other train operational signals and communication equipment for the north side tunnel • Complete utility installation in rebuilt tunnel • Remove the temporary struts • Backfill on top of both tunnels' roof • Remove temporary decks over the both tunnels • Cut top of the earth support systems <p>Estimated Duration: 1 to 2 Months.</p>
<p style="text-align: center;">Step 9</p> 	<ul style="list-style-type: none"> • Provide track connections for the north side tunnel at both ends of the tunnel portal • Begin two-way train operations utilizing both tunnels • Complete backfill over both tunnels • Remove embankment retaining wall and restore slope on the north side of Virginia Avenue SE • Install storm drains • Begin construction of curbs and gutters • Begin street utility restoration <p>Estimated Duration: 2 to 3 Months.</p>

Table 3-2 (Continued)
Preferred Alternative Construction Phasing

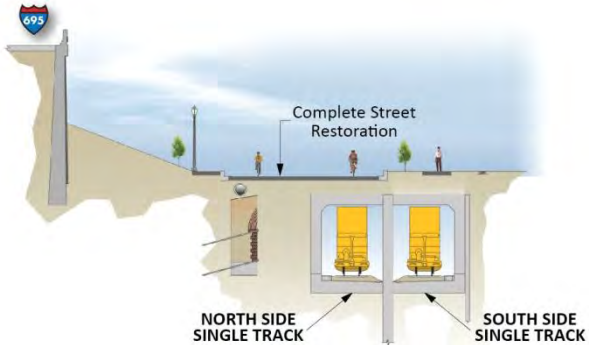
Step	Major Activities
<p data-bbox="446 373 539 405">Step 10</p>  <p>The diagram illustrates the construction site for Step 10. On the left, a sign for Interstate 695 is visible. The main area shows a cross-section of the roadway with workers and equipment performing 'Complete Street Restoration'. Below the surface, two tunnel sections are shown, labeled 'NORTH SIDE SINGLE TRACK' and 'SOUTH SIDE SINGLE TRACK'. The tunnels are currently under construction, with yellow lighting visible inside.</p>	<ul style="list-style-type: none"> • Complete roadway surface restoration (street paving, sidewalks, lighting, striping etc.) and landscaping • Continue construction of storm drains, curbs and gutters • Remove all remaining temporary barriers • Open Virginia Avenue SE to traffic <p>Estimated Duration: 3 to 4 Months.</p>

Table 3-3
Alternative 4 Construction Phasing

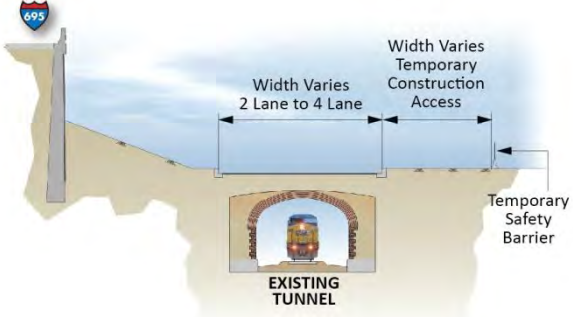
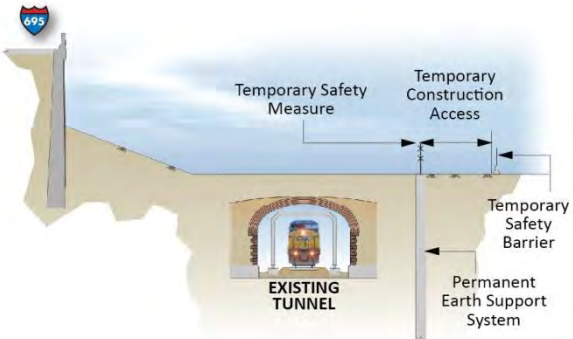
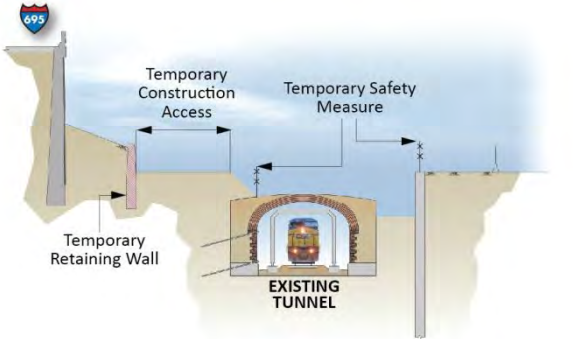
Step	Major Activities
<p data-bbox="451 373 529 405">Step 1</p> 	<ul data-bbox="824 380 1419 667" style="list-style-type: none"> • Set up the maintenance of traffic (MOT) measures • Close Virginia Avenue SE to traffic (section between 4th and 9th Streets SE will remain open in the first several months of construction) • Initiate utility relocations (concurrent with other activities) • Remove roadway asphalt and other hard surfaces. • Erect temporary bridge crossings at intersections • Install safety barriers around construction site
<p data-bbox="451 852 529 884">Step 2</p> 	<ul data-bbox="824 858 1398 1083" style="list-style-type: none"> • Install permanent earth support systems on the south side of the existing tunnel alignment • Install temporary anti-fall barrier over existing rail line in the tunnel • Establish temporary construction access on the south side of existing tunnel • Install temporary bridge crossings over trench
<p data-bbox="451 1331 529 1362">Step 3</p> 	<ul data-bbox="824 1337 1422 1625" style="list-style-type: none"> • Partially cut toe of embankment slope on the north side of Virginia Avenue SE and install temporary retain wall • Provide construction access on the north side of the existing tunnel • Install tiebacks in the existing tunnel's north side wall • Initiate excavation over the existing tunnel and south up to the earth support system

Table 3-3 (Continued)
Alternative 4 Construction Phasing

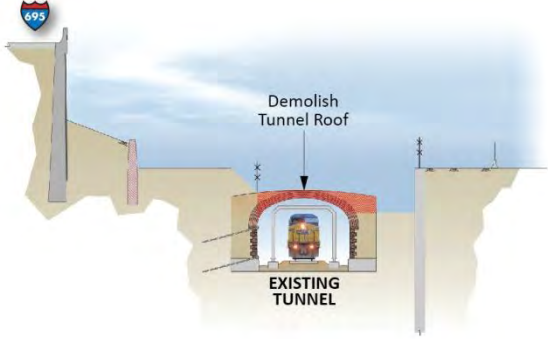
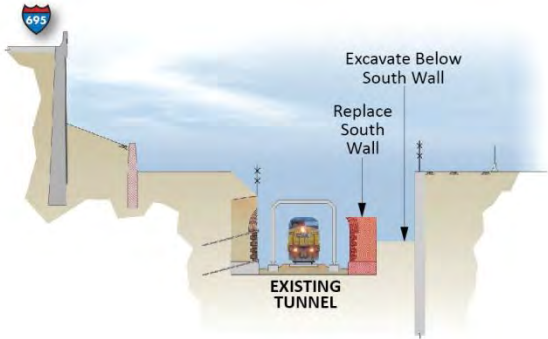
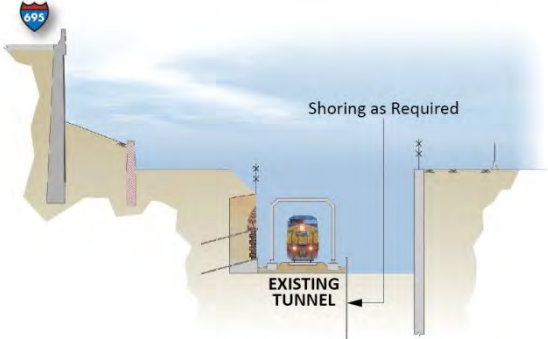
Step	Major Activities
<p data-bbox="451 373 532 405">Step 4</p> 	<ul data-bbox="824 373 1386 405" style="list-style-type: none"> • Demolish tunnel roof (open trench construction)
<p data-bbox="451 850 532 882">Step 5</p> 	<ul data-bbox="824 850 1256 913" style="list-style-type: none"> • Remove south wall of existing tunnel • Excavate below the south wall
<p data-bbox="451 1327 532 1358">Step 6</p> 	<ul data-bbox="824 1327 1354 1390" style="list-style-type: none"> • Install track shoring as required to protect the integrity of the existing track bed ballast

Table 3-3 (Continued)
Alternative 4 Construction Phasing

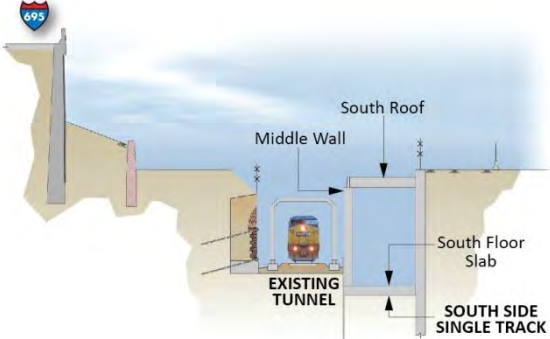
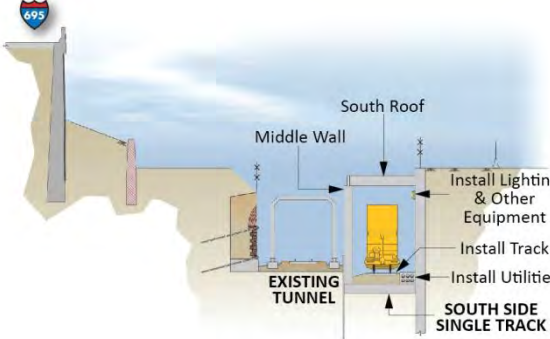
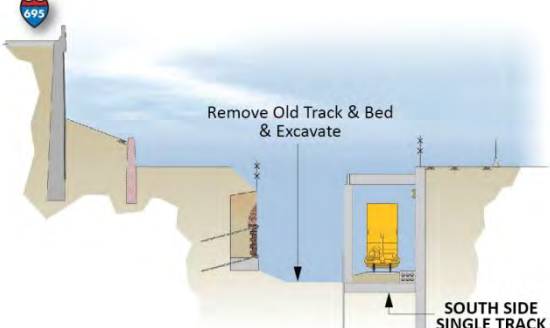
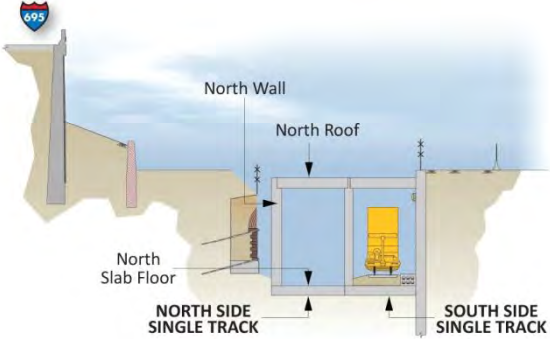

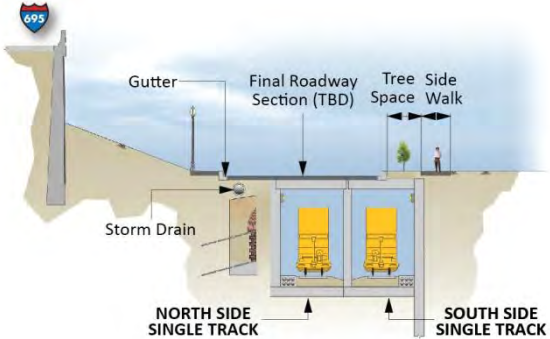
Step	Major Activities
<p data-bbox="451 373 529 407">Step 7</p> 	<ul data-bbox="824 380 1390 470" style="list-style-type: none"> • Construct south side tunnel floor • Construct middle wall and roof for the south side single-track tunnel
<p data-bbox="451 852 529 886">Step 8</p> 	<ul data-bbox="824 858 1430 1146" style="list-style-type: none"> • Install track bed ballast, tracks and other train operations signals and communication equipment for the south side tunnel • Install utilities in the south side tunnel • Install track cut-over from existing tunnel to south side at each end of the tunnel • Begin to operate trains through the south side tunnel, and remove all train operations from existing tunnel
<p data-bbox="451 1333 529 1367">Step 9</p> 	<ul data-bbox="824 1339 1430 1430" style="list-style-type: none"> • Remove old rails and track bed ballast • Excavate down to a depth matching the depth of the new south side single railroad track tunnel

Table 3-3 (Continued)
Alternative 4 Construction Phasing

Step	Major Activities
<p data-bbox="446 373 539 405">Step 10</p>  <p>The diagram shows a cross-section of the tunnel construction site. On the left, a retaining wall for Virginia Avenue SE is shown with a '695' shield. The tunnel structure is partially completed. Labels include 'North Wall', 'North Roof', and 'North Slab Floor'. Below the tunnel, two tracks are labeled 'NORTH SIDE SINGLE TRACK' and 'SOUTH SIDE SINGLE TRACK'. A yellow train is visible in the south side tunnel.</p>	<ul data-bbox="824 380 1425 470" style="list-style-type: none"> • Construct north side tunnel floor • Construct north side wall and roof for the north side single-track tunnel
<p data-bbox="446 852 539 884">Step 11</p>  <p>The diagram shows the tunnel structure from Step 10 with additional components. Labels include 'Install Lighting & Other Equipment', 'Install Track', and 'Install Utilities'. A 'Middle Wall' is shown between the two tracks. The tracks are now labeled 'NORTH SIDE SINGLE TRACK' and 'SOUTH SIDE SINGLE TRACK'. Two yellow trains are shown in both tunnels.</p>	<ul data-bbox="824 858 1433 1083" style="list-style-type: none"> • Install track bed ballast, tracks and other train operational signals and communication equipment for the north side tunnel • Complete utility installation in the rebuilt tunnel • Provide track connections for the north side tunnel at both ends of the tunnel portal • Begin two-way train operations utilizing both tunnels
<p data-bbox="446 1331 539 1362">Step 12</p>  <p>The diagram shows the final roadway surface restoration. Labels include 'Gutter', 'Final Roadway Section (TBD)', 'Tree Side Space Walk', and 'Storm Drain'. The tunnel structure is now fully integrated into the roadway. The tracks are labeled 'NORTH SIDE SINGLE TRACK' and 'SOUTH SIDE SINGLE TRACK'. A yellow train is visible in the south side tunnel.</p>	<ul data-bbox="824 1337 1411 1696" style="list-style-type: none"> • Backfill on top of both tunnels' roof • Remove temporary decks over the both tunnels • Remove embankment retaining wall and restore slope on the north side of Virginia Avenue SE • Install storm drains • Complete roadway surface restoration (street paving, sidewalks, lighting, striping etc.) and landscaping Continue construction of storm drains, curbs and gutters • Remove all remaining temporary barriers • Open Virginia Avenue SE to traffic

of the construction period. The phasing of train operations within the west segment is shown in Table 3-2. Plan views of the west end and other segments in the construction area are provided in Appendices C and M.

Construction of the Project will be accomplished in segments, with some activities being potentially more noticeable than others. Although construction will proceed in phases or segments, the LOD, as described in Section 3.5.1, will remain secured throughout most of construction.

3.5.3 Access and Haul Routes

In addition to the LOD, construction area access points for construction vehicles and designated haul routes were identified and are shown in Figure 3-6. The access points apply to all three Build Alternatives. The haul routes correspond to designated construction area access points at the following locations that match the numbered spots shown in Figure 3-6:

1. South Capitol Street from the Jersey Rail Yard
2. I Street SE from the Jersey Rail Yard
3. 1st Street SE and H Street SE
4. 2nd Street SE at Virginia Avenue SE
5. 3rd Street at Virginia Avenue SE
6. 4th Street at Virginia Avenue SE
7. I Street SE at Virginia Avenue SE
8. 5th and 6th Street SE at Virginia Avenue SE
9. 7th Street SE at Virginia Avenue SE
10. 8th Street SE at Virginia Avenue SE
11. 9th Street SE at Virginia Avenue SE
12. L Street SE between 10th and 11th Streets SE
13. L Street SE and 11th Street SE
14. M Street SE adjacent to the CSX rail right-of-way

The haul trucks will enter or exit the construction area from I-395, South Capitol Street and the 11th Street Bridge (I-695). The latter two roadways provide connections to I-295. I-395 connections will be made through South Capitol Street and I and M Streets SE, in addition to I-695 ramps at 3rd and 6th Streets SE. South Capitol Street connections will be made through I and M Streets SE. 11th Street Bridge connections will be made through M Street SE.

At any given day, haul routes noted on Figure 3-6 could be modified due to a number of reasons, such as road closures and vehicle accidents. Any permanent changes to these designated haul routes will be coordinated with DDOT.

3.5.4 Maintenance of Traffic and Property Access

As described in Section 3.5.1, the Project's construction LOD will include Virginia Avenue SE from 2nd to 11th Streets SE. Within these limits, Virginia Avenue SE will be closed to traffic throughout most of the construction duration. In order to maintain the same level of

Figure 3-6
Construction Haul Routes and Access Points



transportation connectivity during construction, (including ensuring that every property with street access maintains alternative access), a maintenance of traffic (MOT) plan was developed. This section contains a summary of the MOT. Certain properties currently have direct driveway access from Virginia Avenue SE within the LOD. Special provisions will be made during construction to keep access open on these properties for owners, users, and fire and emergency response vehicles.

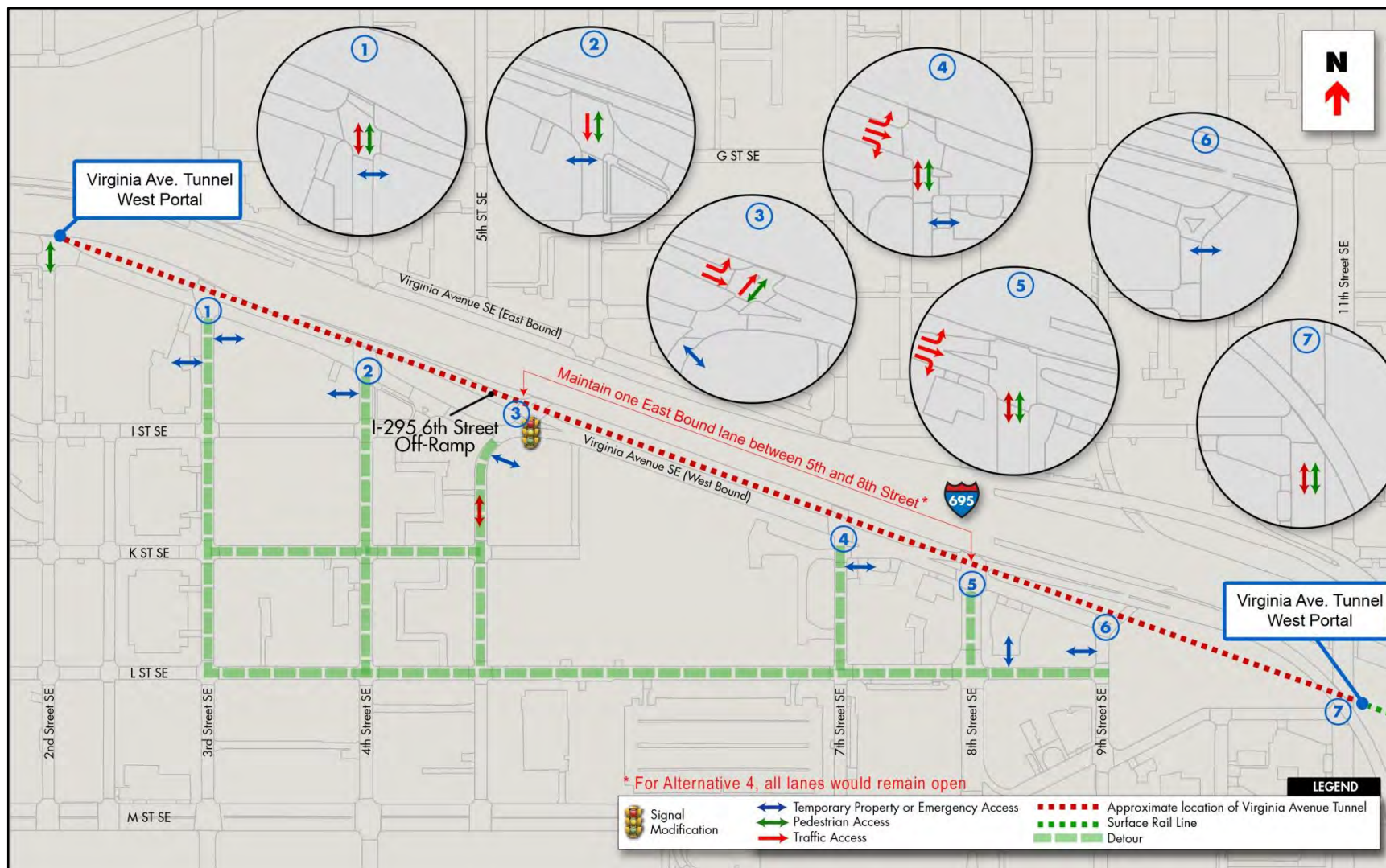
The MOT plan took into account other construction activities located in the general vicinity of the Project that are projected to overlap with the Project's construction, and will be re-evaluated during final design to determine the status of these and other construction projects in the general vicinity of the LOD.

Under the Preferred Alternative or Alternative 2, a two-phased MOT will be implemented because portion of construction dedicated to the building of the temporary runaround track/trench (Alternative 2) or the south side single-track tunnel (Preferred Alternative) does not require closure of all of Virginia Avenue SE. Alternative 4's MOT would have the same phasing, but timed differently than the Preferred Alternative or Alternative 2. Additional detail about Alternative 4's MOT is provided at the end of this section.

Under MOT Phase 1, a single eastbound lane on Virginia Avenue SE (northernmost lane) could be maintained between the I-695 off-ramp at 6th Street SE and the 8th Street SE intersections. Keeping this lane open will allow traffic exiting I-695 to make left turns at 7th and 8th Streets SE from the eastbound Virginia Avenue SE, the same movements currently allowed. For I-695 exiting traffic wishing to proceed to the south of Virginia Avenue SE, they would turn left at 6th Street SE, left on westbound Virginia Avenue SE (north side of I-695) and left on 4th Street SE. The other lanes and pedestrian facilities on Virginia Avenue SE within these limits will be closed. In addition, Virginia Avenue SE from 2nd to 5th Streets SE and from 8th to 9th Streets SE will be closed with traffic diverted to the parallel K and L Streets SE, and temporary decks over the temporary runaround trench (Alternative 2) or south side tunnel (Preferred Alternative) will be provided along all cross streets from 2nd to 8th Streets SE and 11th Streets SE (the deck at 2nd Street SE is only for pedestrians and cyclists). These and other elements of the MOT Phase 1 plan, including how properties adjacent to Virginia Avenue SE within the project limits will maintain access to the street grid, are shown in Figure 3-7.

MOT Phase 2 for the Preferred Alternative or Alternative 2 will start when work on either the two-lane rebuilt tunnel (Alternative 2) or the north side tunnel (Preferred Alternative) begins, which will require closure of all of Virginia Avenue SE between 6th and 8th Streets SE. In order to maintain access for traffic exiting I-695 at the 6th Street off-ramp to the surrounding community, Virginia Avenue SE, on the north side of I-695, will be converted from one-way westbound to two-way operations between 6th and 8th Street SE. Between 6th and 7th Streets SE, one westbound lane and two eastbound lanes will be provided throughout Phase 2. Between 7th and 8th Streets SE, one lane each direction will be provided throughout Phase 2.

Figure 3-7
Maintenance of Traffic Plan, Phase 1



Traffic from the freeway at 6th Street SE will be diverted to the reconfigured Virginia Avenue SE on the north side of I-695. From this location, traffic could proceed into three different directions (currently two directions are available): westbound, northbound or eastbound. For traffic exiting I-695 wishing to proceed to the south of Virginia Avenue SE, they would turn left at 6th Street SE. At the intersection with Virginia Avenue SE (north side of I-695), traffic could either turn left (as noted above under Phase 1) or turn right and make right turns at either 7th or 8th Street SE. The temporary decks at 2nd to 8th Streets SE and 11th Street SE will be extended over the expanded construction area. These and other elements of the MOT Phase 2 plan are shown in Figure 3-8.

As noted above, the MOT for Alternative 4 would be phased. The first several months of construction would be concentrated in the area between 2nd and 5th/6th Streets SE. The I-695 6th Street off-ramp and the section of Virginia Avenue SE between 6th and 9th Streets SE would be unaffected. The MOT for Alternative 4 during these initial months would be similar to the Phase 1 MOT for the Preferred Alternative or Alternative 2 except that all the lanes would be available between 6th and 9th Streets SE. When construction moves east of the 5th/6th Street intersection, the detour for traffic exiting I-695 would start from the Phase 2 MOT plan noted above throughout the rest of construction. Similar to the Preferred Alternative or Alternative 2, temporary decks over the would be provided along all cross streets from 2nd to 8th Streets SE and 11th Streets SE, and all properties adjacent to Virginia Avenue SE within the project limits would maintain access to the street grid through various measures as noted on Figures 3-7 and 3-8.

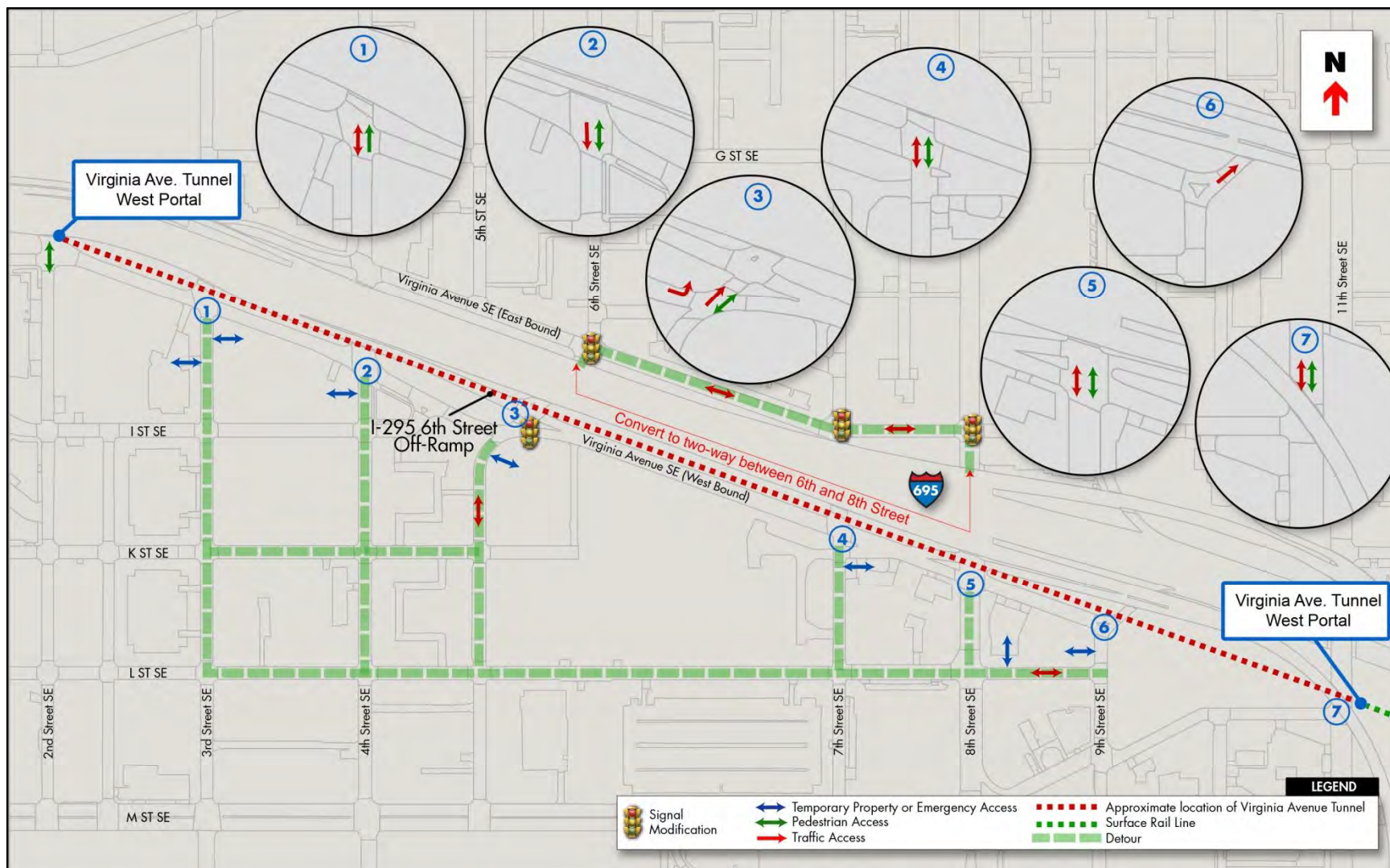
Temporary wayfinding signs will be included among the detours to assist motorists, pedestrians and cyclists in navigating finding their destinations, which may include important gathering places in the community, such as Barracks Row, Eastern Market, the Washington Navy Yard and Garfield Park. The project sponsor will work with the local business and civic groups to determine the important gathering places that should be identified by temporary signage.

3.5.5 Safety and Security

The construction area will be in proximity to residences, many of which have families with children. Therefore, to be consistent with Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, the construction area for the Project will be secured to prevent unintended intrusion, including the areas used for temporary train operations. The general public will not be allowed to access construction areas or areas used for train operations, such as the runaround track/trench under Alternative 2. Safety and security measures will be implemented during construction, such as:

- Secure fencing at least eight feet high along the perimeter of the construction area, including around the areas with trains running in a protected trench, and at cross streets where vehicles, pedestrians and cyclists will be allowed to cross the construction zone (see photographs of sample fencing and barriers around construction sites);
- Suitable lighting for the construction area;
- Regular patrols by railroad police officers assigned to the Project;

Figure 3-8
Maintenance of Traffic Plan, Phase 2



- Access for first response and emergency vehicles to all property fronting the LOD (see Section 3.5.4); and
- Rodent control program initiated prior to the start of construction and maintained during entire duration of construction.

Tunnel safety and stability will be monitored through a comprehensive instrumentation program with devices placed both inside and outside the tunnel as well as on adjacent structures that may be susceptible to vibration damage. In addition, a full-time safety officer will be present at all times when construction activities are taking place to oversee the safety protocols and measures.

The Federal Railroad Administration (FRA) regulates safety procedures of freight trains owned by Class I railroad companies, such as CSX, operating within construction sites. In accordance with FRA safety regulations, the railroad company is required to follow specific protocols to ensure the safety of trains moving through construction sites in order to protect workers involved in construction as well as the general public.

As required by the FRA regulations, all persons (CSX employees and its contractors) working on or near railroad tracks are required to be formally trained in "Roadway Worker Protection Training" (RWT). On an annual basis, all persons must complete the course and pass a written test to work on or near railroad tracks. In addition, all workers will be required to take security training, and those working for contractors must undergo a criminal background check every two years under the requirements of the e-RAILSAFE System program.

For the Project, a CSX employee will be assigned as the "railroad employee-in-charge" and will have all the requisite training, testing and qualifications to properly perform this job. The railroad employee-in-charge will control all train movements through the work limits whenever construction activities are being performed. The work limits encompass the construction site and both approaches to the current/new tunnel.

The locomotive operator of trains approaching the work limits will be required to receive permission from the "railroad employee-in-charge" before entering or making any movement within the work limits. Before granting this permission, the

Stockade Fence Mounted on Traffic Barrier



employee-in-charge must check that all workers and equipment are clear from the railroad tracks at a predetermined distance of safety, and confirm that the tracks, tunnel and all supporting structures are in a condition to allow the safe passage of trains.

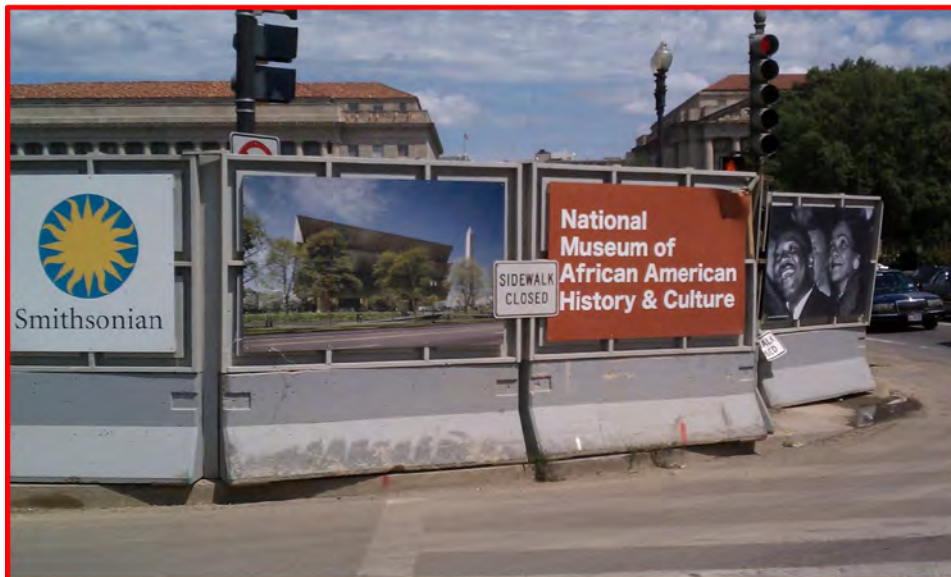
Chain Link Fence Mounted on Traffic Barrier



Typical Stockade Fencing



Banner-Mounted Fencing



All CSX train crews operating on a route that includes the Project work limits will receive a computer generated message prior to departure from their originating terminal alerting them that they must receive permission from the railroad employee-in-charge for the Project before traversing through the work limits. In addition, signs will be erected no less than two miles from the work limits to provide advance warning to train crews that they are required to stop before entering the work limits unless advised by the railroad employee-in-charge that the work limits are safe for train passage. Conditional stop signs will be placed at each end of the work limits as a reminder to train crews that they must stop unless given permission to enter the work limits by the railroad employee-in-charge.

CSX radios at frequencies dedicated to railroad use will be used for all communications between train crews and the railroad employee-in-charge. All voice communication is repeated to ensure positive identification and an understanding of the specifics with each permission granted. If for some reason the railroad employee-in-charge cannot respond to a train requesting permission to enter the work limits, the train will be required to stop and cannot enter the work limits until such time the employee-in-charge is contacted. All permissions to traverse the work area are recorded and documented.

3.5.6 Duration

For the Preferred Alternative and Alternatives 2 and 4, construction work hours would be the same in accordance with District regulations. Standard construction work hours are between 7 AM and 7 PM, Monday to Friday. Work on Saturday, Sunday or at night would require a permit from the District. The District government would apply its customary criteria, which would

weigh community benefit versus community impacts, in deciding whether to issue such a permit. Based on the standard work hours, estimated construction durations for each alternative were developed and presented on Table 3-4. This table also includes the estimated durations of the MOT phases described in Section 3.5.4.

Table 3-4
Estimated Construction Duration by Alternative

Alternative	MOT Phase		Total Estimated Duration
	Phase 1	Phase 2	
Alternative 1	Not Applicable	Not Applicable	Not Applicable
Alternative 2	10-16 months	20-26 months	30-42 months
Preferred Alternative	16-22 months	14-20 months	30-42 months
Alternative 4	32-38 months	22-28 months	54-66 months

The estimated construction duration for each Build Alternative was based on certain factors including, among others, the proposed sequence of work, access restrictions, allowable work hours, known utility impacts, and available information about comparable construction projects.

The main reason that Alternative 4 is projected to take substantially longer to complete is because construction has to be conducted in a single, linear segment, starting at one end of the tunnel and continuing to the other end so that freight operations and rebuilding activities could be conducted at the same time within the same trench. The other two Build Alternatives are not restricted in such a manner. For example, the Preferred Alternative or Alternative 2 allows for the same or similar construction activities (e.g., excavation) to occur simultaneously along different areas of the LOD, an option not available to Alternative 4. In addition, construction activities are anticipated to be slowed along the entire length of the Alternative 4's construction zone because of the close proximity between active rail operations and construction work areas. Also, additional safety regulations and safe work zone practices would need to be implemented for Alternative 4. These regulations and practices make the construction schedule for Alternative 4 highly dependent on railroad operational needs and customer service requirements.

3.5.7 Cost

As noted on Table 3-5, the total costs for the Preferred Alternative and Alternative 2 would be similar (within approximately \$7 million). At approximately \$208 million, the total cost for Alternative 4, however, would be approximately 20 to 24 percent higher than Alternative 2 and the Preferred Alternative, respectively. The primary reasons for the higher cost for Alternative 4 is the longer construction duration and the extra safety precautions to accommodate construction and freight rail operations in the same trench.

Table 3-5
Estimated Cost Breakdowns by Alternative

Alternative	Estimated Cost (or Millions)*
Alternative 1	Not Applicable
Alternative 2	\$175
Preferred Alternative	\$168
Alternative 4	\$208

Notes: * Includes site preparation, demolition, construction, track work, MOT, environmental measures, landscaping, roadway restorations, professional services and indirect costs.

3.6 Proposed Virginia Avenue SE Streetscape

Upon completion of tunnel construction, the street and other affected areas, such as Virginia Avenue Park and the Marine Corps Recreation Facility, will be restored. The rebuilding of Virginia Avenue Tunnel provides the opportunity to construct a new streetscape for Virginia Avenue SE and be incorporated as part of the Preferred Alternative or the other two Build Alternatives. In the rebuilding the Virginia Avenue SE streetscape, certain improvements will be made. A plan view of the proposed changes to the Virginia Avenue SE streetscape is provided in Appendix M. Figures 3-9 and 3-9A through 9E show proposed changes to the streetscape of Virginia Avenue SE by block. Descriptions of these changes are provided below.

Between 2nd and 4th Streets, the existing two-way traffic lanes will be maintained as well as the existing on-street parking on both sides of the road (see Figure 3-9A). The only substantive changes will be the conversion of the south-side pedestrian way into a 10-foot wide shared use path, and the provision of a north-side pedestrian way.

Between 4th and 5th/6th Streets, the existing two one-way (eastbound) traffic lanes and south-side pedestrian way will be maintained, but the curved alignment will be straightened to be more consistent with the L'Enfant Plan of Washington D.C. (see Figure 3-9B). The south-side on-street parking will be kept, but the north-side on-street parking will be eliminated. A south-side bike path will be provided between the pedestrian way and the street. Due to the elimination of the north-side on-street parking and the provision of a bike path, the curb to curb space will be narrower within the 400 block than under existing conditions. In addition, I Street SE, which currently curves north to intersect with Virginia Avenue SE, will be converted into a two-way cul-de-sac within the 400 block, with its only function to provide access to the Capitol Quarter driveway. The area reclaimed from roadway paving between Virginia Avenue SE and the Capitol Quarter residences within the 400 block will be converted to vegetative and/or grassy landscaping. A bike path will be provided connecting the I Street cul-de-sac with the new Virginia Avenue SE bike path.

Figure 3-9
Location Key for Proposed Roadway Typical Sections

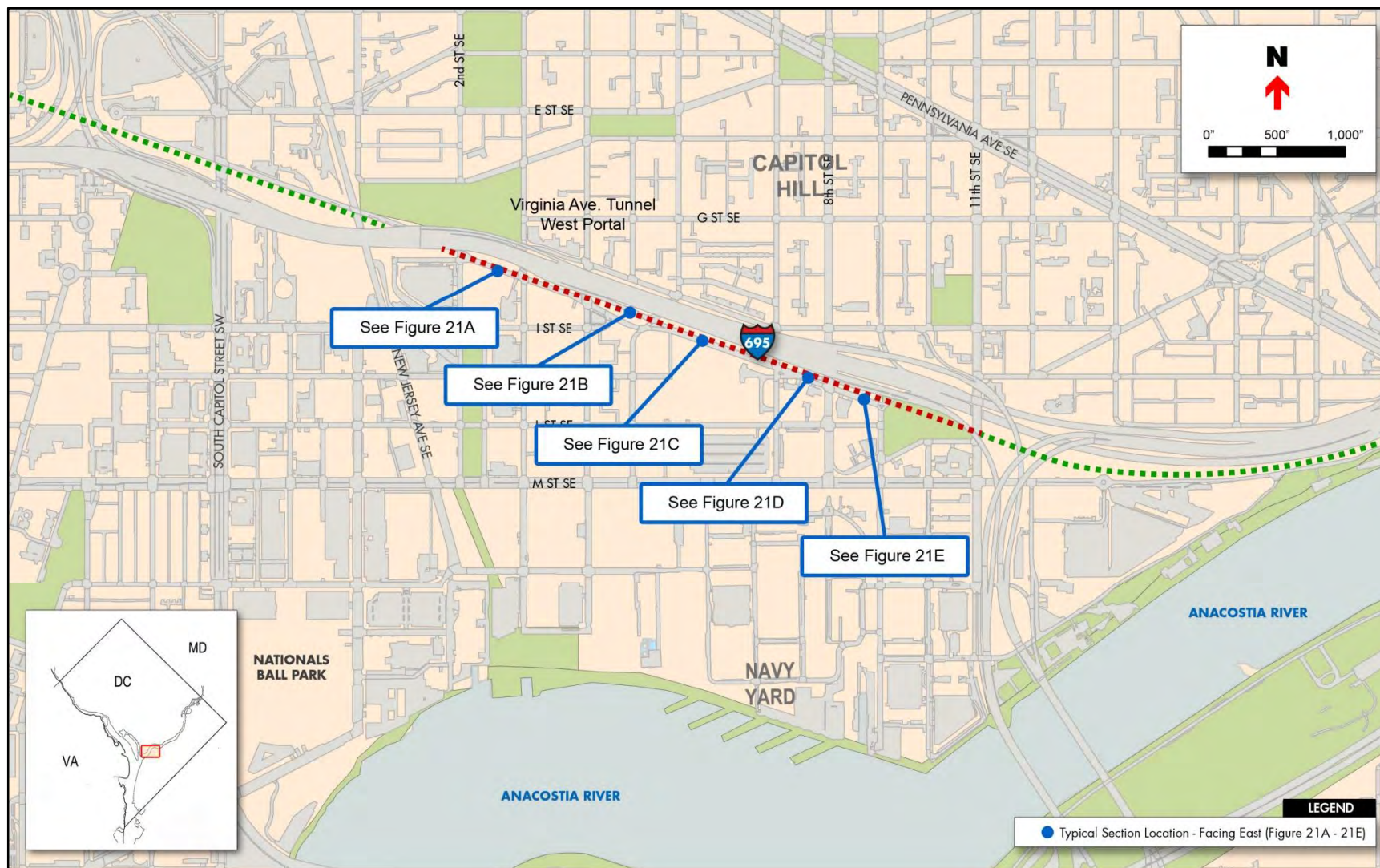


Figure 3-9A
Proposed Typical Section between 2nd and 4th Streets

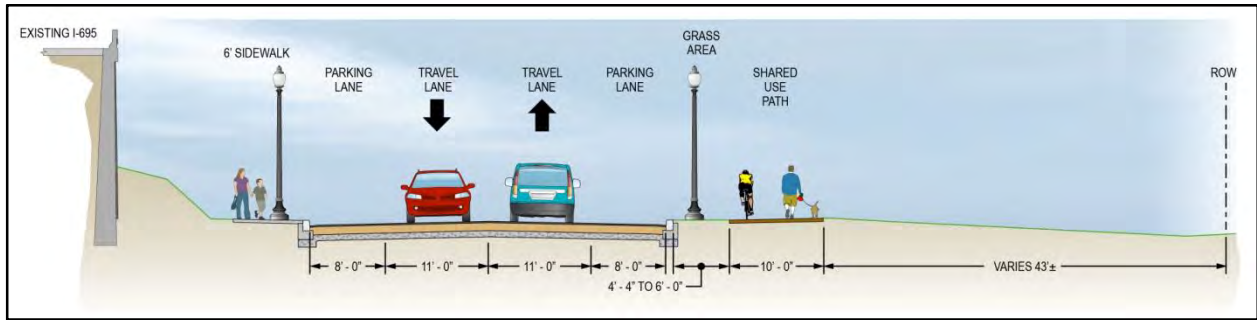


Figure 3-9B
Proposed Typical Section between 4th and 5th/6th Streets

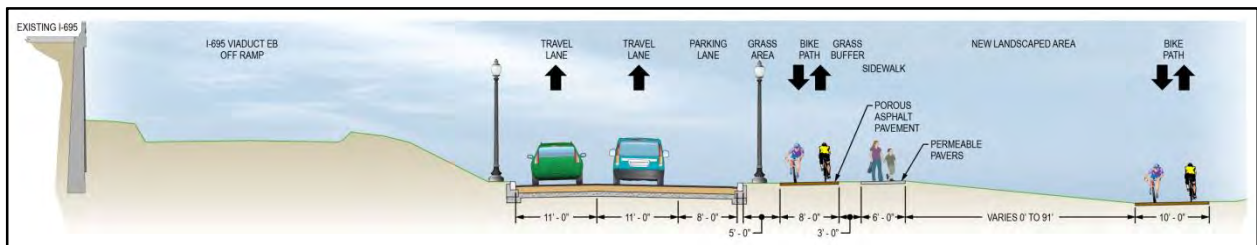


Figure 3-9C
Proposed Typical Section between 5th/6th and 7th Streets

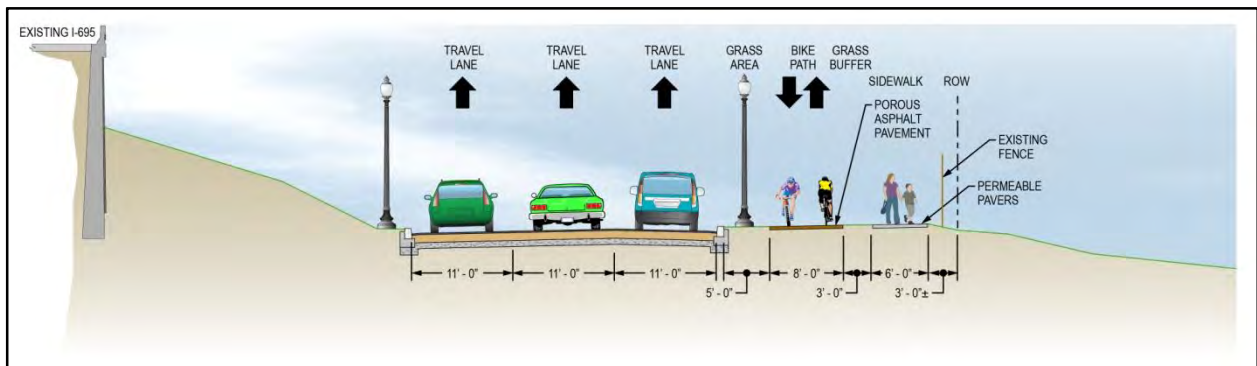


Figure 3-9D
Proposed Typical Section between 7th and 8th Streets

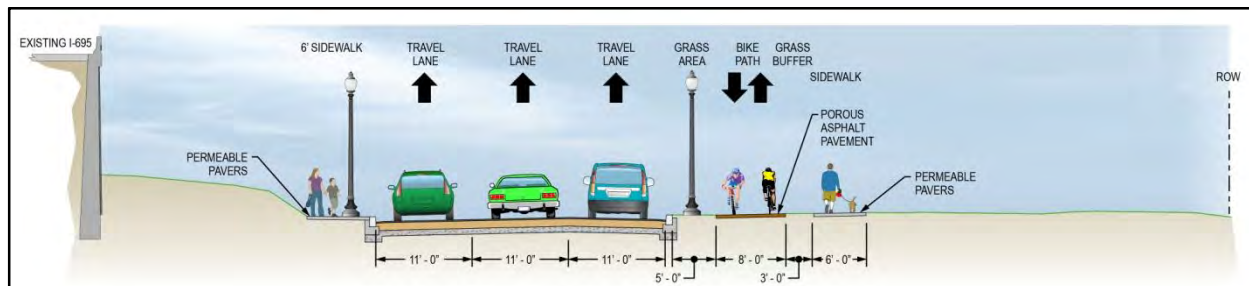
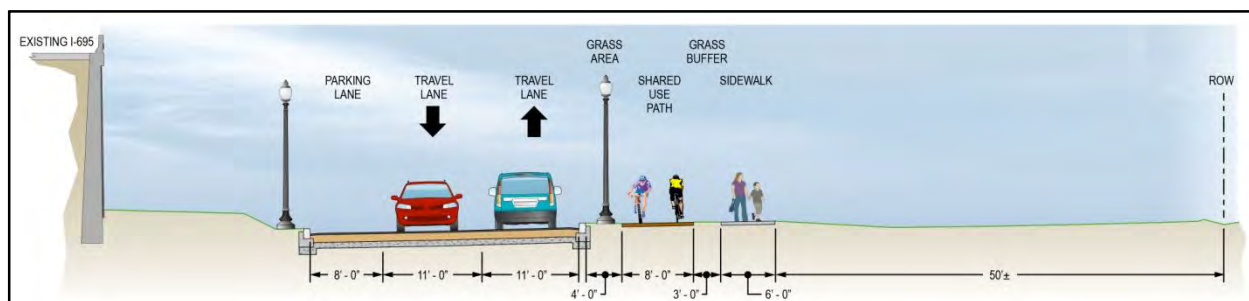


Figure 3-9E
Proposed Typical Section between 8th and 9th Streets



Between 5th/6th and 7th Streets, the number of one-way (eastbound) traffic lanes will be changed from four to three (see Figure 3-9C). Currently, no on-street parking is provided within this block and this will not change under the proposed new streetscape. The existing south-side concrete pedestrian way will remain, but converted to permeable pavers. Between this pedestrian way and the street, a bike path will be provided.

The section between 7th and 8th Streets will be the same as the section between 5th/6th and 7th Streets, except that a pedestrian way will be provided on the north side of the street (see Figure 3-9).

The two lanes between 8th and 9th Streets will be converted from one-way (eastbound) to two-way traffic (see Figure 3-9E). The existing south-side permeable paver pedestrian way will remain. As with other proposed sections along Virginia Avenue SE, a bike path will be provided on the south side of the street, which will make the curb to curb space narrower through the elimination of the south-side on-street parking. The north-side on-street parking will remain.

3.7 Alternative Concepts Considered But Rejected

NEPA requires federal agencies to “rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated (40 CFR §1502.14(a))”. According to the Council on Environmental Quality (CEQ) guidance, reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant (CEQ, NEPA’s Forty Most Asked Questions). At the same time, when considering a proposal from a private applicant for federal approval, NEPA’s “rule of reason” directs federal agencies to look at the general goals of a project in developing an appropriate range of alternatives. Therefore, unlike a proposed public infrastructure project, such as a new public road or bridge, that needs to compete with other projects for public funds, this Project represents CSX’s judgment of the action it needs to take to satisfy its common carrier obligation as one of the nation’s leading freight rail companies.

This section introduces the 12 preliminary concepts that were considered as candidates for the Project, and describes how the concepts were evaluated to determine which would be developed into alternatives carried forward for a more detailed analysis through the EIS process. The evaluation was based on the following eight criteria, which are based on the Purpose and Need for the Project and economic and feasibility factors:

- Criterion 1: The concept, upon completion, will address the deficiencies of the Virginia Avenue Tunnel.
- Criterion 2: The concept, upon completion, will provide the necessary improvements for operating double-stack intermodal containers and have two railroad tracks for the efficient flow of commercial rail freight through the Washington Metropolitan Area.
- Criterion 3: The concept will avoid major impacts to the structures, traffic or access to or from I-695.
- Criterion 4: The concept must allow for the maintenance of traffic across Virginia Avenue and along adjacent streets throughout the duration of construction.
- Criterion 5: The concept will maintain interstate rail commerce without a substantial negative impact to the level of service during construction.
- Criterion 6: The concept will be implemented in a time frame that accommodates the near term anticipated increase in freight traffic.
- Criterion 7: The concept has a comparatively reasonable duration of construction in the vicinity of the existing tunnel.
- Criterion 8: The concept has a comparatively low cost.

3.7.1 Alternative Concepts Overview

In order to develop reasonable alternatives to address the Project’s Purpose and Need, a preliminary assessment of the engineering and physical constraints was conducted along the alignment of the existing tunnel. In addition, DDOT and FHWA sought input from Federal and District agencies, interested parties and the general public. From these activities, the following 12 preliminary concepts were developed.

- Concept 1 is the no action or no build condition. It automatically is carried through the EIS process and was developed as Alternative 1 described in Section 3.3.
- Concepts 2 through 7 involve the rebuilding or reconfiguration of the Virginia Avenue Tunnel. Among these concepts is Concept 3A, which was developed in response to public comment during analysis of the 11 original preliminary concepts, and increased the total number of concepts considered for the Project to 12.
- Concepts 8 through 11 involve rerouting the main rail line outside of the existing Virginia Avenue SE, but the tunnel would remain to service Washington Metropolitan Area regional customers.

The remainder of this section includes descriptions of each of the concepts that were then evaluated, and resulted in the selection of the four NEPA alternatives retained for further detailed consideration.

After the 12 concepts were screened to produce four candidate alternatives, the additional engineering efforts to further develop the candidate alternatives, as described in this chapter, are not of final design level precision with respect to the description of facility locations (e.g., tunnel alignments and portal locations) within the public space (including subsurface) at or near Virginia Avenue. These final design details would be developed after the NEPA process is concluded, and if a Build Alternative for the Project is approved. For this document, each alternative is described with the precision necessary to identify and address reasonably foreseeable environmental and social impacts. Because all three Build Alternatives described in this Final EIS contemplate that the reconstructed tunnel would only be located within CSX-owned or public property, rather than intruding into or under any private property, no additional detail beyond those already presented here is warranted. As the concepts and Build Alternatives were being developed through a series of public meetings and consultation with agencies, additional engineering was conducted for each of the selected Build Alternatives and minor changes continue to be made to their specific descriptions (e.g., construction phasing and tunnel alignments).

Concepts 2 through 7: Rebuild Virginia Avenue Tunnel

Concepts 2 through 7 involve the rebuilding of the existing Virginia Avenue Tunnel generally within the existing tunnel envelope but with sufficient vertical clearance to allow for double-stacking of intermodal containers. Although not all freight trains are double-stacked (only intermodal containers are double-stacked), allowing double-stack intermodal container freight operations during construction will not present any additional impacts as compared to a situation in which only single-stacking were allowed. Following construction, freight traffic would operate more efficiently by the use of double-stack intermodal container cars because at least 21 feet of vertical clearance would be provided within the rebuilt tunnel. In addition, all of these rebuild concepts would provide two sets of permanent tracks within the tunnel corridor to improve the fluidity and operations of the railroad. Trains moving in opposite directions would be able to traverse the rebuilt tunnel simultaneously. Under Concepts 2, 3, 4, 6 and 7, the rebuilt Virginia Avenue Tunnel would largely be the same design, two sets of track

within a single tunnel. Concepts 3A and 5, on the other hand, involve the construction of two tunnels, each containing a single set of tracks, and both having the necessary vertical clearance to accommodate double-stack intermodal container freight trains. (Note that Concept 6, which became Alternative 4, was changed to include a partitioned tunnel.)

The rebuild concepts differ in how each would maintain freight operations during construction. Concepts 2, 3 and 4 would provide a temporary detour or “runaround” track in a protected trench. A range of design options are available to maintain a protected trench, such as various forms of safety barriers to isolate the trench from access by passersby and trespassers. These include stockade and chain link fencing, and Jersey barriers. Additional detail about trench safety and security is provided in Section 3.5.5. Concepts 3A and 5 would not require temporary facilities to maintain freight rail operations. The new single railroad track tunnel would be built outside of the existing tunnel alignment and would accommodate train traffic while the second tunnel would be built within the existing tunnel alignment. Concept 6 would maintain freight operations within the existing envelope of the Virginia Avenue Tunnel. Concept 7 would temporarily reroute freight trains outside the District during construction.

Among the rebuild concepts all have approximately the same layout (i.e., they would cover approximately the same surface area during and after construction). On the west end, the temporary runaround or permanent track would connect with the existing track near the New Jersey Avenue overpass. At the east end, the temporary runaround or permanent track would connect with the existing track in the vicinity of 14th Street SE.

Upon completion of the rebuilt Virginia Avenue Tunnel, the surface of Virginia Avenue SE and other disturbed areas would be restored under all rebuild concepts.

During and following construction, Washington Metropolitan Area regional customers would continue to receive freight transportation service through the Virginia Avenue Tunnel under the rebuild concepts. However, Concept 7 would not be able to maintain the same level of freight service for Washington Metropolitan Area regional customers during construction because train operations through the Virginia Avenue corridor would not be available under this concept.

All temporary measures to maintain freight rail operations within the Virginia Avenue SE corridor during construction (Concepts 2 through 6) would allow for the operation of double-stack intermodal container freight trains.

Brief descriptions of Concepts 2 through 7 are provided in Sections 2.2.1.1 to 2.2.1.7.

Concepts 8 through 11: Reroute Concepts

The “reroute” concepts (Concepts 8 through 11) would all involve rerouting mainline freight rail traffic out of the Virginia Avenue Tunnel at its present depth and location in lieu of near-term reconstruction of the tunnel (Concepts 2 through 7). Under Concepts 8 through 11, new mainline freight rail routes would be constructed within or outside of the District of Columbia.

Concepts 8 through 11 would result in projects of considerable magnitude because they would require either digging an approximately nine-mile deep tunnel (Concept 8) or establishing new mainline freight rail lines that would entirely bypass the District of Columbia (Concepts 9, 10 and 11). Concepts 8 through 10 would require a new Potomac River crossing (tunnel or bridge) because the Long Bridge (see Section 1.2) is the only freight rail bridge crossing the Potomac River, between Harpers Ferry, WV and the Chesapeake Bay.

Upon completion of any of the reroute concepts, freight rail trains would continue to use the Virginia Avenue Tunnel to service customers in the Washington, DC area. Because the existing Virginia Avenue Tunnel must remain operational, Concepts 8 through 11 may involve emergency or unplanned repairs of the tunnel at some point in the future, which might require closure of at least part of Virginia Avenue SE in order to make the repairs. In other words, the tunnel's structural deficiency described in Section 2.1.3 would remain, and the Virginia Avenue Tunnel would eventually require major rehabilitation or replacement, possibly at a time when the surrounding neighborhood is more fully developed and with increased traffic as a result.

Descriptions of Concept 8 through 11 are provided in Sections 3.2.1.8 to 3.2.1.11.

3.7.1.1 Concept 2: Rebuild, Temporary South Side Runaround

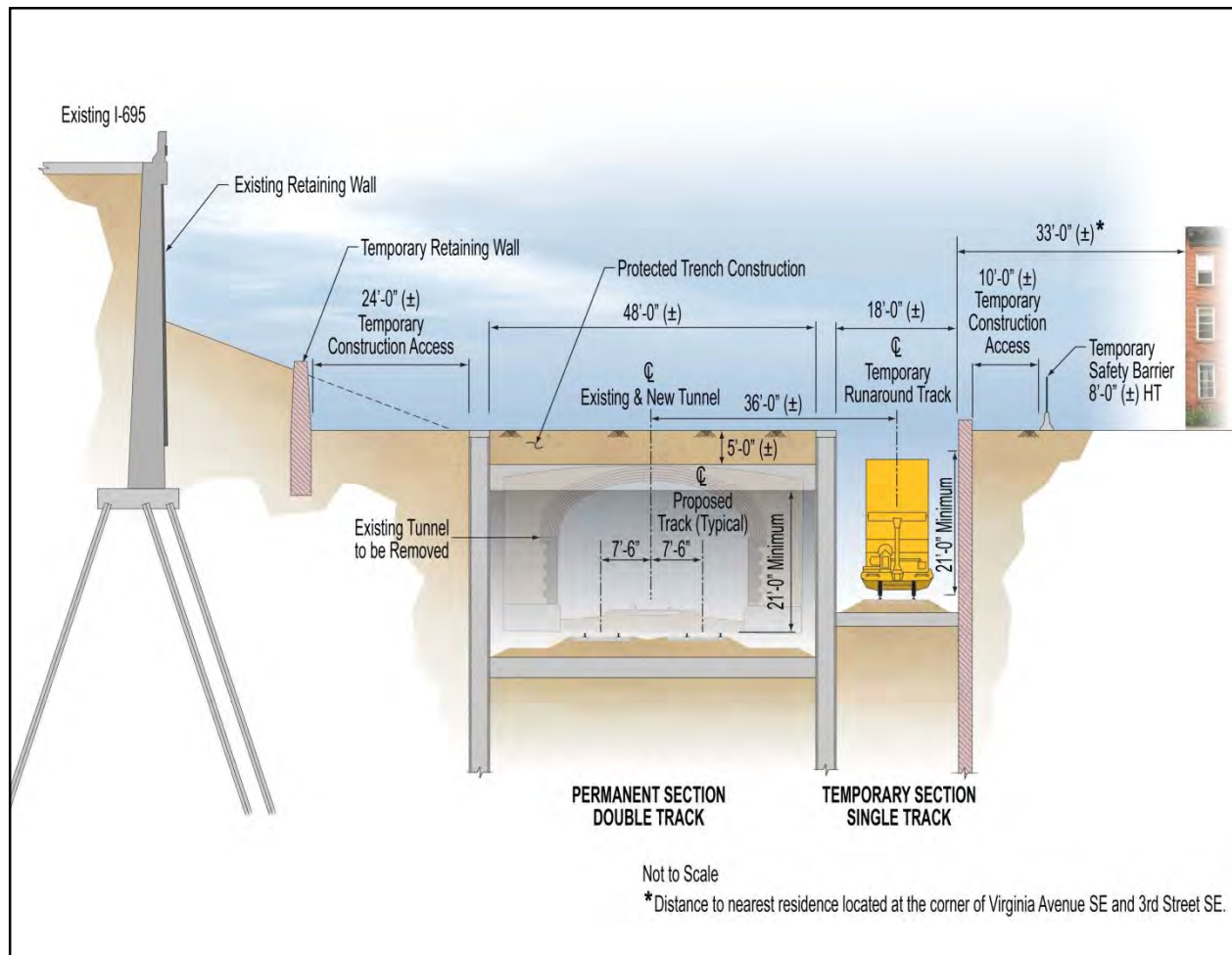
The Project under Concept 2 would reconstruct the existing single-track Virginia Avenue Tunnel into a new double track/double stack tunnel within the approximate existing horizontal envelope or alignment of Virginia Avenue Tunnel (see Figure 3-10). To maintain freight traffic during construction of the new tunnel, Concept 2 would provide a temporary runaround track placed inside a protected trench constructed immediately south of the existing tunnel alignment, as shown in Figure 3-10.

Placing the temporary runaround track/trench for Concept 2 on the south side of the existing tunnel would avoid the long-term closure of the Interstate 695 (I-695) off- and on-ramps located at 6th and 8th Streets SE (I-695 ramps), respectively, during construction (see photograph of I-695 Off-Ramp).

Intermittent short-term closures of the I-695 ramps may be required for maintenance of traffic shifts. Upon completion of the rebuilt Virginia Avenue Tunnel, the runaround track would be removed and the protected trench would be backfilled.

I-695 Off-Ramp at 6th Street SE



Figure 3-10
Concept 2 Typical Section

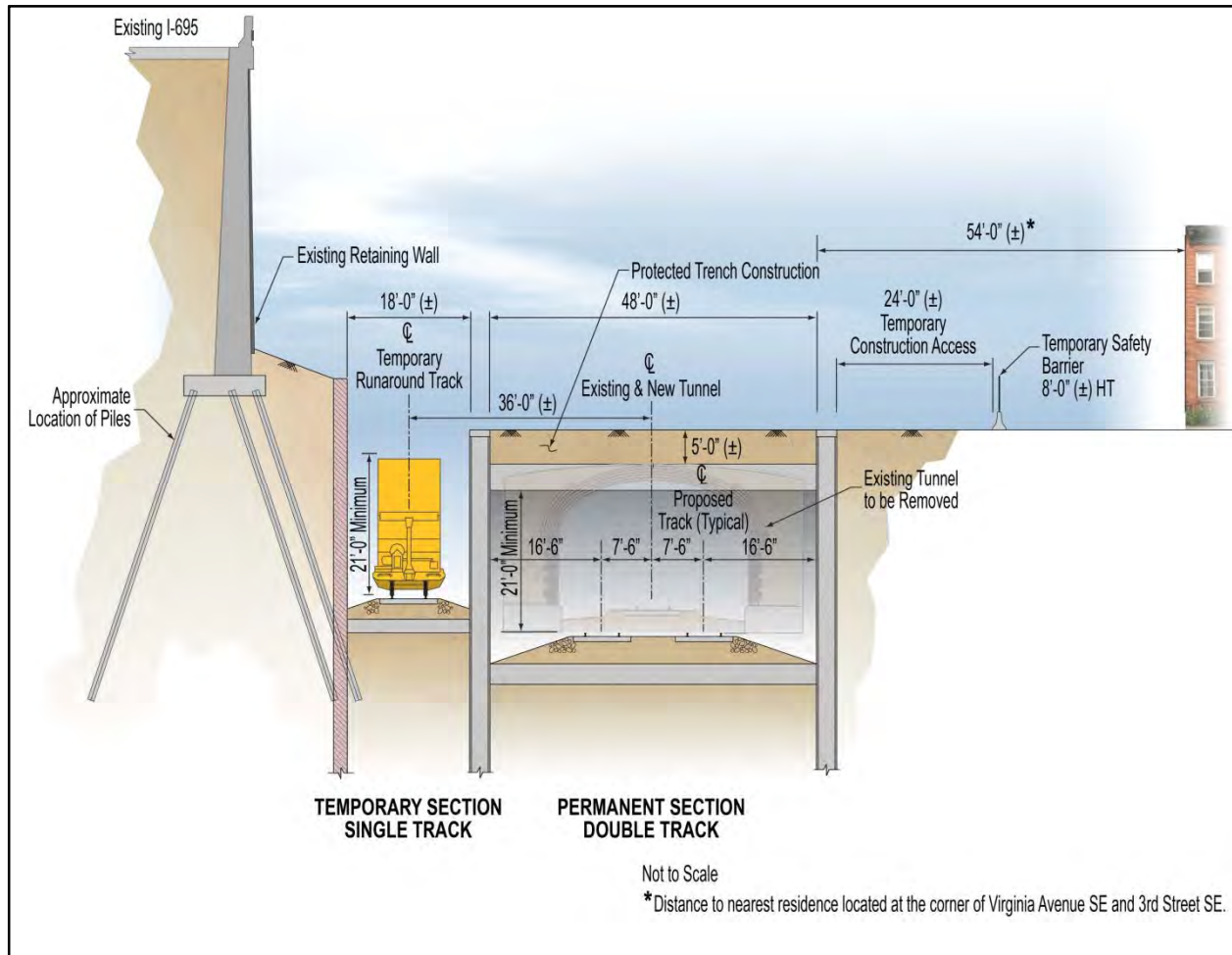
3.7.1.2 Concept 3: Rebuild, Temporary North Side Runaround

Concept 3 is similar to Concept 2, except that instead of placing the temporary runaround track in a protected trench on the south side of the existing tunnel alignment, it would be placed in a protected trench immediately north of the existing tunnel alignment, or located between the existing tunnel and I-695 (see Figure 3-11).

Aligning the temporary runaround track on the north side of the existing tunnel would place temporary freight operations as far as feasibly possible from land uses on the south side of Virginia Avenue, but still within the confines of the public right-of-way. Due to the temporary runaround track's proximity to I-695, long-term (throughout most of the construction duration) closures of the I-695 ramps would be required. It may be possible to stagger these closures so only one of the ramps is closed at a time, but long-term closure and disruptions would still be required. Similar to Concept 2, the runaround track would be removed and the protected

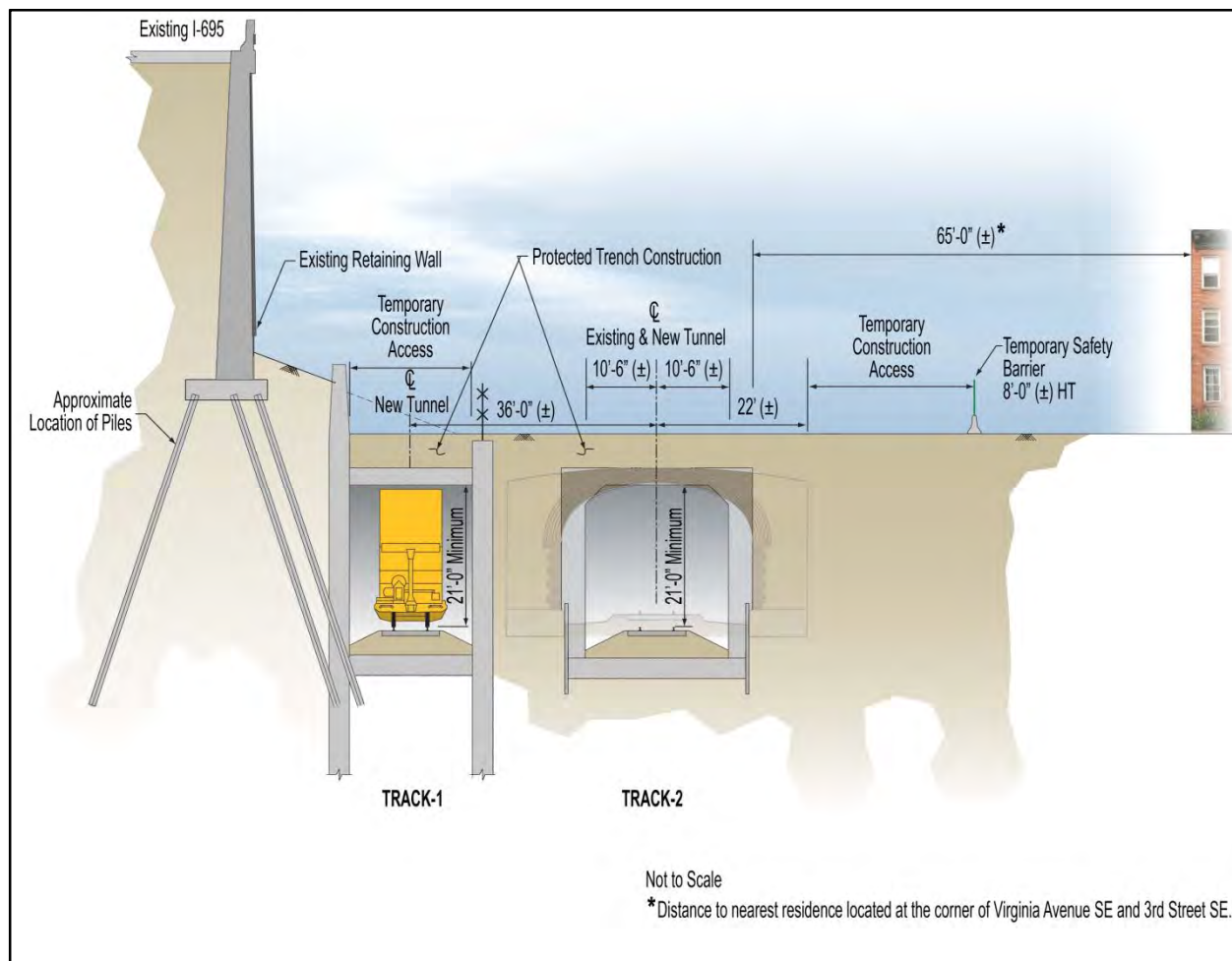
trench would be backfilled upon completion of the rebuilt Virginia Avenue Tunnel. The I-695 ramps would also be reopened.

Figure 3-11
Concept 3 Typical Section



3.7.1.3 Concept 3A: Rebuild, Permanent Two Tunnels (New Tunnel on North Side of Existing Virginia Avenue Tunnel)

Concept 3A was developed during discussions with the public during community meetings where the original 11 project concepts were presented. This concept combines the elements of Concepts 3 and 5. Like Concept 5, Concept 3A would result in the construction of two single-track/double-stack tunnels (see Figure 3-12). The new, second single-track/double-stack tunnel would be set along the same alignment as the temporary northern runaround track/trench as presented under Concept 3.

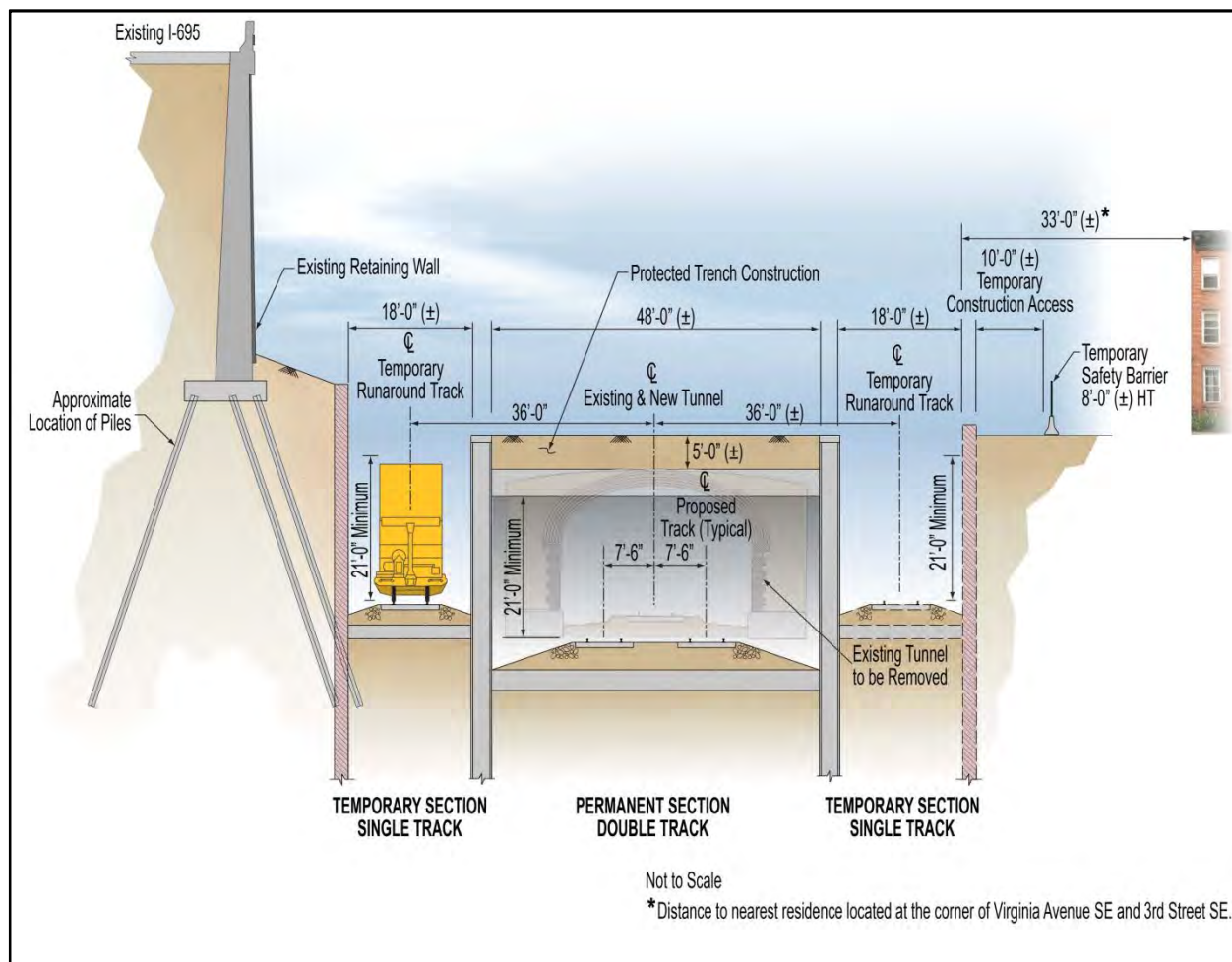
Figure 3-12
Concept 3A Typical Section

Similar to Concept 5, this second tunnel would be constructed first. On the west end, the new permanent track would connect with the existing track near the New Jersey Avenue overpass. Both permanent tunnels would be constructed using a cut-and-cover method. Due to the proximity of the new tunnel to I-695, long-term (throughout most of the construction duration) closures of the I-695-ramps would be required. It may be possible to stagger these closures so only one of the ramps is closed at a time, but long-term closure and disruptions would still be required. Once completed, the new permanent single-track/double-stack tunnel would serve as a route for two-way train traffic while the existing tunnel is reconstructed and converted into a new single-track/double-stack tunnel. Upon completion of the second single-track/double-stack Virginia Avenue Tunnel, train traffic would be split with one-way traffic in each tunnel.

3.7.1.4 Concept 4: Rebuild, Temporary Combination Runaround

Concept 4 is also similar to the Concepts 2 and 3 in that the rebuilt Virginia Avenue Tunnel would be reconstructed generally within the existing horizontal envelope of the existing tunnel. Instead of placing the temporary runaround track/protected trench on the north or south side of the existing tunnel, it would have a serpentine alignment, crossing the existing tunnel at two locations (see Figure 3-13).

Figure 3-13
Concept 4 Typical Section



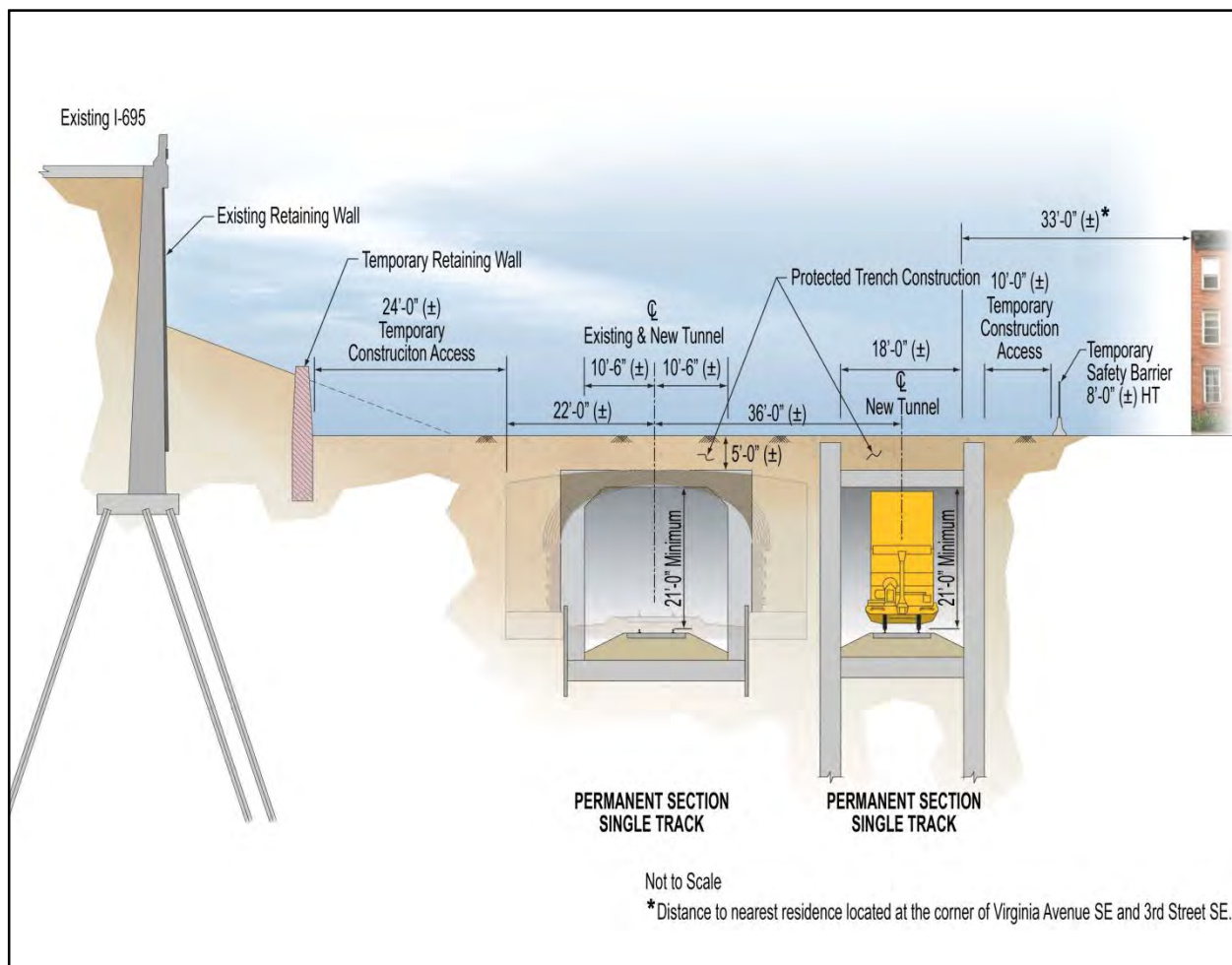
The rationale behind the configuration of the serpentine temporary runaround track under Concept 4 was to explore the possibility of placing temporary freight operations as far as feasibly possible from land uses on the south side of Virginia Avenue, but still within the confines of the public right-of-way, while avoiding the long-term closure of the I-695 ramps on the north side. On the west end, the runaround track would be the same as Concept 2, and

continue on the south side of the existing tunnel between 2nd and 5th Streets SE within a protected trench. At 5th Street SE, the temporary runaround track/trench would transition to the north side of the existing tunnel. At 8th Street SE, the temporary runaround track/trench would transition back to the south side of the existing tunnel. It should be noted that when the runaround track is moved to the north side of the existing tunnel between 2nd and 5th Streets SE, this concept conforms essentially to Concept 3. As is under Concepts 2 and 3, the runaround track would be removed upon completion of the rebuilt Virginia Avenue Tunnel.

3.7.1.5 Concept 5: Rebuild, Permanent Two Tunnels (New Tunnel on South Side of Existing Virginia Avenue Tunnel)

The rebuilt Virginia Avenue Tunnel under Concept 5 would be different than any of the previously described rebuild concepts with the exception of Concept 3A, which was added after the identification of the original 11 concepts. Concept 5 would result in the construction of two single-track/double-stack tunnels (see Figure 3-14).

Figure 3-14
Concept 5 Typical Section



Concept 5 would avoid having to construct temporary facilities to maintain freight operations during construction. One of the single-track/double-stack tunnels would occupy the space generally within the existing tunnel envelope. The other would have an alignment very similar to the alignment of the temporary runaround track/trench under Concept 2, or along the south side of the existing tunnel. The south side single-track/double-stack tunnel would be constructed first. During construction of the south side tunnel, freight traffic would continue to use the existing Virginia Avenue Tunnel. After the new south side tunnel is completed, train traffic would cut over to this new tunnel and the existing, older tunnel would be reconstructed and converted into a new single-track/double-stack tunnel. Both new tunnels would be constructed using a cut-and-cover method. Upon completion of Concept 5, train traffic would be split with traffic in each tunnel.

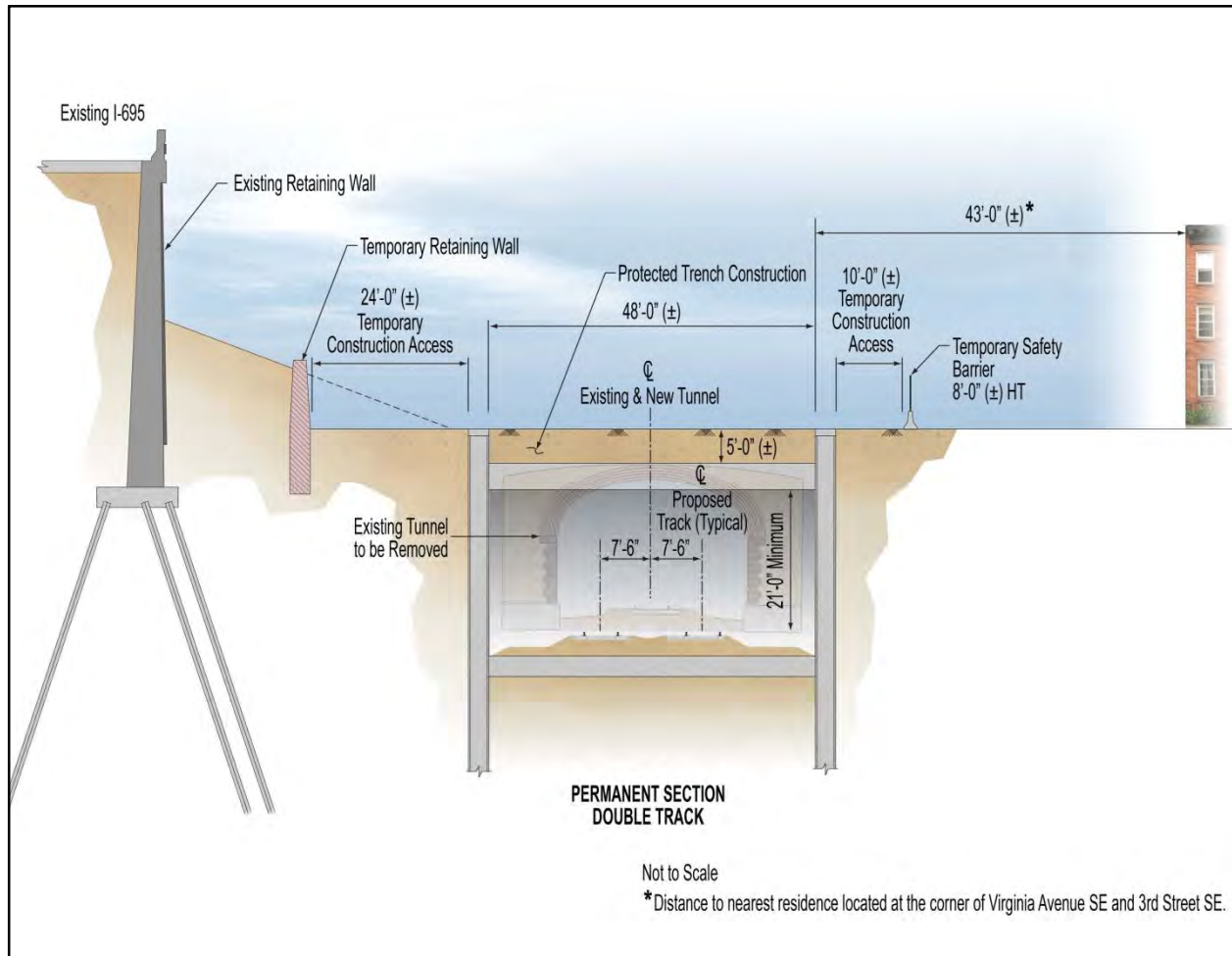
3.7.1.6 Concept 6: Rebuild with On-Line Construction

Concept 6 would be similar to Concepts 2, 3 and 4 in that it would result in largely the same kind of new two-track/double-stack tunnel within the existing tunnel envelope (see Figure 3-15). Concept 6 is different from Concepts 2 to 5 in that a runaround track/trench or new single-track tunnel would not be used to maintain freight rail traffic during construction. Instead, Concept 6 would involve construction of a new permanent tunnel in short segments while maintaining freight rail traffic in one half of the tunnel at all times. Demolition of the old tunnel and construction of the new tunnel would occur in numerous stages with regularly shifting track alignments and all work occurring in very close proximity to live train traffic, allowing trains to continue to use the tunnel through the construction work area on a daily basis. (Note that additional engineering analysis on Concept 6, after it was developed into Alternative 4, showed that a larger trench would be needed for both maintaining freight rail operations and rebuilding the tunnel).

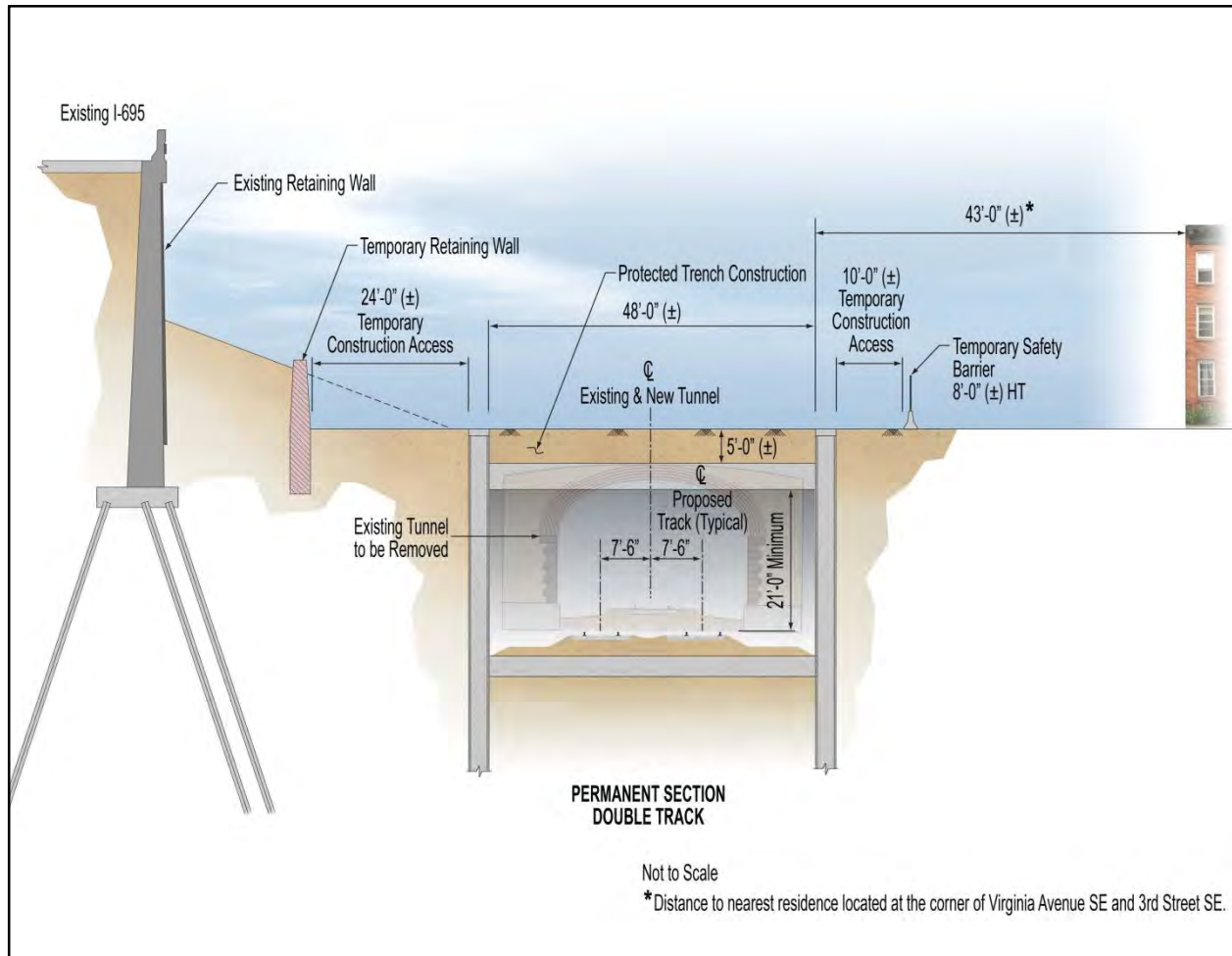
Concept 6 would require substantial daily coordination between the train operators and the construction contractor to safely allow trains to pass through the construction zone on set schedules. Inevitably, this extremely complicated coordination has the potential to cause delays to both freight rail operations and construction, as well as increase community impacts because of the increased duration of construction in the Virginia Avenue SE neighborhood. The contractor would be under the daily obligation to ensure the rail lines through the work area are operational at all times.

3.7.1.7 Concept 7: Rebuild, Temporary Reroute

Concept 7 is similar to the Concepts 2, 3, 4 and 6 in that the rebuilt Virginia Avenue Tunnel would be reconstructed generally within the existing horizontal envelope of the existing tunnel (see Figure 3-16). Instead of accommodating the train traffic within the Virginia Avenue SE corridor as would be done under Concepts 2 through 6, Concept 7 would close the tunnel to all traffic during construction. Therefore, Concept 7 unlike the other concepts would not be able to maintain the same level of service to Washington Metropolitan Area regional customers during construction. It would create logistical problems in the rerouting of trains to maintain service to these customers.

Figure 3-15
Concept 6 Typical Section

Concept 7 would temporarily detour freight trains through other rail routes within and outside the District. Figure 1-3 in Chapter 1 depicts the existing rail network in the District of Columbia, including the rail lines used by passenger carriers, such as AMTRAK and VRE. Routing freight trains through Union Station (a passenger train station) would maintain the connectivity of the freight rail network through the District. However, a maximum of one freight train per day would be able to move through Union Station in each direction, due to the constraints of existing passenger rail service. In addition, each freight train would require equipment changes before it could traverse Union Station. Because of the capacity constraints of the route through Union Station, freight rail traffic must operate over other principal routes throughout the eastern seaboard. Each of these bypass options involve substantial additional train mileage and transit time. Figure 3-17 displays the potential bypass routes, which are briefly discussed below.

Figure 3-16
Concept 7 Typical Section

CSXT Southern Bypass Route – Northbound trains originating in Florida and destined for northeastern points would divert from the eastern seaboard freight rail corridor route at Waycross, GA and be routed through Atlanta GA, Knoxville TN, Cincinnati and Cleveland OH, Buffalo NY, and into Selkirk Yard (located in the vicinity of Albany NY). Southbound trains originating at Selkirk Yard would use the reverse routing to Waycross GA. From Selkirk Yard, freight trains could access markets in New Jersey, New York City, and New England. Baltimore/Philadelphia markets could be accessed via route running through Pittsburgh PA and Cumberland MD. The segment between Waycross, GA and Cleveland (Greenwich), OH is essentially a single-track rail line with passing sidings, and much of it is already at or near capacity.

CSXT Mid-Atlantic Bypass Route - Northbound trains originating in the Carolinas would use the eastern seaboard freight rail corridor route to Richmond VA, then divert to the Mid-Atlantic Route and proceed through Lynchburg and Clifton Forge VA, Huntington WV, Columbus and Cleveland OH, and on to Selkirk Yard. As with the Southern Bypass, the Mid-Atlantic Bypass adds over 800 miles to the overall route to New Jersey points. Half of the segment between Richmond, VA and Huntington, WV is a single-track rail line, and is in mountainous areas used frequently by coal trains. In addition, westbound trains traveling from Richmond have no efficient means to connect with Lynchburg and head north. A complicated and time-consuming maneuver involving the uncoupling of locomotives from one end of the train and coupling the locomotives on the other end would be required. Moreover, each of these train movements requires crossing over mainline tracks that are used by approximately 20 AMTRAK trains daily. Essentially, using the Mid-Atlantic Bypass Route is not a feasible operation for multiple freight trains per day.

CSXT Mid-Atlantic Bypass Route (Doswell) – A variation Mid-Atlantic Bypass would deviate from eastern seaboard freight rail corridor route in Doswell VA, rejoining the bypass route in Clifton Ford, VA. The route segment between Doswell and Clifton Forge is operated by the Buckingham Branch Railroad. Although CSX has rights to use this rail line primarily as a relief route for returning empty coal trains, it is not feasible to support high density freight traffic due to its low speed limit (25 mph), and lack of sufficient siding length and space (distance between each siding) and steep grades.

Norfolk Southern (NS) I-83 Hagerstown Route – Another possible bypass route involves using the NS I-83 freight rail route that traverses the Shenandoah Valley from Charlotte NC through Roanoke VA, Hagerstown MD and Harrisburg PA. Beyond Harrisburg PA, a number of NS routes are available that enable access to the New Jersey area. As a NS route, train movement and track sharing would have to be negotiated before any CSX trains could use it. NS would maintain absolute control of dispatching and the guest railroad trains (CSX) are allowed access as the opportunity permits. Although rerouting is a common railroad practice under emergency conditions that are usually short in duration, negotiating a 2 plus-year operating agreement that would maintain CSX's current level of operational service may not be possible. Notwithstanding agreement issues, using the I-83 NS route presents operational challenges. Essentially, the NS I-83 corridor route has extremely limited in line capacity. The corridor has a single railroad track, a limited number of sidings, and much of the corridor consists of curved track and low speed limits.

3.7.1.8 Concept 8: Reroute, Deep Bore Tunnel

Concept 8 would establish a new two-track/double-stack tunnel approximately 80 feet below the surface of Virginia Avenue SE (i.e. approximately 45 feet below the existing tunnel) (see Figure 3-18). This depth is needed to maintain a stable foundation under the existing tunnel while the new tunnel is being excavated. The purpose of Concept 8 would be to maintain the existing mainline freight rail route through Washington, DC, but avoid the need for construction on Virginia Avenue SE. Rail operations would continue using the existing Virginia Avenue

Tunnel for service Washington Metropolitan Area and regional customers. Constructing this tunnel would require the use of tunnel boring equipment, and would not require any major construction activity on city streets, including Virginia Avenue SE. The diameter of the tunnel would be approximately 44 feet wide, which would be wide enough to accommodate two-track/double-stack facilities. In order to reach a depth of 80 feet in the area of the existing tunnel while also maintaining appropriate separation from other existing features along the route (i.e., river crossings and WMATA tunneling), the portals of the new tunnel would be located no closer than an area near the south of Reagan National Airport in Alexandria, VA on the west end and near the Deanwood Metrorail Station on the east end, making the minimum length of the tunnel approximately nine miles (see Figure 3-19). For the construction of the transition area at each portal, a minimum of 14-16 acres would be required. In addition, numerous ventilation shafts along the entire tunnel length would be needed, most of which would be sited in urban areas.

There are several reasons for the 9-mile tunnel length. The maximum permissible grade for freight trains operating on this corridor is 1.25 percent. The portal would have to be located at least 6,400 feet from the bottom of the slope. With a 1.25 percent grade and with the existing tunnel at approximately 3,800 feet long, a deep bore tunnel would be no shorter than approximately 16,600 feet, or a little more than three miles. Second, several natural and manmade obstructions would prevent the minimum length of a deep bore tunnel with grades of 1.25 percent. The natural obstructions include the Anacostia and Potomac Rivers. For example, because of the relatively close proximity of the Anacostia River to the current east portal, the deep bore tunnel's rise to surface level elevation could not begin until the tunnel is on the east side of the river. The manmade obstructions include underground structures associated with freeway over- and under-passes, underground utilities including large combined sewer overflow (CSO) trunk lines, and underground transportation facilities, such as Metrorail tunnels and the 12th Street, 1st Street and I-395 tunnels. The manmade obstructions would affect the tunnel length and depth on the west side, and would force the deep bore tunnel's rise to surface level elevation to begin on the west side of the Potomac River. Finally, the length of the deep bore tunnel under Concept 8 would be affected by keeping the tunnel within the existing CSX right-of-way within the District, Maryland and Virginia.

3.7.1.9 Concept 9: Reroute NCPC Indian Head Alignment

Concept 9 was taken from a study conducted by the National Capital Planning Commission (NCPC) in 2007 titled, the Railroad Realignment Feasibility Study. The NCPC study identified alternative routes to divert the majority of the freight traffic on the I-95 corridor away from the District, but still within the Washington Metropolitan Area. Concept 9 would use an alignment called the Indian Head Alignment, which was identified in the NCPC study (see Figure 3-20). Under Concept 9, a new mainline rail route would be established through the greater Washington Metropolitan Area.

Figure 3-18
Concept 8 Typical Section

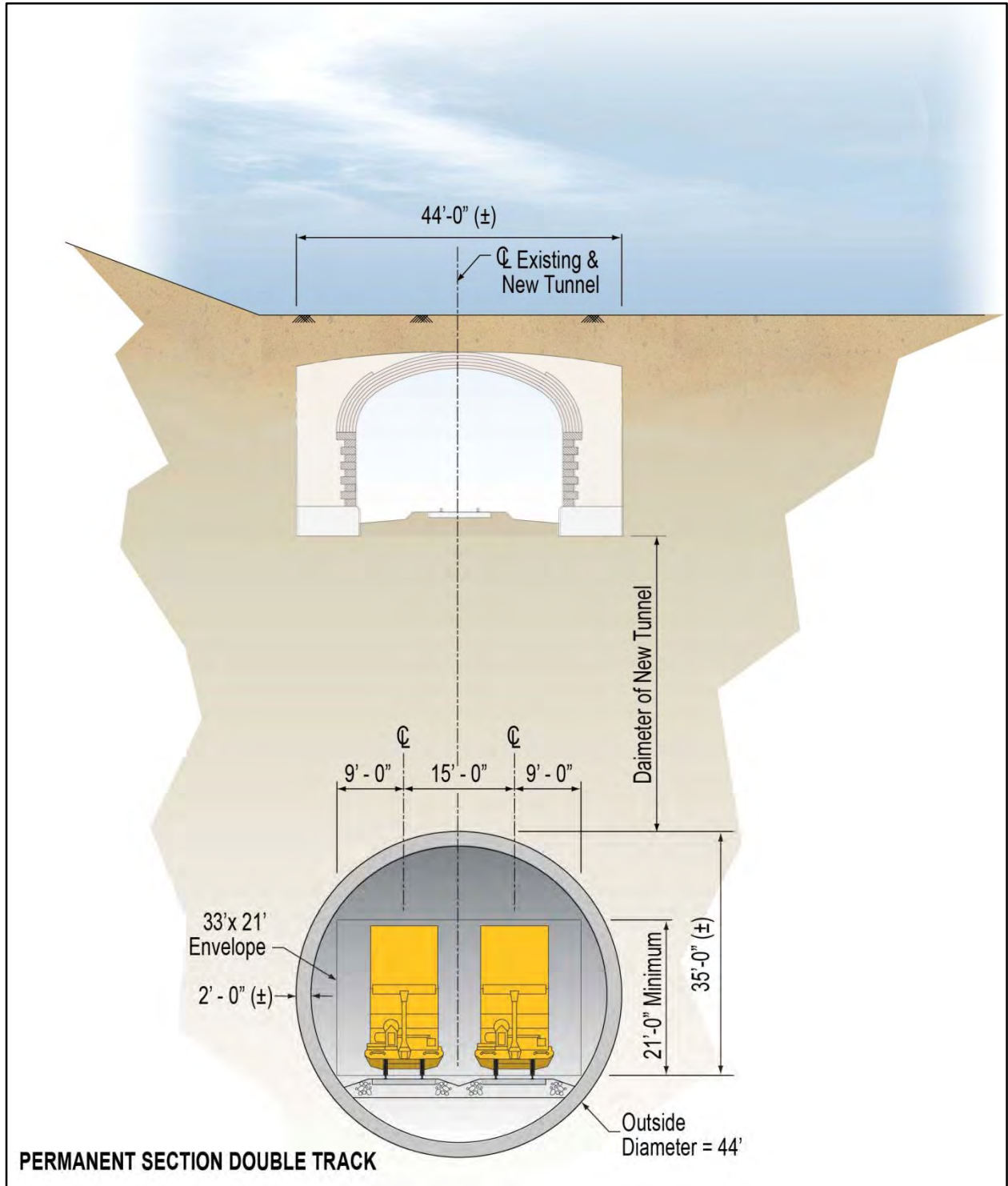
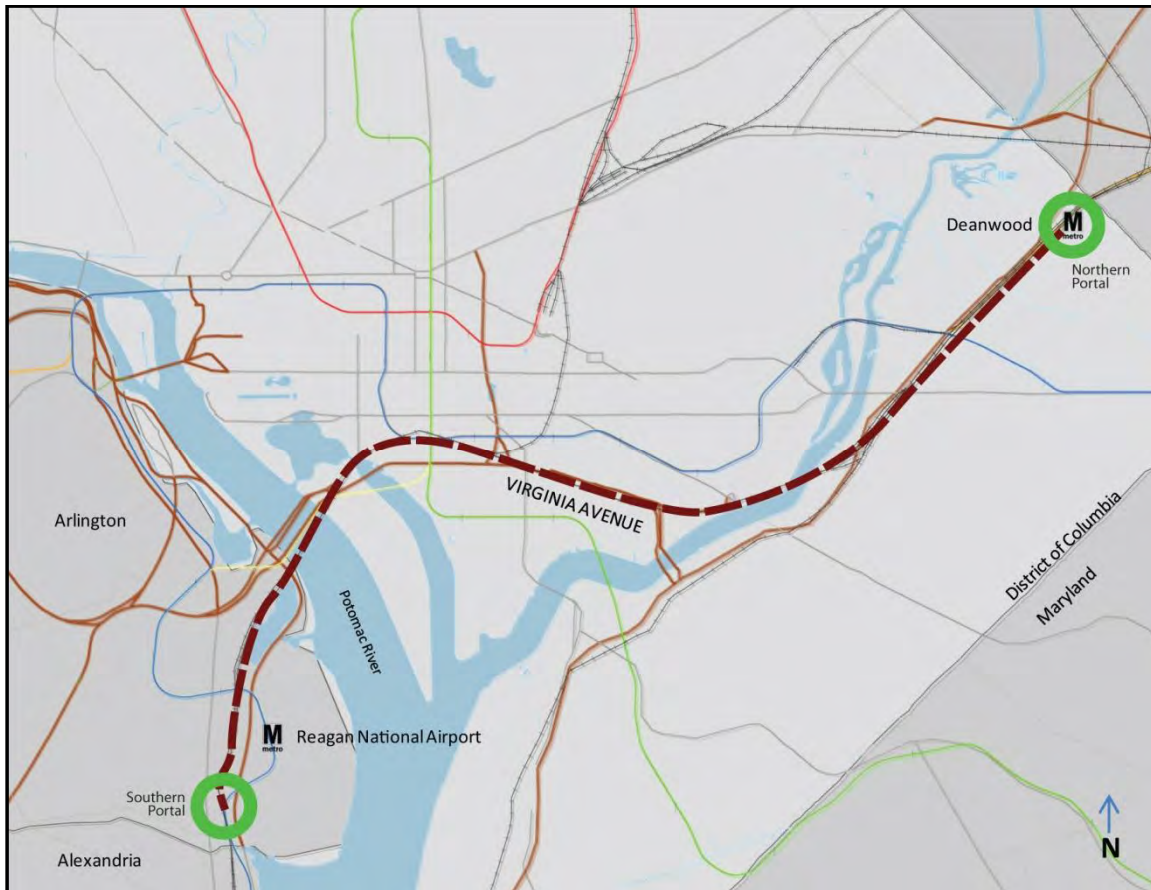
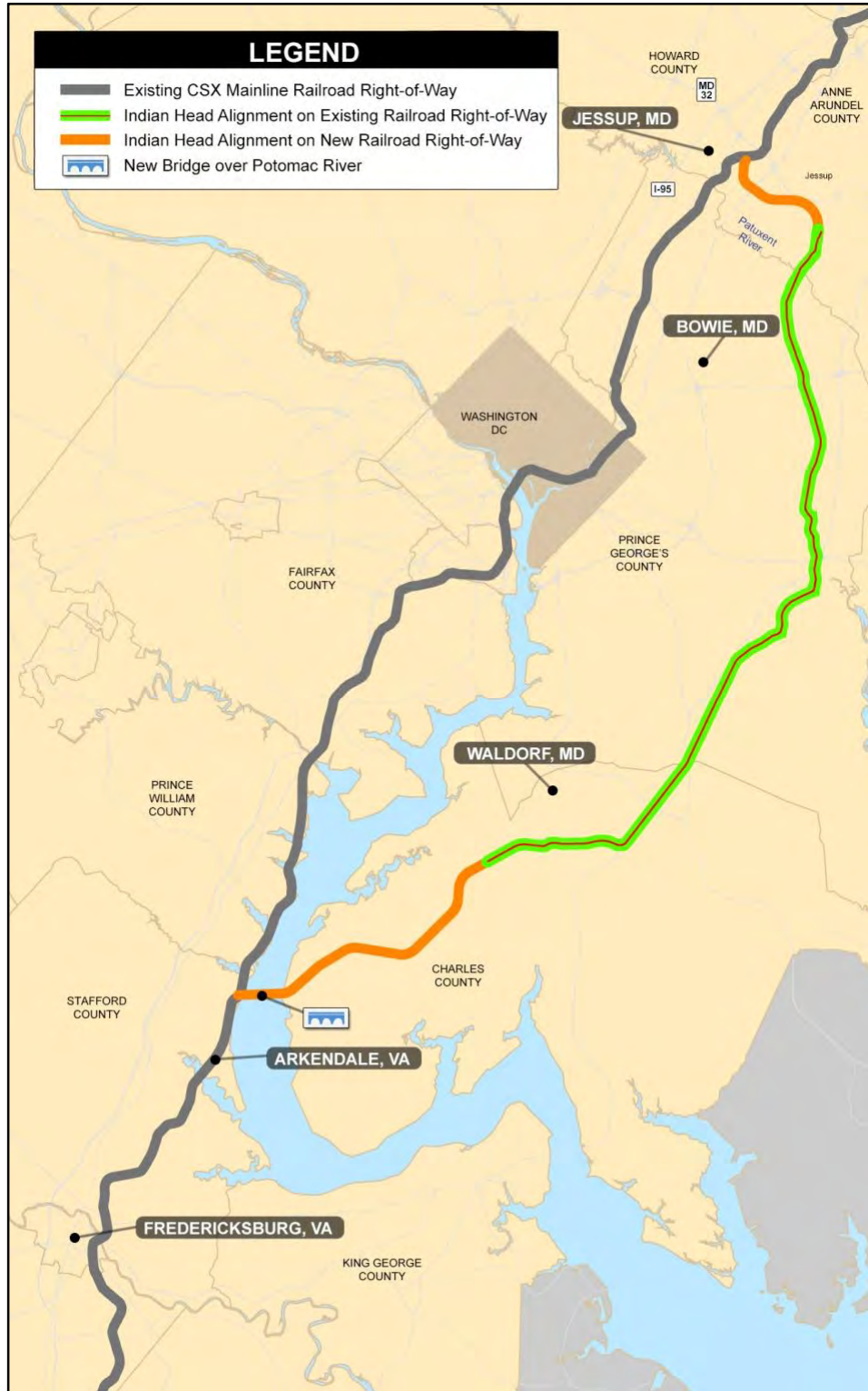


Figure 3-19
Concept 8 Tunnel Alignment and Portal Locations



From Virginia, the Indian Head alignment would diverge from the existing mainline rail tracks north of Arkendale, and cross the Potomac River via a new two-track 2.5-mile-long bridge. On the east side of the river, a new two-track railroad would be built and connect with the existing single-track Indian Head Branch, and the single-track Pope's Creek Branch. The sections of the Indian Head and Pope's Creek Branch affected by this alignment would require two-track expansion, including, where necessary, changes in grades or bridge or overpass structures to allow double-stack operations. North of Bowie, MD the alignment would run parallel to the Amtrak Northeast Corridor, and a new two-track railroad would be built between the Patuxent River and MD 32 to the mainline traversing through Jessup, MD.

Figure 3-20
Concept 9, NCPIC Indian Head Alignment



3.7.1.10 Concept 10: Reroute, NCPC Dahlgren Alignment

Concept 10 was also taken from the 2007 NCPC study. It would use an alignment called the Dahlgren Alignment (see Figure 3-21). The purpose of Concept 10 is the same from Concept 9: instead of making the necessary capital improvements to maintain the existing mainline route through Washington, DC, it would establish a new mainline route through the greater Washington Metropolitan Area.

From Virginia, the Dahlgren alignment would diverge from the existing mainline rail tracks just south of Fredericksburg where a new two-track railroad would be constructed that would traverse across King George County. From just south of Fredericksburg, the alignment of Concept 10 would follow an existing utility corridor right-of-way, cross the Rappahannock River and connect with the abandoned Dahlgren rail line, which would be restored to a functioning two-track railroad. This restored rail line would then parallel the recently completed Dahlgren Railroad Heritage Trail for a short distance before establishing new rail line that would partially be aligned with the U.S. 301 to the Potomac River. At the Potomac River, a new two-mile-long railroad drawbridge would be constructed near the existing U.S. 301 Bridge. The alignment would connect with the southern terminus of single-track Pope's Creek Branch, which would require two-track expansion. At and north of Waldorf, the Dahlgren alignment is the same as the Indian Head alignment.

3.7.1.11 Concept 11: Reroute, Permanent Reroute

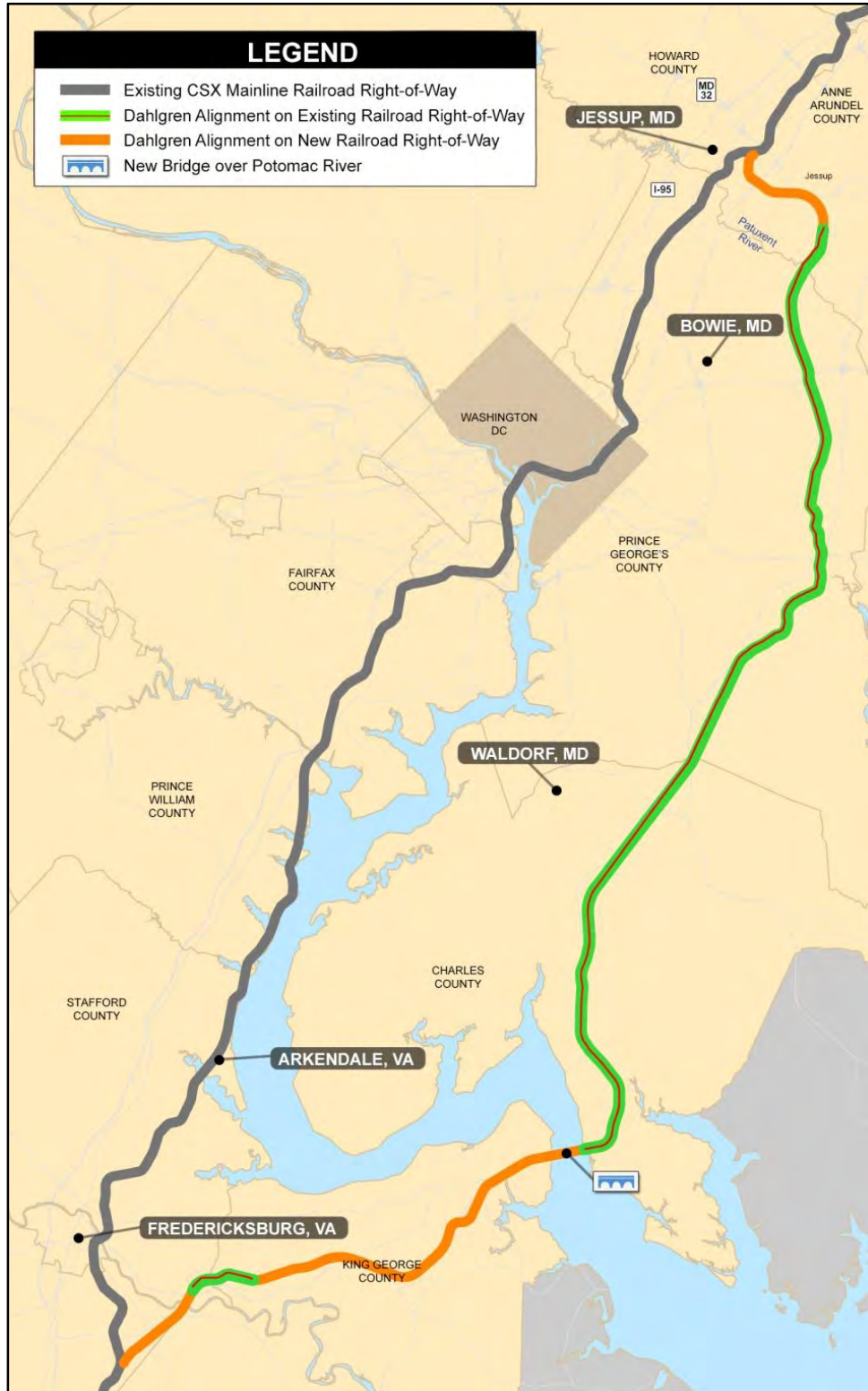
Concept 11 involves no proposed construction or upgrades to the existing Virginia Avenue Tunnel, and would establish new permanent routes using existing railroads owned by CSX throughout the eastern part of the U.S. This concept would continue operations in the existing Virginia Avenue Tunnel SE while permanently routing freight trains outside the District (see Figure 3-17). Concept 11 would use the same routes as Concept 7. However, the reroutes would be permanent under this concept, and would require substantial upgrades.

The differences between Concepts 7 and 11 is the duration of rerouting (temporary versus permanent), and the impacts associated with the durations. Similar to Concept 7, freight traffic must operate over other principal routes and all bypass options involve significant additional train mileage and running time. These potential bypass routes are discussed under Concept 7 and are illustrated in Figure 3-17.

3.7.2 Evaluation Criteria and Screening Process

This section describes the eight evaluation criteria and explains how each concept was measured against the criteria. The project concepts were introduced to the public during the November 30, 2011 public meeting. Following this and other smaller group meetings, the concepts evaluation criteria were developed and applied.

Figure 3-21
Concept 10, NCPD Dahlgren Alignment



Criteria 1 through 4 are based on the Project Purpose and Need described in Chapter 1. Criteria 5 through 8 address issues of technical and economic feasibility, such as impacts on freight traffic and cost, as well as impacts to the community, including the duration of construction along Virginia Avenue SE. Detailed descriptions of the criteria are provided in the Concepts Evaluation Technical Report provided in Appendix B. The criteria and their application are described below.

Criterion 1: The concept, upon completion, will address the deficiencies of the Virginia Avenue Tunnel.

In order for a concept to meet Criterion 1, Virginia Avenue Tunnel must be rebuilt to modern engineering standards, while at the same time eliminating the bottleneck on the I-95 mainline rail corridor, a vital segment of the nation's rail network. The elimination of the bottleneck does not necessarily have to be through the Virginia Avenue corridor in order to partially meet this objective.

Criterion 2: The concept, upon completion, will provide the necessary improvements for operating double-stack intermodal containers and have two tracks for the efficient flow of commercial rail freight through the Washington Metropolitan Area.

In order for a concept to meet Criterion 2, the Project must result in two railroad tracks with sufficient clearance to accommodate double-stack containers on rail cars throughout the Washington Metropolitan Area.

Criterion 3: The concept will avoid major impacts to the structures, traffic or access to or from I-695.

Only rebuild concepts (Concepts 2 through 7) that involve a short-term temporary closure of I-695 ramps meet Criterion 3. Rebuild concepts that involve long-term closure of an I-695 ramp or re-construction of any structural element of I-695 (e.g., columns, retaining walls, etc.) do not meet Criterion 3. Obviously, Concepts 8 through 11, which do not require construction along the surface streets, including Virginia Avenue SE, would meet Criterion 3. However, it is uncertain, and beyond the scope of this analysis, to predict how the massive railroad construction contemplated by any of these concepts (including construction of a new rail bridge across the Potomac River) could affect interstate highways and other major roads.

Criterion 4: The concept must allow for the maintenance of traffic across Virginia Avenue and along adjacent streets throughout the duration of construction.

In order to meet Criterion 4, the concept must have the potential to include effective traffic management measures to maintain cross-street traffic across Virginia Avenue for motorists, pedestrians and cyclists, and vehicle access to and from I-695.

Criterion 5: The concept will maintain interstate rail commerce without a substantial negative impact to the level of service during construction.

This criterion requires a dependable level of timely freight transportation services in the Washington Metropolitan Area throughout the duration of construction. If a concept is unable to maintain the existing level of service, it would fail to meet Criterion 5.

Criterion 6: The concept will be implemented in a time frame that accommodates the near term anticipated increase in freight traffic.

As a practical matter, Criterion 6 requires that double-stack intermodal container train operations be available through the Washington Metropolitan Area by 2015, the year in which the Panama Canal is projected to be expanded allowing passage of larger vessels with higher freight capacity. A concept does not necessarily have to be fully constructed by 2015 in order to meet Criterion 6 if it includes temporary measures that maintain freight operations through the Washington Metropolitan Area with the ability to operate double-stack intermodal container freight trains.

Criterion 7: The concept has a comparatively reasonable duration of construction in the vicinity of the existing tunnel.

In order to determine if a concept meets Criterion 7, the expected length of construction for each of the 12 concepts were compared. The concepts with the shorter construction periods within the Virginia Avenue SE corridor satisfy Criterion 7.

Criterion 8: The concept has a comparatively low cost.

Under Criterion 8, a comparatively low cost essentially means a cost that is practical and feasible from an economic standpoint. To apply Criterion 8, a cost comparison of the 12 concepts was conducted. The concepts in the lower range of overall costs meet Criterion 8. Concepts with costs orders of magnitude greater than the lower cost concepts would not satisfy Criterion 8.

3.7.3 Concepts Dismissed from Further Consideration

This section provides a summary of how each concept was evaluated and rated against the eight criteria described in Section 3.7.2. Table 3-6 summarizes the findings of the concepts screening evaluation. The table qualitatively scores each concept against the eight evaluation criteria. Scoring is based on ability of each concept to either meet the criteria, failure to meet the criteria, or uncertainty in meeting the criteria and where further study would be needed through the EIS process. The scores on the table also reflect situations where the criteria are simply not applicable to concepts. The Concepts Evaluation Technical Report in Appendix B contains a point-by-point descriptive evaluation of the alternative concepts against the criteria. It also provides more information on why certain concepts were eliminated from detail study as formal alternatives in the EIS process.

VIRGINIA AVENUE TUNNEL
RECONSTRUCTION PROJECT

FINAL ENVIRONMENTAL IMPACT
STATEMENT & SECTION 4(F) EVALUATION

Table 3-6
Concepts Evaluation Matrix

Project Criteria		No Build	Rebuild Tunnel Concepts							Reroute Freight Traffic Concepts			
		1	2	3	3A	4	5	6	7	8	9	10	11
1	The concept, upon completion, will address the deficiencies of the Virginia Avenue Tunnel.		Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No
2	The concept, upon completion, will provide the necessary improvements for operating double-stack intermodal containers and have two tracks for the efficient flow of commercial rail freight through the Washington Metropolitan Area.		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
3	The concept will avoid major impacts to the structures, traffic or access to or from I-695.		Yes	No	No	Requires more study	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	The concept must allow for the maintenance of traffic across Virginia Avenue and along adjacent streets throughout the duration of construction.		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	The concept will maintain interstate rail commerce without a substantial negative impact to the level of service during construction.		Yes	Yes	Yes	No	Yes	Requires more study	No	Yes	Yes	Yes	Yes
6	The concept will be implemented in a time frame that accommodates the near term anticipated increase in freight traffic.		Requires more study	Requires more study	Requires more study	Requires more study	Requires more study	Requires more study	No	No	No	No	No
7	The concept has a comparatively reasonable duration of construction in the vicinity of the existing tunnel.		Requires more study	Requires more study	Requires more study	Requires more study	Requires more study	Requires more study	Yes	N/A	N/A	N/A	N/A
8	The concept has a comparatively low cost.		Yes	Requires more study	Requires more study	Requires more study	Yes	Requires more study	Requires more study	No	No	No	No

Legend:

Yes	Yes
Requires more study	Requires more study
No	No
N/A	N/A

Based on the evaluation, all of the reroute concepts (Concepts 8 through 11) were eliminated from further consideration. In summary, the major reasons for eliminating the reroute concepts include:

- Concept 8, Reroute, Deep Bore Tunnel, which failed three of the evaluation criteria, would require acquisition of 14 to 16 acres at portal locations and the construction of ventilation shafts in urban areas. It would have an extremely high cost (estimated to cost approximately \$2 billion) and require extensive planning efforts across multiple jurisdictions.
- Concept 9, Reroute, NCPC Indian Head Alignment, which failed three of the evaluation criteria, would require a new bridge over the Potomac River and 31 miles of new rail line. It would traverse several communities, would affect diverse natural resources, would have an extremely high cost (NCPC estimated to cost between \$3.2 and \$4.2 billion), and would require extensive planning efforts across multiple jurisdictions.
- Concept 10, Reroute, NCPC Dahlgren Alignment, which failed three of the evaluation criteria, would require a new bridge over the Potomac River and 38 miles of new rail line. Like Concept 9, it would traverse several communities, would affect diverse natural resources, would have an extremely high cost (NCPC estimated to cost between \$3.5 and \$4.7 billion), and would require extensive planning efforts across multiple jurisdictions.
- Concept 11, Permanent Reroute, which failed four of the evaluation criteria, would include substantial diversion of freight traffic to trucks or other modes of transportation, with associated impacts to interstate highway congestion, higher fuel consumption, and increased pollution.

Concepts 3, 3A, 4 and 7 were also eliminated from further consideration. Concepts 3 and 3A failed to meet one of the criteria based on the Project's Purpose and Need. Concept 4 failed to meet Criterion 5. Concept 7 failed to meet Criteria 5 and 6. In summary, the major reasons for eliminating these concepts include:

- Concept 3, Rebuild, Temporary North Side Runaround, would result in major impacts to I-695 during construction.
- Concept 3A, Rebuild, Permanent Two Tunnels (New Tunnel on North Side of Existing Virginia Avenue Tunnel), would also result in major impacts to I-695 during construction.
- Concept 4, Rebuild, Combination Runaround, would require two major disruptions to freight rail operations, causing stoppages of freight train movements for several weeks for each disruption.
- Concept 7, Rebuild, Temporary Reroute, would result in a substantial degradation of freight rail service to growing customer demands in the I-95 corridor

The following remaining concepts were retained as Build Alternatives for detailed evaluation in the EIS process, including further study with regards to Criteria 6 to 8 on Table 3-6:

- Concept 2: Rebuild Virginia Avenue Tunnel, Temporary South Side Runaround

- Concept 5: Permanent Two Tunnels (New Tunnel on South Side of Existing Virginia Avenue Tunnel)
- Concept 6: Rebuild Virginia Avenue Tunnel, Rebuild With On-Line Construction

The retained concepts were developed as project alternatives, and given descriptive names (see Section 3.4):

- Alternative 1: No Build
- Alternative 2: Rebuilt Tunnel / Temporary Runaround Track
- Alternative 3: Two New Tunnels
- Alternative 4: New Partitioned Tunnel / Online Rebuild

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
 Plaintiff)
)
 v.)
)
 ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
 Defendants)
)
_____)

PLAINTIFF'S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 13

**Memorandum of Agreement
Between
CSX Transportation, Inc.
And the
District of Columbia
Acting through and by the
District Office of the Deputy Mayor
And the
District Department of Transportation
Regarding
Transportation Projects within the District of Columbia**

This Memorandum of Agreement ("Agreement") is entered into as of the 23rd day of August, 2010, by and between CSX Transportation, Inc., a corporation organized and existing under the laws of the Commonwealth of Virginia with its principal place of business at 500 Water Street, Jacksonville, Florida 32202 ("CSXT"), and the District of Columbia ("DC" or District"), a municipal corporation, acting through the Office of the Deputy Mayor for Planning and Economic Development ("DMPED") and the District Department of Transportation ("DDOT"), collectively referred to herein as the "Parties."

WHEREAS, the Parties seek to form a foundation to improve the effectiveness of the transportation network to better serve the District and surrounding region; and

WHEREAS, the Parties have identified various projects that will benefit CSXT rail operations and DDOT's transportation initiatives; and

WHEREAS, the Parties recognize that working together on projects that mutually benefit the transportation network within the District will result in a more livable community; and

WHEREAS, the Parties mutually agree the projects listed below are critical to rail transportation, vehicular transportation, and safe pedestrian walkways throughout the District; and

WHEREAS, the Parties mutually agree that time is of the essence to have this Agreement executed no later than August 23, 2010, due to construction and development timelines for the 11th Street Bridge Project and Virginia Avenue Tunnel Expansion Project; and

WHEREAS, the Parties will coordinate and work together as needed to negotiate and execute mutually acceptable definitive agreements to implement the terms of this Agreement as set forth herein; and

WHEREAS, CSXT and DDOT intend this Agreement to supersede and replace the letter agreement between CSXT and DDOT dated July 26, 2010; and

NOW THEREFORE, in consideration of the mutual promises contained herein, the Parties hereto agree as follows:

ARTICLE I. RECITALS

The above recitals are incorporated into this Agreement as if fully set forth herein.

ARTICLE II. NATIONAL GATEWAY INITIATIVE

A. DDOT and DMPED agree to provide support to CSXT in its efforts to develop the National Gateway Initiative ("NGI"). As such, DDOT agrees to send a letter by October 1, 2010 to the United States Department of Transportation ("USDOT") supporting the NGI. Further, DDOT and DMPED will support legislative efforts to secure federal funding for the NGI by supporting funding requests in the next federal surface transportation bill or other federal bills in which a funding mechanism could be applicable to the NGI freight program.

B. DDOT will submit the TIGER II grant application on behalf of the National Gateway Coalition for a planning grant that includes the CSXT Virginia Avenue Tunnel Expansion Project.

ARTICLE III. VIRGINIA AVENUE TUNNEL

A. DDOT agrees to credit CSXT up to Four Million, One Hundred Seventy One Thousand and Forty-Four Dollars (\$4,171,044) ("CSXT Credit Amount") toward the cost of the restoration and/or resurfacing of Virginia Avenue upon the completion of the construction for the Virginia Avenue Tunnel Expansion Project.

B. The CSXT Credit Amount shall be applied by DDOT, subject to required appropriations, toward CSXT's costs for the restoration and/or resurfacing of Virginia Avenue upon completion of the construction for the Virginia Avenue Tunnel Expansion Project. DDOT shall obtain the CSXT Credit Amount of funds through traditional federal appropriations and obligations for resurfacing of Federal-Aid facilities. To the extent that the total cost for the restoration and/or resurfacing of Virginia Avenue exceeds the remaining credit balance of the CSXT Credit Amount to be applied by DDOT, such costs shall be paid by CSXT.

C. DDOT agrees to provide a designated point of contact to assist CSXT in obtaining required public space permits for the Virginia Avenue Tunnel Expansion

Project and connection and greening proposals to improve the streetscape on Virginia Avenue, SE, as part of the tunnel expansion project.

D. The District agrees to coordinate with CSXT and to expedite approvals of the required public space permits for the Virginia Avenue Tunnel Expansion Project. Costs of the District's coordination efforts and review shall be funded by CSXT. Upon completion of the new tunnel, CSXT shall restore the construction area in accordance with the design specifications and plans approved by DDOT.

E. DDOT will provide a list of permits, licenses, and easements that may be needed for the construction on or before October 1, 2010. CSXT acknowledges that such list shall be subject to change based on changes in applicable laws, rules and regulations in effect at the time of construction.

F. DDOT agrees to send a letter by October 1, 2010 to USDOT requesting expedient assistance on the National Environmental Policy Act requirements for the Virginia Avenue Tunnel Expansion Project.

G. CSXT agrees to enter into a First Source Agreement with District of Columbia Office of Employment Services that shall, among other things, require CSXT to: (i) use diligent efforts to hire and use diligent efforts to require its architects, engineers, consultants, contractors, and subcontractors to hire at least fifty one percent (51%) District residents for all new jobs created by the Virginia Avenue Tunnel Expansion Project, all in accordance with such First Source Agreement and (ii) use diligent efforts to ensure that at least fifty one percent (51%) of apprentices and trainees employed are residents of the District and are registered in apprenticeship programs approved by the D.C. Apprenticeship Council. The Parties acknowledge and agree that the any First Source Agreement will be subject to CSXT's existing collective bargaining agreements and nothing under this First Source Agreement will supersede existing CSXT labor agreements.

H. CSXT agrees to enter into an agreement with the District of Columbia Department of Small and Local Business Development governing certain obligations of CSXT regarding contracting participation of Certified Business Entities in the CSXT Virginia Avenue Tunnel Expansion Project in accordance with the Local and Disadvantaged Business Enterprise Development and Assistance Act of 2005, as amended (D.C. Law 16-33; D.C. Official Code §§ 2-218.01 et seq.). However, CSXT shall not be required to take on an equity and development participant as stated in DC Code § 18-249.49a, as part of the agreement discussed in this paragraph.

ARTICLE IV. 11th STREET BRIDGE PROJECT

A. DDOT will coordinate with CSXT to minimize, where possible, conflicts between the proposed temporary runaround trench for the CSXT temporary rail track and

the 11th Street Bridge construction during all phases of the construction of the Virginia Avenue Tunnel.

B. CSXT shall remove and relocate a communication tower currently located on DDOT property that interferes with the proposed 11th Street ramp in Phase I, at no cost or expense to DDOT.

C. CSXT shall pay to DDOT (or DDOT's authorized agent) Four Million, One Hundred Seventy-One Thousand, and Forty-Four Dollars (\$4,171,044) for design and construction costs associated with adjustments to the 11th Street Bridge Project required by CSXT ("Redesign Costs"). The Redesign Costs shall be paid in four (4) equal payments of One Million, Forty-Two Thousand, Seven Hundred Sixty-One Dollars (\$1,042,761) in accordance with the following payment schedule:

1. The first payment shall be paid within thirty (30) days of the execution of the State-Railroad agreement between DDOT and CSXT for Ramp A-1;
2. The second payment shall be paid in the 2nd quarter of calendar year 2011;
3. The third payment shall be paid in the 3rd quarter of calendar year 2011; and
4. The fourth payment shall be paid in the 1st quarter of calendar year 2012.

If the Redesign Costs cannot be paid according to this payment schedule, the Parties agree to work together to determine how the Redesign Costs can be remitted to the Agency (or Agency's authorized agent). Once determined, the payment schedule shall be amended to reflect the Parties' decision regarding remittance of the Redesign Costs.

D. CSXT and DDOT shall enter into the necessary State-Railroad agreement for the construction of Ramp A-1 of the 11th Street Bridge Project. In accordance with that agreement, CSXT shall provide up to One Hundred Thousand Dollars (\$100,000.00) in flagging services to the project. The State-Railroad agreement is attached as Exhibit A.

E. Upon the payments set forth in the State- Railroad Agreement, CSXT shall have no further obligations to the District for the construction of Ramp A-1 of the 11th Street Bridge Project.

ARTICLE V. PROJECT COORDINATION

CSXT and DDOT agree that future projects near the CSXT right of way and DDOT public right of way will be coordinated to ensure any design and construction will accommodate the requirements of both CSXT and DDOT.

ARTICLE VI. ACCESS and EASEMENTS

A. **H Street Access:** DDOT shall grant to CSXT a temporary easement for a term of ninety (90) days over a portion of the public right of way located in Lot 801 or Square N-737. The temporary easement area will run from the western edge of H Street, SE, (just east of New Jersey Avenue) to the railroad track. DDOT and CSXT shall negotiate in good faith the terms and conditions of the grant of a permanent easement and required releases. In the event that the subject property is transferred from DDOT's property inventory to DMPED's property inventory, DMPED and CSXT shall negotiate in good faith the terms and conditions of such permanent easement and required releases.

B. **Rhode Island Ave Access:** CSXT conveyed to DDOT certain property rights between Rhode Island Avenue and Franklin Street on which the District constructed a bike trail and a fence to separate the public from the adjacent active railroad tracks. DDOT will provide to CSXT a temporary easement for a term of ninety (90) days over the District right of way near the Franklin Avenue Bridge. This easement will allow CSXT to access its signal equipment located within the railroad right of way south of Rhode Island Ave. DDOT and CSXT shall negotiate in good faith the terms and conditions of DDOT's grant of a permanent easement.

C. **Anacostia Pedestrian Walkway/Trail:** CSXT shall grant to the District two (2) temporary easements for a term of ninety (90) days over CSXT property near the Anacostia River for the Anacostia Riverwalk Trail. CSXT and DDOT shall negotiate in good faith the terms and conditions of CSXT's grant of a permanent easement. CSXT and DDOT shall negotiate in good faith and enter into a State-Railroad agreement for the construction of the Anacostia Pedestrian Walkway/Trail.

D. **Rhode Island Avenue Pedestrian/Bicycle Bridge** ("RI Ave. Ped/Bike Bridge"): CSXT shall grant a temporary easement for a term of ninety (90) days to the District over CSXT property near Rhode Island Avenue. CSXT shall also grant to the District access as needed for construction of the RI Ave. Ped/Bike Bridge; provided, however that the fees for the access for construction shall not exceed Ten Dollars (\$10). CSXT and DDOT shall negotiate in good faith the terms and conditions of CSXT's grant of a permanent easement. Additionally, CSXT and DDOT shall negotiate in good faith and enter into a State-Railroad agreement for the construction of the RI Ave. Ped/Bike Bridge.

E. **Virginia Avenue Easements:** DDOT and CSXT shall negotiate in good faith the terms and conditions of DDOT's grant of a temporary easement for the use of the public right of way adjacent to the Virginia Avenue Tunnel for a temporary track throughout the construction period of the Virginia Avenue Tunnel Expansion Project.

ARTICLE VII. CSXT's SHEPPARD's BRANCH

CSXT and DDOT shall negotiate in good faith the terms and conditions for DDOT's use and development of CSXT's Shepherd's Branch property.

ARTICLE VIII. VIRGINIA AVENUE RESURFACING/RESTORATION

In accordance with Article III, Sections A and B above, DDOT will seek funding via the Transportation Improvement Program for the costs of restoration and/or resurfacing of Virginia Avenue, SE, up to the CSXT Credit Amount.

ARTICLE IX. NOTICE

All notices, requests or demands to a party hereunder shall be in writing and shall be effective (i) when received by overnight courier service or facsimile telecommunication (provided that a copy of such notice, request or demand is deposited into the United States mail within one (1) business day of the facsimile transmission), or (ii) three (3) days after being deposited into the United States mail (sent certified or registered, return receipt requested), in each case addressed as follows (or to such other address as either party may designate in writing to the other party in accordance with this Section):

To District:

Office of the Deputy Mayor for Planning and Economic
Development
John A. Wilson Building
1350 Pennsylvania Ave., N.W., Suite 317
Washington, D.C. 20004
Attn: Deputy Mayor for Planning and Economic Development

District Department of Transportation
2000 14th Street, NW
6th Floor
Washington, D.C. 20009
Attention: Director

District Department of Transportation
Infrastructure Project Management Administration
64 New York Avenue, N.E., 1st Floor
Washington, D.C. 20002
Attention: Chief Engineer

District Department of Transportation
2000 14th Street, NW
5th Floor
Washington, D.C. 20009
Attention: General Counsel

To CSX:

CSX Transportation, Inc.
500 Water Street C900
Jacksonville, Florida 32202
Attention: Louis Renjel

ARTICLE X. EXECUTION IN COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Execution and delivery of this Agreement by facsimile shall be sufficient for all purposes and shall be binding on any party to the Agreement.

ARTICLE XI. ENTIRE AGREEMENT

This Agreement constitutes the entire Agreement and understanding of the Parties with respect to the projects list above. No oral or other written provisions shall have any force or effect except those contained in a written amendment to this Agreement executed by the Parties or as specifically provided for in this Agreement.

ARTICLE XII. MODIFICATION OF AGREEMENT

No amendment, alteration or modification to this Agreement shall be effective unless agreed to in writing by the Parties.

ARTICLE XIII. ANTI-DEFICIENCY LIMITATIONS

A. The obligations of the District to fulfill financial obligations pursuant to this Agreement, or any subsequent agreement entered into pursuant to this Agreement or referenced herein (to which the District is a party), are and shall remain subject to the provisions of (i) the federal Anti-Deficiency Act, 31 U.S.C. §§ 1341, 1342, 1349-1351 1511-1519 (2004) (the "**Federal ADA**"), and D.C. Official Code §§ 1-206.03(e) and 47-105 (2001); (ii) the District of Columbia Anti-Deficiency Act, D.C. Official Code §§ 47-355.01 – 355.08 (2004 Supp.) (the "**D.C. ADA**" and (i) and (ii) collectively, as amended from time to time, the "**Anti-Deficiency Acts**"); and (iii) Section 446 of the District of

Columbia Home Rule Act, D.C. Official Code § 1-204.46 (2001). Pursuant to the Anti-Deficiency Acts, nothing in this Agreement shall create an obligation of the District in anticipation of an appropriation by Congress for such purpose, and the District's legal liability for the payment of any charges under this Agreement shall not arise or obtain in advance of the lawful availability of appropriated funds for the applicable fiscal year as approved by Congress.

B. This Agreement shall not constitute an indebtedness of the District nor shall it constitute an obligation for which the District is obligated to levy or pledge any form of taxation or for which the District has levied or pledged any form of taxation. No District of Columbia Official or employee is authorized to obligate or expend any amount under this Agreement unless such amount has been appropriated by Act of Congress and is lawfully available.

ARTICLE XIV. SEVERABILITY

The Parties agree that if any part, term or provision of this Agreement is held to be illegal, unenforceable or in conflict with any applicable federal, state, or local law or regulation, such part, term or provision shall be severable, with the remainder of the Agreement remaining valid and enforceable.

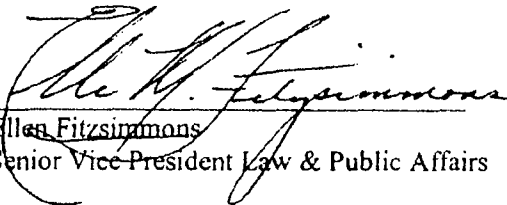
ARTICLE XV. APPLICABLE LAW

The Parties shall comply with all applicable laws, rules, and regulations whether now in force or hereafter enacted or promulgated that pertain to this Agreement. This Agreement shall be governed by the laws of the District of Columbia, exclusive of its choice of law rules. The Parties further agree that the venue of all legal and equitable proceedings related to disputes under this Agreement shall be situated in Washington, DC, and the Parties agree to submit to the personal jurisdiction of any state or federal court situated in Washington, DC.

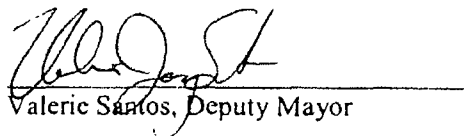
REST OF PAGE INTENTIONALLY BLANK

IN WITNESS WHEREOF, the parties hereto, through their authorized representatives, have executed this Memorandum of Agreement between CSX Transportation, Inc., and the District of Columbia Office of the Deputy Mayor for Planning and Economic Development and the District Department of Transportation regarding the projects listed as of the date written first written above.

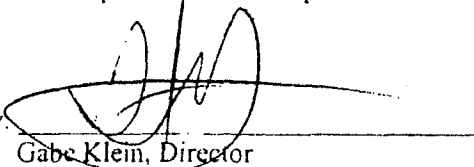
CSX Transportation, Inc.

by: 
Ellen Fitzsimmons
Senior Vice President Law & Public Affairs

District of Columbia Office of the Deputy Mayor
for Planning and Economic Development

by: 
Valerie Santos, Deputy Mayor

District Department of Transportation

by: 
Gabe Klein, Director

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 14

AMENDMENT NO. 1
TO
TERM SHEET AGREEMENT

This Amendment No. 1 ("Amendment No. 1") to the Term Sheet Agreement (dated December 21, 2012), is entered into as of the 29th day of October, 2013, by and between CSX Transportation, Inc. ("CSXT") and the District of Columbia, acting by and through the Department of Transportation ("DDOT") pursuant to D.C. Official Code §§ 50-921.02, 50-921.04(1)(B), 50-921.04(4)(A), 50-921.05 (2013), by and through the undersigned, to further describe the Virginia Avenue Tunnel Project ("VAT Project") and Shepherds Branch project described in Sections 4 and 6(a)(v), respectively, of the Term Sheet Agreement.

I. VIRGINIA AVENUE TUNNEL PROJECT

- A. Waiver of Public Inconvenience Fee. Pursuant to D.C. Mun. Regs. Tit. 24, § 225.9(c) (2013), DDOT agrees to grant a waiver of the public inconvenience fee ("PIF") to CSXT for the Limits of Disturbance ("LOD") associated with the Construction Public Space Permit on Virginia Avenue, SE between 2nd and 4th Streets, SE and between 8th and 9th Streets, SE (all as shown in Exhibit A), which is a local street according to DDOT's records and whose temporary closing will not prohibit vehicular or pedestrian access to any private property.
- B. Payment of Public Inconvenience Fee. CSXT shall pay the PIF for the Construction Public Space Permit for the VAT Project associated with the LOD that extend outside of the area described above in Section I(A), if and as applicable.

II. SHEPHERDS BRANCH

- A. Grant of Temporary Access Permit.
1. CSXT and DDOT are, contemporaneously with this Amendment No. 1, executing a permit ("CSXT Permit") in the form attached hereto as Exhibit B for DDOT's immediate access to CSXT's Shepherds Branch Right of Way, as described therein ("SB ROW").
 2. If DDOT desires to make improvements to the SB ROW or any portion thereof during the terms of the CSXT Permit, DDOT and CSXT shall enter into good faith negotiations regarding the same.
- B. Acquisition of the SB ROW.
1. DDOT shall have a one (1) time option (the "Option") to acquire the SB ROW for transportation purposes and/or trail use through the National Trails System Act in accordance with terms and conditions that may be agreed upon by CSXT and DDOT. Any sale of Property Segment 2 (as defined in the CSXT

Permit) shall be subject to any required approvals from the party with the requisite authority over Bolling AFM (Joint Base Anacostia-Bolling) military facility, if applicable.

2. DDOT may exercise the Option by notifying CSXT in writing ("Offer Notice") no later than the expiration or termination of the CSXT Permit that DDOT desires to exercise the Option. The Offer Notice shall include a proposed price for the SB ROW based on an appraisal obtained by DDOT based on assumptions and scope agreed to by CSXT and DDOT prior to the appraisal being undertaken to the extent permitted by applicable law and DDOT's Right of Way Manual ("ROW Manual"). Upon CSXT's receipt of the Offer Notice, the parties shall use commercially reasonable efforts and negotiate in good faith to reach agreement on mutually agreeable terms for DDOT's acquisition of the SB ROW to the extent permitted by applicable law and the ROW Manual. For purposes of clarification, CSXT shall not be obligated to agree to the purchase price proposed by DDOT (whether based on the appraisal described above or not) or to convey the SB ROW, and DDOT shall not be obligated to acquire the SB ROW, unless and until the parties have reached terms for such transaction agreeable to each party in its sole discretion. DDOT's Option right shall terminate, if timely exercised, if conveyance of the SB ROW has not taken place within one year after the date DDOT delivers the Offer Notice to CSXT or such other time upon which the parties mutually agree.

3. To the extent required for the acquisition of the SB ROW, in connection with the exercise by DDOT of the Option, CSXT shall use commercially reasonable efforts to obtain STB Approval (defined below) and such conveyance shall be subject to STB's Public Use or Trails Conditions, if applicable.

4. To the extent required for acquisition of the SB ROW, DDOT shall use commercially reasonable efforts to obtain approvals from the Federal Transit Authority, Federal Highway Administration, D.C. Council, or other oversight entity, as applicable.

5. To the extent permitted by the National Environmental Policy Act ("NEPA") and DDOT's ROW Manual, either party shall have the right to disclose the existence of the Option.

6. DDOT acknowledges that CSXT previously provided DDOT with copies of the restrictive covenants that CSXT customarily requires to be recorded with any documents transferring title in real property by CSXT to a third party and expects that such covenants, subject to the outcome of certain environmental testing of the SB ROW being undertaken by DDOT pursuant to the CSXT Permit, would be recorded against the SB ROW if CSXT conveys the same to DDOT pursuant to the Option.

7. Closing under the Option shall not occur unless the following conditions has been satisfied, the same being a precondition to CSXT's obligation to convey the SB ROW to DDOT: (i) CSXT shall have received a final non-appealable order from the Surface Transportation Board ("STB") approving CSXT's abandonment and/or trails use through the National Trails System Act of the SB ROW and/or the entire Shepherds Branch rail line, as applicable, or such other approval from STB with respect to the transaction, as is mutually acceptable to the parties ("STB Approval"); and (ii) CSXT shall have obtained from the District of Columbia the necessary permits and approvals needed from any agency of the District of Columbia to commence and construct the VAT Project in accordance with the build alternative, if any, determined to be the acceptable alternative pursuant to the Record of Decision issued in connection with the Environmental Impact Statement being undertaken pursuant to NEPA as of the date hereof. Notwithstanding the foregoing, such permits shall be obtained only after submission of appropriate applications and compliance with all applicable ordinances, regulations and statutes associated therewith.

8. CSXT and the CA have agreed to address the following matters as soon as possible, but in all events on or before closing under the Option: (i) Permits and approvals (other than the Construction Public Space Permit) for construction of the Virginia Avenue Tunnel Project; (ii) First Source and CBE agreements. The CA is joining this Amendment No. 1 only as pertains to this Section II(B)(8).

III. OTHER

- A. Capitalized Terms. Capitalized terms used but not defined in this Amendment No. 1 shall have the same meaning as defined in the Term Sheet Agreement.
- B. Full Force and Effect. Except as modified by this Amendment No. 1, the Term Sheet Agreement remains in full force and effect in accordance with its terms.

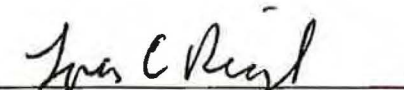
[Signatures on Following Page]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment No. 1 as of the date first written above.

DISTRICT OF COLUMBIA, by and through the
District Department of Transportation

By: 
Name: Terry Bellamy
Title: Director

CSX TRANSPORTATION, INC.

By: 
Name: Louis E. Renjel, Jr.
Title: Vice-President

AGREED – ONLY AS TO SECTION II(B)(8):

DISTRICT OF COLUMBIA, by and through the Office
Of the City Administrator

By: 
Name: Allen Y. Lew
Title: City Administrator

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
<hr/>)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 15



DISTRICT DEPARTMENT OF TRANSPORTATION
PUBLIC RIGHT-OF-WAY OCCUPANCY PERMIT



Inspections/Enforcement: (202) 645-7050

Date: DECEMBER 21, 2012 Permit No. PA-LTO-_____

Permittee: CSX TRANSPORTATION, INC.

Address: UNDER VIRGINIA AVE SE GENERALLY BETWEEN 2ND ST SE AND 12TH ST SE, WASHINGTON, DC – AS MORE PARTICULARLY SHOWN ON EXHIBIT A OF THE TERMS AND CONDITIONS ATTACHED HERETO

Pursuant to the approval by the District Department of Transportation ("DDOT" or "Department") on December 21, 2012, permission is hereby granted to CSX TRANSPORTATION, INC. ("CSXT" or "Permittee"), subject to the terms of this Permit including, without limitation, the Terms and Conditions attached to this Permit, to use and occupy exclusively a portion of the Public Right of Way located under Virginia Avenue, SE generally from 2nd Street, SE to 12th Street, SE, the location and dimensions of which are more particularly shown in Exhibit A of the Terms and Conditions as shall be amended as described in the Terms and Conditions, hereunto annexed and made a part hereof (collectively, the "Virginia Avenue Tunnel ROW"), where Permittee will occupy the Virginia Avenue Tunnel ROW with a tunnel, railroad tracks and related appurtenances for railroad purposes.

Occupancy Times and Days: 24 hours a day, 7 days a week

Occupancy Period: The date hereof through the duration of the Virginia Avenue Tunnel Reconstruction Improvements (defined in the Terms and Conditions) in the Virginia Avenue Tunnel ROW being used for railroad purposes

Compensation: \$10.00 for exclusive occupancy of the Virginia Avenue Tunnel ROW during the Occupancy Period

- The Permittee and DDOT shall be bound by all terms listed herein, as well as the Terms and Conditions attached to this Permit.
- No deviation from the Terms and Conditions that supplement this Permit shall be allowed without prior permission from DDOT as provided for in the Terms and Conditions attached to this Permit.
- The Permittee agrees to occupy the public right-of-way only to the extent as set forth in this Permit and the Terms and Conditions attached to this Permit.
- Upon termination of this Permit, the Permittee shall suspend all occupancy of the public right-of-way and all activities authorized in the public right-of-way under this Permit except for that occupancy and those activities authorized under other permits, DCMR, the District of Columbia Code, or applicable federal laws.

NAME AND TITLE OF DDOT APPROVER: _____

SIGNATURE: _____ DATE: _____

**GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C.**

**TERMS AND CONDITIONS
FOR THE
PUBLIC RIGHT OF WAY OCCUPANCY PERMIT
FOR
CSX TRANSPORTATION, INC.**

PREAMBLE

This Permit is being granted to **CSX TRANSPORTATION, INC.** (“CSXT” or “Permittee”).

RECITALS

WHEREAS, CSXT currently owns and operates certain railroad improvements, including without limitation, tracks and a tunnel running, in part, under Virginia Avenue, SE (“Existing Virginia Avenue Tunnel Improvements”) which were largely constructed in 1905 pursuant to the Acts (defined in Article IV.D below); and

WHEREAS, because of their age, condition and 21st Century infrastructure requirements, CSXT needs to reconstruct the Existing Virginia Avenue Improvements running, in part, under Virginia Avenue, SE (“Virginia Avenue Tunnel Reconstruction Improvements”);

WHEREAS, the District Department of Transportation (“DDOT” or “Department”) and the United States Federal Highway Administration (“FHWA”) are currently preparing an Environmental Impact Statement (“EIS”) pursuant to the National Environmental Policy Act, 42 USCA § 4321 et seq. (“NEPA”) to determine which, if any, of three (3) build alternatives currently described in that Draft Environmental Impact Statement dated September 7, 2012 (“DEIS”), will be an acceptable alternative for the Virginia Avenue Tunnel Reconstruction Improvements, if any; and

WHEREAS, the NEPA process will conclude with the issuance of a record of decision (“Record of Decision”) which may select one of the build alternatives, if any, pursuant to which Permittee may construct the Virginia Avenue Tunnel Reconstruction Improvements or adopt the “No Build alternative” identified in the DEIS; and

WHEREAS, each of the build alternatives identified in the DEIS provides for the construction of the Virginia Avenue Tunnel Reconstruction Improvements just to the south of the Existing Virginia Avenue Tunnel Improvements; and

WHEREAS, if the Record of Decision identifies a build alternative for the construction of the Virginia Avenue Tunnel Reconstruction Improvements, Permittee shall have the right to construct the Virginia Avenue Tunnel Reconstruction Improvements including a tunnel, railroad tracks and related improvements and appurtenances in a manner set forth in the Record of Decision; and

WHEREAS, pursuant to D.C. Official Code §§ 9-101.01 *et seq.*, the Government of the District of Columbia (“the District” or “DC”) has jurisdiction and control over the streets and public right of way of the District of Columbia; and

WHEREAS, D.C. Official Code §§ 10-1141.01 *et seq.*, 50-921.05 and 50-921.06 authorizes the Department to establish the terms and conditions (“Terms and Conditions”) of a Permit for the Virginia Avenue Tunnel ROW (defined below).

NOW, THEREFORE, based upon the above recitals, Permittee hereby agrees to the Terms and Conditions of this Permit as follows:

ARTICLE I Responsibilities and Rights of DDOT and Location of Virginia Avenue Tunnel ROW

- A. Department hereby grants unto Permittee from the date hereof through the duration of the Virginia Avenue Tunnel Reconstruction Improvements the right to occupy and use exclusively the Virginia Avenue Tunnel Right of Way, the location and dimensions of which are substantially as shown in Exhibit A (“Virginia Avenue Tunnel ROW”), for the Virginia Avenue Tunnel Reconstruction Improvements for railroad purposes.
- B. As of the date hereof, Exhibit A generally identifies the Virginia Avenue Tunnel ROW as the area covered by all three build alternatives identified in the DEIS. CSXT shall only be allowed to construct the Virginia Avenue Tunnel Reconstruction Improvements in the location identified in the Record of Decision, if any. Therefore, upon completion of the Virginia Avenue Tunnel Reconstruction Improvements in accordance with the Record of Decision, this Permit shall be automatically and without further action amended to reduce the Virginia Avenue Tunnel ROW shown on Exhibit A to reflect the as-built location of the Virginia Avenue Tunnel Reconstruction Improvements. Within thirty (30) days of the Virginia Avenue Tunnel Reconstruction Improvements being constructed, CSXT shall submit to DDOT an amendment to this Permit to replace Exhibit A with a revised Exhibit A that identifies the revised Virginia Avenue Tunnel ROW based on the actual location of the Virginia Avenue Tunnel Reconstruction Improvements consistent with the Record of Decision and the foregoing provisions of this Article I.B.
- C. Department and CSXT shall cooperate to coordinate CSXT’s access to public right of way outside of the Virginia Avenue Tunnel ROW for the operation, maintenance, and safety of the Virginia Avenue Tunnel. Department and CSXT shall cooperate to coordinate Department’s activities in the portion of the public right of way proximate to the Virginia Avenue Tunnel ROW to avoid adverse impact on the operation, maintenance, and safety of the Virginia Avenue Tunnel.

ARTICLE II Responsibilities and Rights of CSXT

- A. Permittee shall occupy the Virginia Avenue Tunnel ROW with the Virginia Avenue Tunnel Reconstruction Improvements for railroad purposes. Permittee shall use the Virginia Avenue Tunnel ROW for the purposes aforesaid and for no other purpose.
- B. Permittee shall pay \$10 for this Permit.
- C. Nothing in this Permit shall relieve Permittee of its obligation to obtain any and all other required permits and licenses from other agencies of the District of Columbia, if any, to operate the Railroad Improvements, in the Virginia Avenue Tunnel ROW, or to comply with federal and local laws applicable to Permittee's operations in the Virginia Avenue Tunnel ROW during the term of this Permit.
- D. Permittee shall be solely responsible for and bear all costs related to Permittee's use of and operations in the Virginia Avenue Tunnel ROW.
- E. If any provision of this Permit, or the application thereof to any person or circumstances, shall, for any reason and to any extent, be invalid or unenforceable, the remainder of this Permit and the application of such provision to other persons or circumstances shall not be affected thereby but rather shall be enforceable to the fullest extent permitted by law.
- F. Notwithstanding anything contained in this Permit to the contrary, Permittee shall assume sole responsibility for and shall indemnify, save harmless, and defend the District from and against all claims, actions, or legal proceedings arising, in part or in whole, by Permittee's use and occupation of the Virginia Avenue Tunnel ROW.
- G. Permittee shall maintain at all times commercial general liability insurance policies in commercially reasonable amounts for the Virginia Avenue Tunnel ROW and shall name the District as an additional insured thereunder. Notwithstanding the foregoing, DDOT recognizes that CSXT self-insures and need not obtain separate insurance or otherwise satisfy the previous sentence so long as CSXT continues to self-insure.

ARTICLE III Key Officials and Contact Persons

All notices, requests, modifications, and other communications shall be in writing and shall be personally delivered or mailed via first class mail, delivered by overnight courier, or emailed to the addresses below:

A. For DDOT

B. For CSXT

KEY OFFICIAL

Terry Bellamy
Director
DDOT
55 M St SE – 5th Floor
Washington DC 20003
202-671-2740 (office)
Terry.Bellamy@dc.gov

KEY OFFICIAL

Louis Renjel
VP Strategic Infrastructure
CSXT Transportation, Inc.
500 Water Street
Jacksonville FL 32202
Phone (904) 359-3770
Louis_Renjel@csx.com

CONTACT PERSON

Matthew Marcou
Deputy Associate Director
DDOT/PSRA
55 M St SE – 5th Floor
Washington DC 20003
202-478-1448 (office)
Matthew.Marcou@dc.gov

CONTACT PERSON

Stephen Flippin
CSXT Transportation, Inc.
1331 Pennsylvania Ave NW # 560
Washington DC 20004
Phone (202) 626-4931
Stephen_Flippin@csx.com

CSXT and DDOT may change the persons, addresses, and numbers for receipt of notices, requests, modifications and other communications by providing written notice to the applicable Key Official and Contact Person at the last noticed address.

ARTICLE IV Term of Permit, Modification, Termination

- A. The Permit shall be effective on December 21, 2012, and shall remain in effect for the duration of the Virginia Avenue Tunnel Reconstruction Improvements in the Virginia Avenue Tunnel ROW being used for railroad purposes.
- B. Notwithstanding the foregoing Article IV.A or any other provision in this Permit to the contrary, if the Record of Decision (defined above) selects the “no build alternative” for the Virginia Avenue Tunnel Reconstruction Improvements, this Permit shall terminate and be of no further force and effect.
- C. The following shall be the process for the termination of the Permit:
 - 1. The Permit shall terminate only upon written consent executed by Permittee and Department; or
 - 2. Department shall have the right to terminate and revoke the Permit in the event of a major casualty to the Virginia Avenue Tunnel Reconstruction Improvements which damages the Virginia Avenue Tunnel Reconstruction Improvements and materially and adversely impacts (a) the physical structure and stability of the Virginia Avenue Tunnel ROW or, (b) the immediate health, safety, or welfare of the

public using Virginia Avenue, SE. Such right to terminate is subject to the right of the Permittee to cure and may be exercised by Department only if Permittee fails to remove or correct the condition that created the impact on the health, safety, or welfare of the public using Virginia Avenue, SE within a reasonable time or to commence to rebuild the Virginia Avenue Tunnel Reconstruction Improvements as approved by this Permit or as permitted by law, which shall be evidenced by the submission of an application for a building permit within one (1) year after the occurrence of the major casualty, subject to further extension due to force majeure and the application of District or federal law. If Permittee fails to comply with the requirements of this Article IV.C.2, Department may give notice of termination and revoke the Permit by the giving of thirty (30) days prior notice thereof to Permittee.

- D. DDOT and CSXT shall retain each of their respective rights under and expressly reserve and do not waive any rights or remedies under applicable federal laws and acts including Ch. 29, 78 Acts of Congress (February 5, 1867) (the "1867 Act"), 16 Stat 3 (March 18, 1869) (the "1869 Act"), 16 Stat 78 (March 25, 1870) (the "1870 Act"), 31 Stat 767 (February 12, 1901) (the "1901 Act" and collectively with the 1867 Act, 1869 Act and 1870 Act, the "Acts"), Section 10501(b) of the federal Interstate Commerce Commission Termination Act of 1995, 49 U.S.C. § 10501(b) and Section 20106 of the Federal Railroad Safety Act, 49 U.S.C. § 20106, all of which are expressly preserved and not waived. In furtherance of the foregoing, the parties hereto recognize that the Virginia Avenue Tunnel Reconstruction Improvements are integrally related to interstate rail commerce and railroad operations. This Permit shall not affect either of DDOT or CSXT's rights pursuant to the foregoing nor is this Permit intended to convey title or provide proof of ownership of the public right of way by Permittee.

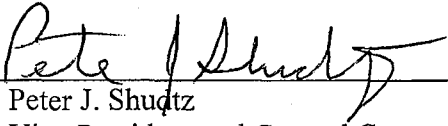
ARTICLE V Required and Standard Clauses

- A. **Assignment.** CSXT may transfer or assign the Permit in connection with a transfer or assignment of the railroad operations conducted in the Virginia Avenue Tunnel ROW.
- B. **Confidential Information.** Department and Permittee will use, restrict, safeguard and dispose of all information related to the Permit and these Terms and Conditions, in accordance with all relevant federal and local statutes, regulations, and policies.
- C. **Recitals.** The Recitals are incorporated by reference.

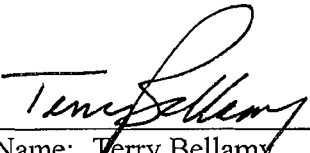
Signatures on Following Page

IN WITNESS WHEREOF, the undersigned has caused these presents to be executed on the date specified below.

CSX TRANSPORTATION, INC.

By: 
Name: Peter J. Shutz
Title: Vice-President and General Counsel

**DISTRICT OF COLUMBIA,
by the District Department of Transportation**

By: 
Name: Terry Bellamy
Title: Director

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 16

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
)

DECLARATION OF MAUREEN COHEN HARRINGTON

I, Maureen Cohen Harrington declare as follows:

- 1) I am over the age of 18 and have the capacity to make this statement.
- 2) I am a resident of Washington, D.C.
- 3) I am a member of The Committee of 100 On The Federal City, which is one of the District of Columbia’s oldest community-based advocacy organizations, with standing subcommittees devoted to, among other things, parks and environmental issues, historic preservation and city planning.
- 4) I reside in the immediate vicinity of the Virginia Avenue Tunnel. In fact, due to the proximity of my home to the Virginia Avenue Tunnel, I am described as a so-called “front row” resident in the Final Environmental Impact Statement and Record of Decision. *See* Exhibit 21, at 5-14.
- 5) As a front row resident, I will be directly affected by the noise, vibrations, air pollutants, traffic and parking problems, utility disruptions, and other environmental impacts and “inconveniences” from the construction to enlarge the Virginia Avenue Tunnel into two new, larger freight rail tunnels.

- 6) In light of the “inconvenience” to me, one of the mitigation measures included in the FEIS will be a monetary payment to me for each month that the construction is ongoing and the possibility of a separate monetary payment in the event that I am forced to sell my residence during the construction period. Exhibit 6 at S-32 and Exhibit 21 at 5-14.
- 7) In addition to the so called “inconveniences resulting from major construction activities” (Exhibit 6, S-11), I fear that I will suffer injury to my person and/or property as a result of environmental impacts associated with the operation of the newly expanded Virginia Avenue Tunnels, resulting from the vastly increased volume of freight rail traveling through the tunnels, at potentially much greater speeds than the speed that is currently allowed. *See, e.g.* Exhibit 2 at 2-4 to 2-5.
- 8) I also fear the potentially severe and catastrophic consequences of a rail disaster or a terrorist attack targeting trains traveling through the tunnels, and believe that the enlarged tunnels will make a more attractive target for a terrorist attack.
- 9) My fear of an environmental disaster is supported by findings made in the 2007 Railroad Realignment Feasibility Study (RRFS) issued by the National Capital Planning Commission. That study indicates that “The line’s location raises security concerns because railroads carry hazardous materials. Railroads are a safe method of transport, but hazardous materials on this rail line would be a tempting target for attack because the line is in the Monumental Core. An attack here could have dramatic effects[.]” Exhibit 23.

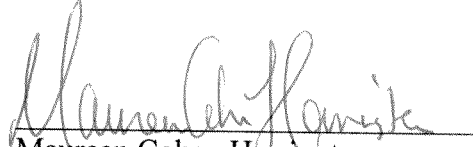
- 10) I appeared and testified at public meetings in opposition to the Virginia Avenue tunnel expansion on 11/30/2011, 5/21/2012, 7/31/2013, 7/1/2014, and 7/31/2014, and filed written comments on 10/14/2011, 7/30/2012, 9/25/2013, and 8/14/2014. My opposition was premised on my concerns regarding the environmental impacts of the new tunnels and the risk of catastrophic consequences of a major rail spill incident or terrorist attack involving trains passing through the future Virginia Avenue Tunnels and throughout this route along the monument core.
- 11) I have agreed to permit the Committee of 100 on the Federal City to advance my interests by pursuing legal action to have the Environmental Impact Statement, and the FHWA Record of Decision that followed, declared unlawful and to stop any and all federal and District of Columbia permits and approvals that rely on the Environmental Impact Statement that was issued for the Virginia Avenue Tunnel expansion project.

[Signature Appears on the Following Page]

I declare, under the penalty of perjury that the foregoing is true and correct:

Signed

Date: 11/12/2014


Maureen Cohen Harrington

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 17



DISTRICT DEPARTMENT OF TRANSPORTATION

PUBLIC RIGHT-OF-WAY OCCUPANCY PERMIT



Inspections/Enforcement: (202) 645-7050

Date: MARCH 30, 2014

Permit No. PA-LTO-CSX-VA Ave Tunnel ROW 2

Permittee: CSX TRANSPORTATION, INC.

Address: UNDER VIRGINIA AVE SE GENERALLY BETWEEN 2ND ST SE AND 12TH ST SE, WASHINGTON, DC AND AT-GRADE TO THE EAST OF 12TH ST SE- AS MORE PARTICULARLY SHOWN ON EXHIBIT A OF THE TERMS AND CONDITIONS ATTACHED HERETO

Pursuant to the approval by the District Department of Transportation (“DDOT” or “Department”) on December 21, 2012, permission is hereby granted to CSX TRANSPORTATION, INC. (“CSXT” or “Permittee”), subject to the terms of this Permit including, without limitation the Terms and Conditions attached to this Permit, to use and occupy exclusively a portion of the Public Right of Way located under Virginia Avenue, SE generally from 2nd Street, SE to 12th Street, SE, and located under Virginia Avenue, SE and at-grade as applicable to the east of 12th Street, SE, the location and dimensions of which are more particularly shown in Exhibit A of the Terms and Conditions as shall be amended as described in the Terms and Conditions hereunto annexed and made a part hereof (collectively, the “Virginia Ave Tunnel ROW”) where Permittee will occupy the Virginia Ave Tunnel ROW with a tunnel, railroad tracks and related appurtenances for railroad purposes.

Occupancy Times and Days: 24 hours a day, 7 days a week

Occupancy Period: The date hereof through the duration of the Virginia Avenue Tunnel Reconstruction Improvements (defined in the Terms and Conditions) in the Virginia Avenue Tunnel ROW being used for railroad purposes

Compensation: \$10.00 for exclusive occupancy of the Virginia Ave Tunnel ROW during the Occupancy Period

- The Permittee and DDOT shall be bound by all terms listed herein, as well as the Terms and Conditions attached to this Permit.
- No deviation from the Terms and Conditions that supplement this Permit shall be allowed without prior permission from DDOT as provided for in the Terms and Conditions attached to this Permit.
- The Permittee agrees to occupy the public right-of-way only to the extent as set forth in this Permit and the Terms and Conditions attached to this Permit.
- Upon termination of this Permit, the Permittee shall suspend all occupancy of the public right-of-way and all activities authorized in the public right-of-way under this Permit except for that occupancy and those activities authorized under other permits, DCMR, the District of Columbia Code, or applicable federal laws.

NAME AND TITLE OF DDOT APPROVER:

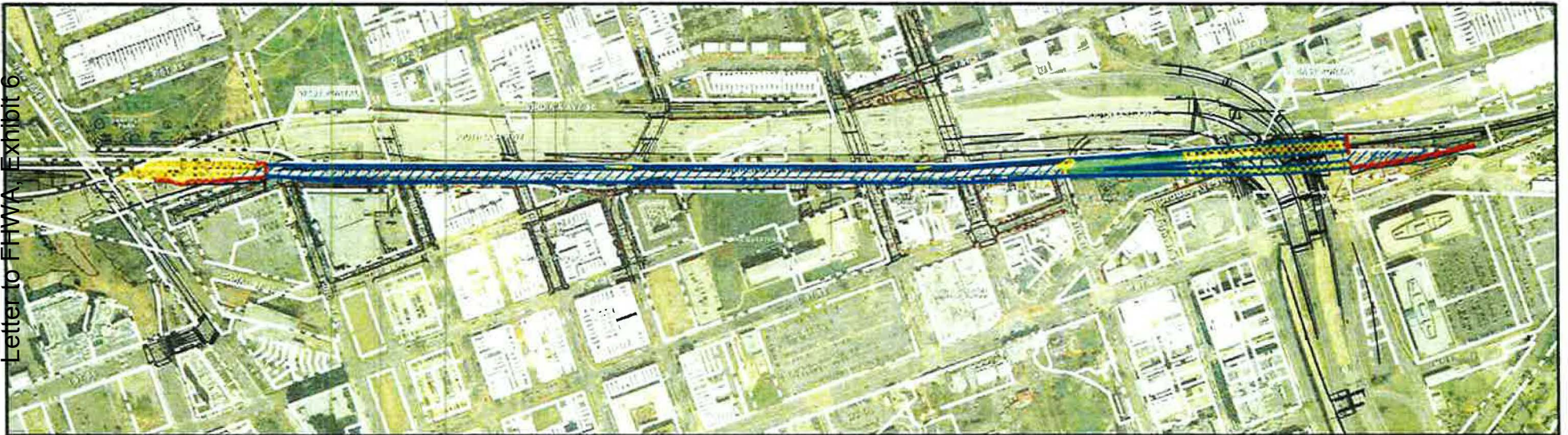
MATTHEW J MARCOU, DEPUTY ASSOCIATE DIRECTOR, PUBLIC SPACE REGULATION ADMINISTRATION

SIGNATURE:

DATE:

04/30/14

EXHIBIT A
TO
DDOT PUBLIC RIGHT OF WAY
OCCUPANCY PERMIT
PERMIT # _____
DATED _____



Letter to FHWA Exhibit 6

ACKNOWLEDGED
DDOT _____
CSX _____
DECEMBER 21, 2012

LEGEND

- EXISTING PROPERTY LINE/ROW
- EXISTING TRACKS
- EXISTING TUNNEL
- OUTSIDE ENVELOPE COMBINED ALTERNATIVES
- RETAINING WALLS COMBINED ALTERNATIVES
- DDOT PUBLIC RIGHT OF WAY
- OTHERS
- RIGHTS UNDER INTERSTATES SUBJECT TO RECORD OF DECISION FROM FHWA

SCALE FEET
0 100 200 300 400 500

DATE: 12/21/12

**GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C.**

**FIRST AMENDMENT TO TERMS AND CONDITIONS
FOR THE
PUBLIC RIGHT OF WAY OCCUPANCY PERMIT
FOR
CSX TRANSPORTATION, INC.**

RECITALS

WHEREAS, District Department of Transportation (“DDOT”) issued a certain Permit to CSX Transportation, Inc. (CSXT) dated December 21, 2012 (Permit No. PA-LTO-CSX-VA Ave Tunnel ROW) which consisted of the Permit cover page (“Cover”), those Terms and Conditions for the Public Way Occupancy Permit for CSX Transportation, Inc. (“Terms and Conditions”) and Exhibit A thereto (collectively the Cover, the Terms and Conditions and Exhibit A are the “Permit”); and

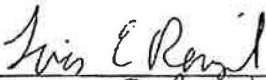
WHEREAS, CSXT and DDOT agree that certain clarifications need to be made to the Cover so that it is consistent with the Terms and Conditions and Exhibit A thereto, as it was always the intention of the parties that the Permit cover both the below grade space between 2nd and 12th Streets, S.E. and certain at grade areas east of 12th Street, S.E., all as shown on Exhibit A.

NOW, THEREFORE, the parties agree (i) to make such modifications to the Permit cover page as shown on Exhibit B and (ii) that the Permit shall include the new cover page, the Terms and Conditions, Exhibit A and this First Amendment.

1. This First Amendment amends certain terms and conditions of the Permit simply to clarify the Cover and make it harmonious with the Terms and Conditions and Exhibit A. All other terms and conditions of the Permit that are not modified by this First Amendment shall remain in full force and effect. Hereafter, the Cover, modified as provided in Exhibit B, the Terms and Conditions, as modified by this First Amendment, and Exhibit A shall constitute the entire Permit.
2. Counterparts. This First Amendment may be executed in counterparts, which shall have the full force and effect of an original document.
3. Recitals. The recitals are incorporated by reference.

IN WITNESS WHEREOF, the undersigned has caused these presents to be executed on the date specified below.

CSX TRANSPORTATION, INC.

By: 
Name: Louis E. Renje
Title: Vice President - Strategic Infrastructure

**DISTRICT OF COLUMBIA,
by the District of Columbia Department of Transportation**

By: _____
Name:
Title:

**GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C.**

**FIRST AMENDMENT TO TERMS AND CONDITIONS
FOR THE
PUBLIC RIGHT OF WAY OCCUPANCY PERMIT
FOR
CSX TRANSPORTATION, INC.**

RECITALS

WHEREAS, District Department of Transportation (“DDOT”) issued a certain Permit to CSX Transportation, Inc. (CSXT) dated December 21, 2012 (Permit No. PA-LTO-CSX-VA Ave Tunnel ROW) which consisted of the Permit cover page (“Cover”), those Terms and Conditions for the Public Way Occupancy Permit for CSX Transportation, Inc. (“Terms and Conditions”) and Exhibit A thereto (collectively the Cover, the Terms and Conditions and Exhibit A are the “Permit”); and

WHEREAS, CSXT and DDOT agree that certain clarifications need to be made to the Cover so that it is consistent with the Terms and Conditions and Exhibit A thereto, as it was always the intention of the parties that the Permit cover both the below grade space between 2nd and 12th Streets, S.E. and certain at grade areas east of 12th Street, S.E., all as shown on Exhibit A.

NOW, THEREFORE, the parties agree (i) to make such modifications to the Permit cover page as shown on Exhibit B and (ii) that the Permit shall include the new cover page, the Terms and Conditions, Exhibit A and this First Amendment.

1. This First Amendment amends certain terms and conditions of the Permit simply to clarify the Cover and make it harmonious with the Terms and Conditions and Exhibit A. All other terms and conditions of the Permit that are not modified by this First Amendment shall remain in full force and effect. Hereafter, the Cover, modified as provided in Exhibit B, the Terms and Conditions, as modified by this First Amendment, and Exhibit A shall constitute the entire Permit.

2. Counterparts. This First Amendment may be executed in counterparts, which shall have the full force and effect of an original document.

3. Recitals. The recitals are incorporated by reference.

IN WITNESS WHEREOF, the undersigned has caused these presents to be executed on the date specified below.

CSX TRANSPORTATION, INC.

By: _____
Name:
Title:

**DISTRICT OF COLUMBIA,
by the District of Columbia Department of Transportation**


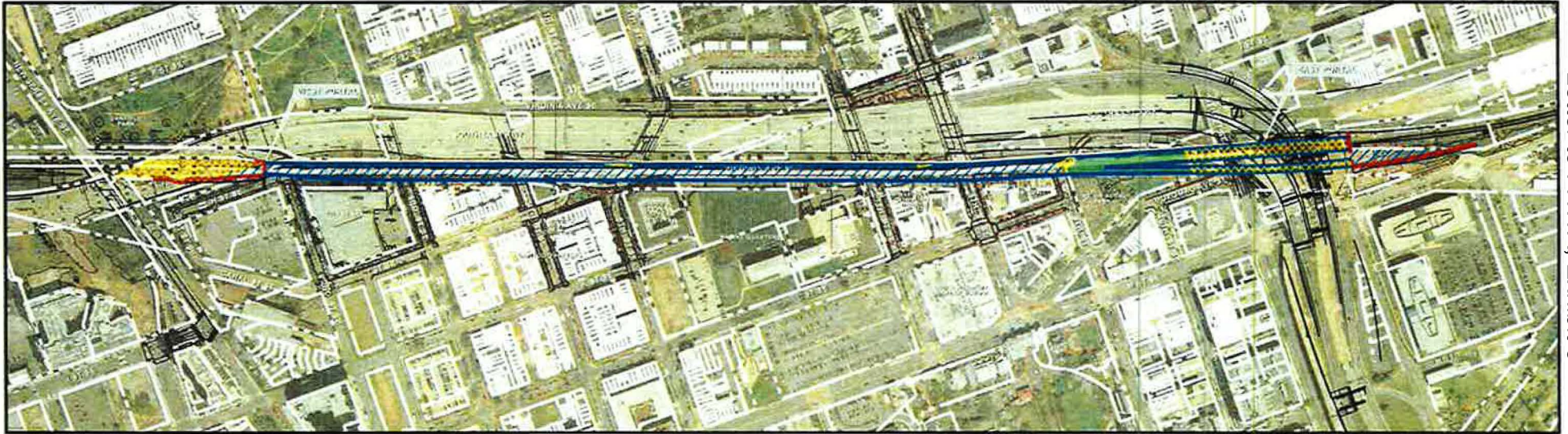
By: 
Name:
Title:

EXHIBIT A
TO
DDOT PUBLIC RIGHT OF WAY
OCCUPANCY PERMIT
PERMIT # _____
DATED _____



Letter to FHWA, Exhibit 6

LEGEND

- EXISTING PROPERTY LINE / ROW
- EXISTING TRACKS
- EXISTING TUNNEL
- OUTSIDE ENVELOPE COMBINED ALTERNATIVES
- RETAINING WALLS COMBINED ALTERNATIVES
- DDOT PUBLIC RIGHT OF WAY
- OTHERS
- RIGHTS UNDER INTERSTATE SUBJECT TO RECORD OF DECISION FROM FHWA

SCALE: 1" = 100' FEET

ACKNOWLEDGED

DDOT _____

CSX _____

DECEMBER 21, 2012

EXHIBIT B

Address shall read: Under Virginia Avenue SE Generally Between 2nd Street SE and 12th ST SE, Washington DC and at-grade to the east of 12th Street, SE -As more particularly shown on Exhibit A of the Terms and Conditions attached hereto.

Pursuant to the approval by the District Department of Transportation (“DDOT” or “Department”) on December 21, 2012, permission is hereby granted to **CSX TRANSPORTATION, INC.** (“CSXT” or “Permittee”), subject to the terms of this Permit including, without limitation the Terms and Conditions attached to this Permit, to use and occupy exclusively a portion of the Public Right of Way located under Virginia Avenue, SE generally from 2nd Street, SE to 12th Street, SE, and located under Virginia Avenue, SE and at-grade as applicable to the east of 12th Street, SE, the location and dimensions of which are more particularly shown in Exhibit A of the Terms and Conditions as shall be amended as described in the Terms and Conditions hereunto annexed and made a part hereof (collectively, the “**Virginia Ave Tunnel ROW**”) where Permittee will occupy the Virginia Ave Tunnel ROW with a tunnel, railroad tracks and related appurtenances for railroad purposes.

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
<hr/>)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 18

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. Contract Number DCKA-2008-R-0146	Page of Pages 1 31
2. Amendment/Modification Number 008	3. Effective Date See Block 18C	4. Requisition/Purchase Request No.	5. Solicitation Caption
6. Issued By: Office of Contracting and Procurement District Department of Transportation 2000 14th Street, NW; 6th Floor Washington, DC 20009		7. Administered By (If other than line 6) D.C. Department of Transportation Transportation Operations Administration 2000 - 14th Street, N.W., 7th Floor Washington, D.C. 20009	
8. Name and Address of Contractor (No. Street, city, country, state and ZIP Code) Skanska/Facchina a Joint Venture 295 Bendix Road, Suite 400 Virginia Beach, VA 23452		9A. Amendment of Solicitation No.	
Code: _____ Facility: _____		9B. Dated (See Item 11)	
		10A. Modification of Contract/Order No. DCKA-2008-R-0146	
		10B. Dated (See Item 13) February 11, 2011	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS			
<p>The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or fax which includes a reference to the solicitation and amendment number. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or fax, provided each letter or telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.</p>			
12. Accounting and Appropriation Data (If Required)			
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14			
(X)	A. This change order is issued pursuant to: (Specify Authority) The changes set forth in Item 14 are made in the contract/order no. in item 10A.		Book 1, Section O
	B. The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation date, etc.) set forth in item 14, pursuant to the authority of 27 DCMR, Chapter 36, Section 3601.2.		
	C. This supplemental agreement is entered into pursuant to authority of:		
	D. Other (Specify type of modification and authority)		
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return <u>1</u> copies to the issuing office.			
14. Description of amendment/modification (Organized by UCF Section headings, including solicitation/contract subject matter where feasible.)			
Total Amount of Change Order		\$4,171,044	
Total Contract Value (including this Change Order)		\$265,075,044	
Fixed Date Time Limit For This Contract Prior to Approval of this Work		July 10, 2013	
Fixed Date Time Limit For This Contract upon Approval of this Work		July 10, 2013	
(Refer to attached documents for additional information)			
Except as provided herein, all terms and conditions of the document referenced in Item (9A or 10A) remain unchanged and in full force and effect			
15A. Name and Title of Signer (Type or print) James K Brookshire III, Vice President		16A. Recommended: Contracting Officer's Technical Representative	
15B. Name of Contractor <i>James K Brookshire III</i> 3/9/11 *(Signature of person authorized to sign)		16B. District of Columbia <i>Jared Cherifi</i> (Signature)	
17A. Recommended Chief Engineer, District Department of Transportation		18A. Approved: Jerry M. Carter, Contracting Officer DDOT	
17B. District of Columbia <i>[Signature]</i> 5/25/2011 (Signature of person authorized to sign)		18B. District of Columbia <i>Jerry M. Carter</i> (Signature of Contracting Officer)	
		18C. Date Signed 5/14/11	

Attachment A – Supporting Documentation
 District Department of Transportation
 11th Street Bridge Replacement

Federal-Aid Project: FAP IM-295-2 (185)
 Contract Number: DCKA-2008-R-0146
 Change Order Number: 008

SUPPORTING DOCUMENTATION

SCOPE OF SERVICES

The basis of the Scope of Services outlined in this document is to modify the design of proposed Bridge S-19 to accommodate the proposed construction along the current CSX rail line adjacent to I-695 (Southeast/Southwest Freeway) in Southeast Washington, DC. This is an additional item of Work to be added to the executed Contract; however, in no way shall the additional item of Work be excluded from any contractual requirements set forth in the initial contract or previously executed Change Orders to the Contract. In particular, the Scope of Services to be provided in Change Order 008 shall include the following:

Re-design of Bridge S-19 over the CSX Rail line

The Contractor shall re-design the new proposed bridge structure (S-19) that carries I-695 over the existing CSX Rail line in the vicinity of 11th and M Streets in Southeast Washington, DC. This structure shall be re-designed in such a way as to not preclude the construction of a CSX temporary shoo-fly track (included as Attachment B) and the widening of the CSX Virginia Avenue Tunnel (included in the Request for Proposal documents supplied prior to award). All costs associated, directly or indirectly, with the re-design of Bridge S-19 are included in this Change Order.

The Contractor shall be solely responsible for design coordination and review with CSX representatives, and shall adhere to all standards, specifications, and design request of CSX. Under no circumstances shall this Change Order modify, change, or circumvent any requirements previously outlined by CSX, or any requirements provided or listed in the Conformed Contract.

In addition, the Contractor shall indemnify and hold the District harmless against all claims, losses or delays caused by CSX during the design coordination and review process since the execution of the agreement between CSX Railroad and the District Department of Transportation dated August 23, 2010. Both parties agree that the Scope of Services outlined for Change Order 10 do not address the time prior to the execution of the agreement nor preclude the Contractor from seeking other CSX related utility delays pursuant to the Conformed Contract.

SUPPORTING DOCUMENTATION

In accordance with Book 1, Section O of the Conformed Contract for the 11th Street Bridge Replacement Project, the following is a list of documents to substantiate the proposed Change Order, and are included as reference material for the Change Order:

- Attachment B CSX Temporary Shoo-fly and Diagram of Proposed Bridge Abutment to Accommodate Design
- Attachment C Railroad Agreement between CSX and DDOT

Total Amount of this Change Order

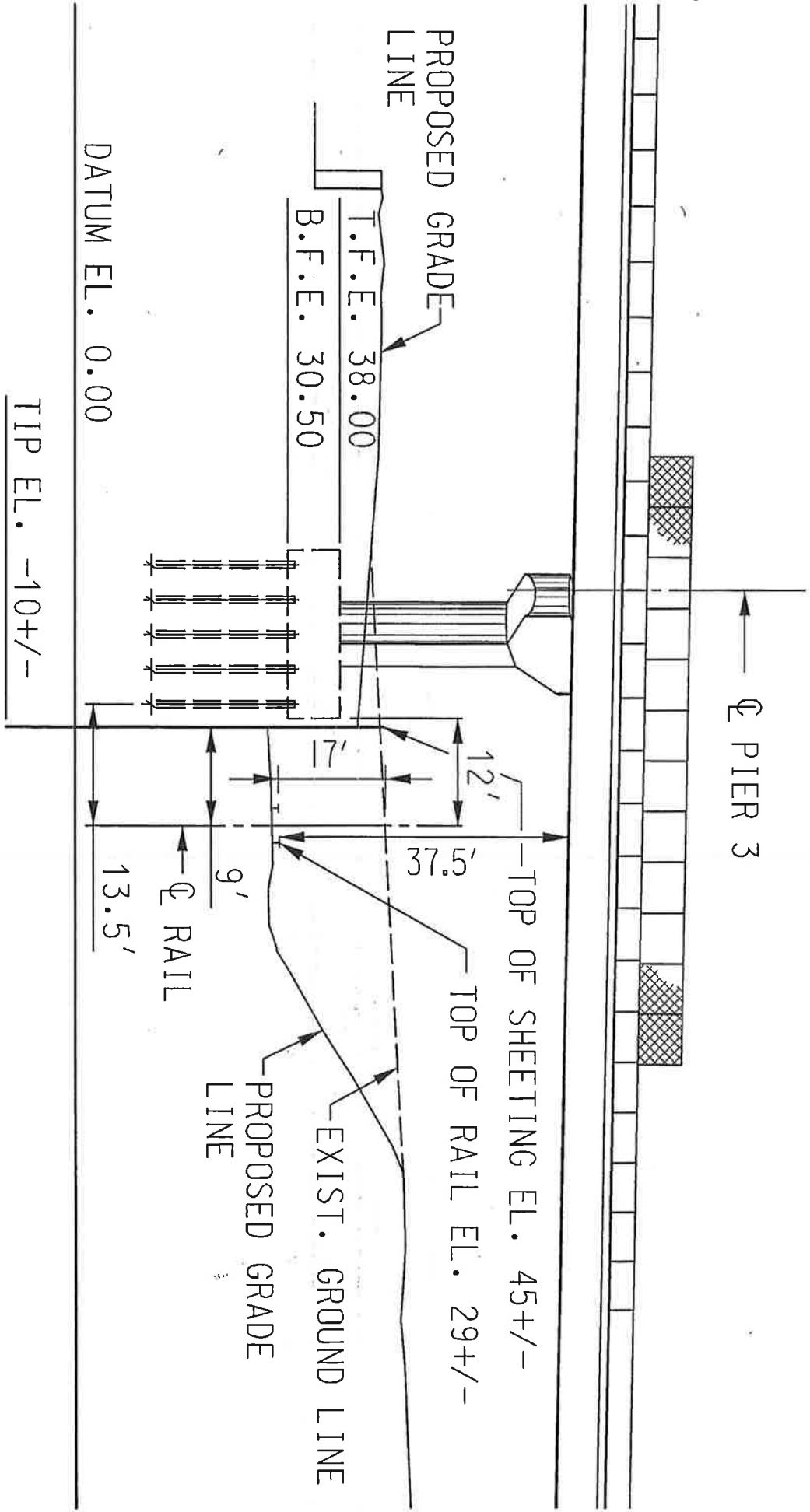
Detail cost breakdown as submitted on C: \$ 4,171,044

DBE Goal

For the additional item of Work described in this Change Order, the DBE goal shall be 15% for design and 6% for construction.

Impact Delay Analysis

Completion Dates:	Project Substantial Completion	May 23, 2013
	Project Final Completion	July 10, 2013



7/27/10

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
<hr/>)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 19

TERM SHEET AGREEMENT

This Term Sheet Agreement is entered into as of the 21st day of December, 2012, by and between CSX Transportation Inc., a Virginia corporation ("CSXT"), and the District of Columbia, a municipal corporation ("District" or "DC"), acting by and through the District Department of Transportation ("DDOT") pursuant to D.C. Official Code §§ 50-921.02, 50-921.04(1)(B), 50-921.04(4)(A), 50-921.05 (2012), by and through the undersigned.

1. 11th Street Bridge. DDOT and CSXT are, contemporaneously with execution of this Agreement, executing a State-Railroad Agreement for the remainder of the 11th Street Bridge project in the form attached hereto as Exhibit A ("Construction Agreement").
2. 12th Street Tunnel Extension. CSXT will revise its current plans for a rebuilt Virginia Avenue Tunnel to include an extension to the east side of 12th Street, SE, to be designed and built at CSXT's cost and expense.
3. CSXT's Occupancy Generally Below Virginia Avenue, SE. DDOT and CSXT are, contemporaneously with the execution of this Agreement, executing a permit in the form attached hereto as Exhibit B.
4. Temporary Construction Public Space Permit.
 - a. If applicable, DDOT shall issue to CSXT a public space permit ("Construction Public Space Permit") for the period during which CSXT undertakes the reconstruction of the Virginia Avenue Tunnel and related improvements including tracks, switches, signals, pipes, wires and other railroad improvements (collectively, the "Railroad Improvements").
 - b. CSXT shall commence the reconstruction work after the issuance of a record of decision (the "Record of Decision") issued in accordance with the National Environmental Policy Act ("NEPA"), but only if the Record of Decision selects one of three build alternatives currently described in that certain Draft Environmental Impact Statement dated September 7, 2012 (as the same may be amended, the "DEIS"), which is being prepared by DDOT and the Federal Highways Administration ("FHWA"), in lieu of selecting the "no build alternative" set forth in the DEIS.
 - c. The reconstruction work shall be completed, if undertaken, in accordance with the Record of Decision.
 - d. The Construction Public Space Permit shall allow CSXT to use and access the public space and right of way reasonably required by CSXT outside the area of CSXT's permanent rights in the Virginia Avenue, SE corridor for construction staging and related purposes during construction of the Railroad Improvements after issuance of the Record of Decision and subject to obtaining construction and related permits and approvals from other agencies of the District.
 - e. As pertains to the Construction Public Space Permit, no public inconvenience fees shall be assessed for the temporary occupancy of public space just east of 11th Street,

SE to the east side of 12th Street, SE that pertain to the extension of the Virginia Avenue Tunnel to the east side of 12th Street, SE.

- f. DDOT shall deliver the Construction Public Space Permit to CSXT promptly after issuance of the Record of Decision and delivery to DDOT of a fully-completed application for the Construction Public Space Permit.

5. Environmental Impact Statement (“EIS”) Process. DDOT shall continue to provide oversight of the EIS process for the Virginia Avenue Tunnel Project as co-lead agency with FHWA. DDOT will partner with FHWA and CSXT to manage the EIS process under FHWA’s *Every Day Counts* initiative and applicable federal law, which is designed to shorten project delivery, enhance project safety, and protect the environment.

6. Other Matters To Be Addressed Hereafter.

- a. CSXT and DDOT have agreed to address additional matters promptly after execution of this Term Sheet Agreement, the Construction Agreement and the permit described in Section 3, but in all events on or before January 31, 2013. Those matters include, but are not limited to, the matters identified below.

- i. Credits to CSXT and DDOT.
- ii. Parkside Bridge.
- iii. Sewer-related costs and agreements.
- iv. Anacostia Bridge (East).
- v. Shepherds Branch.
- vi. Barney Circle.

- b. CSXT and the DC Office of the City Administrator (“CA”) have agreed to address the following matters as soon as possible, but in all events on or before January 31, 2013.

- i. Permits and approvals (other than the Construction Public Space Permit addressed above in Section 3) for construction of the Virginia Avenue Tunnel Project.
- ii. First Source and Certified Business Enterprises (“CBE”) agreements.

The CA supports the purpose of this Term Sheet Agreement, and is joining this Term Sheet Agreement as pertains to this Section 6(b).


7. Counterparts. This Term Sheet Agreement may be executed by the parties in counterparts, which taken together shall constitute one written agreement by and between the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Term Sheet Agreement as of the date first written above.

DISTRICT OF COLUMBIA, by and through the District
Department of Transportation

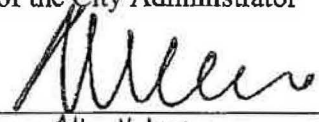
By: _____
Name: Terry Bellamy
Title: Director

CSX TRANSPORTATION, INC.

By:  _____
Name: Louis E. Renjel, Jr.
Title: Vice-President

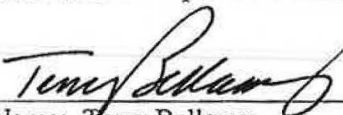
AGREED – ONLY AS TO SECTION 6(b)

DISTRICT OF COLUMBIA, by and through the
Office of the City Administrator

By:  _____
Name: Allen Y. Lew
Title: City Administrator

IN WITNESS WHEREOF, the parties hereto have executed this Term Sheet Agreement as of the date first written above.

DISTRICT OF COLUMBIA, by and through the District
Department of Transportation

By: 
Name: Terry Bellamy
Title: Director

CSX TRANSPORTATION, INC.

By: _____
Name: Louis E. Renjel, Jr.
Title: Vice-President

AGREED - ONLY AS TO SECTION 6(b)

DISTRICT OF COLUMBIA, by and through the
Office of the City Administrator

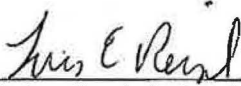
By: _____
Name:
Title:

IN WITNESS WHEREOF, the parties hereto have executed this Term Sheet Agreement as of the date first written above.

DISTRICT OF COLUMBIA, by and through the District
Department of Transportation

By: _____
Name: Terry Bellamy
Title: Director

CSX TRANSPORTATION, INC.

By:  _____
Name: Louis E. Renjel, Jr.
Title: Vice-President

AGREED – ONLY AS TO SECTION 6(b)

DISTRICT OF COLUMBIA, by and through the
Office of the City Administrator

By: _____
Name:
Title:

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

THE COMMITTEE OF 100 ON THE)
FEDERAL CITY)
)
Plaintiff)
v.)
)
ANTHONY FOXX, Secretary of)
Transportation, et al.)
)
Defendants)
_____)

PLAINTIFF’S MOTION FOR A PRELIMINARY INJUNCTION

EXHIBIT 20

FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT

THIS FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT (“**Amendment**”) is entered into as of this 21st day of April, 2014 by and between CSX Transportation, Inc., (“**CSXT**”) a corporation organized and existing under the laws of the Commonwealth of Virginia, the District of Columbia, a municipal corporation (“**District**”) and the District of Columbia, acting through by and through the Office of the Deputy Mayor for Planning and Economic Development (“**DMPED**”) and the District Department of Transportation (“**DDOT**”).

WHEREAS, the parties hereto are parties to that certain Memorandum of Agreement dated as of August 23, 2010 (“**MOA**”); and

WHEREAS, the parties desire to amend the Memorandum as provided herein;

NOW, THEREFORE, for good and valuable consideration, the parties hereto hereby agree as follows:

1. Section A of Article III is hereby amended by inserting the following new paragraph at the end thereof :

“Notwithstanding anything to the contrary in Sections A and B of this Section III, none of the CSXT Credit Amount shall be used for the Virginia Avenue Tunnel Expansion Project. In exchange for the payments in the total amount of \$4,171,044 CSXT previously made to DDOT pursuant to Section IV.C below to assist DDOT with the 11th Street Bridge Project, DDOT and CSXT agree to work together to identify an eligible project for the use of the CSXT Credit Amount using traditional federal appropriations and obligations for resurfacing of Federal-Aid facilities within the next six (6) months, however, failure to identify an eligible project shall not constitute a default under the MOA, as amended.”

2. Article VIII of the Memorandum is hereby deleted.
3. This Amendment may be executed in multiple counterparts, each of which shall constitute an original and all of which together shall constitute one and the same instrument.
4. All provisions, terms and conditions contained in the MOA not expressly modified by this First Amendment, shall remain in full force and effect.

(Balance of Page Intentionally Blank)

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first written above.

CSX Transportation, Inc.

By: Louis E. Renzel
Name: Louis E. Renzel
Title: Vice President - Strategic Infrastructure

District of Columbia, by and through the District
Department of Transportation

By: _____
Name:
Title:

District of Columbia, by and through the Office of
the Deputy Mayor of Planning and Economic
Development


By: _____
Name:
Title:

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the date first written above.


CSX Transportation, Inc.

By: _____
Name:
Title:

District of Columbia, by and through the District
Department of Transportation

By: 
Name:
Title:

District of Columbia, by and through the Office of
the Deputy Mayor of Planning and Economic
Development

By: 
Name: Jeff Miller o/b/o Deputy Mayor Hoskins,
Title: per Office Order 2014-4