Chapter 1
Introduction

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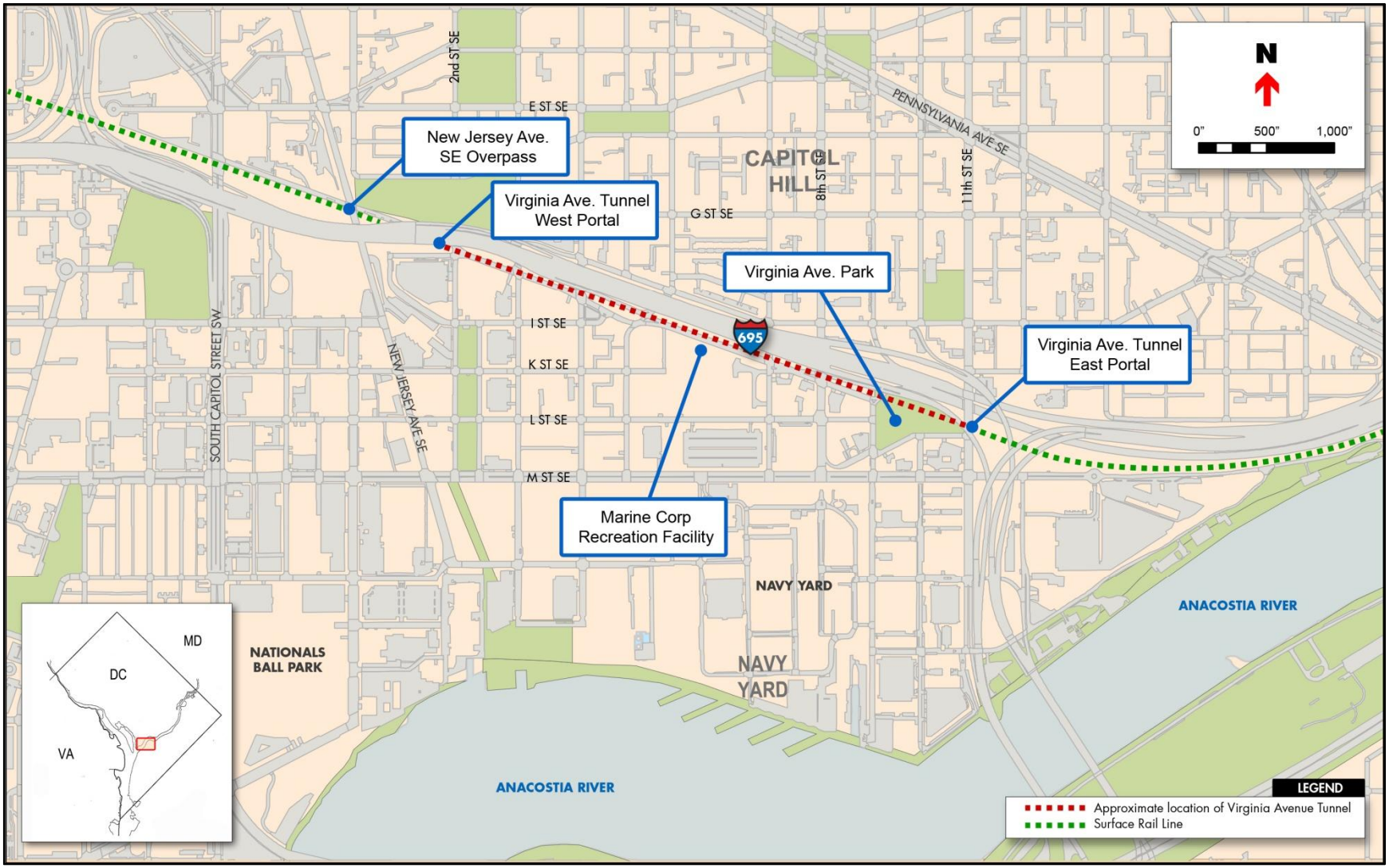
The U.S. Department of Transportation's (U.S. DOT) Federal Highway Administration (FHWA) in conjunction with the District of Columbia Department of Transportation (DDOT) has prepared this Draft Environmental Impact Statement (Draft EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, for the CSX Transportation, Inc. (CSX) proposal to reconstruct the existing Virginia Avenue Tunnel, which is located in the Capitol Hill neighborhood of the District of Columbia (District or DC) (see Figure 1-1). This Draft EIS also contains a Draft Section 4(f) Evaluation in accordance with the U.S. Department of Transportation Act of 1966. Built over 100 years ago, the tunnel is located beneath eastbound Virginia Avenue SE from 2nd Street SE to 9th Street SE; Virginia Avenue Park between 9th and 11 Streets SE; and the 11th Street Bridge right-of-way. The tunnel portals are located a short distance west of 2nd Street SE and a short distance east of 11th Street 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 would continue to require increasingly higher levels of investment for maintenance and repair, resulting in more frequent 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 Virginia Avenue Tunnel Reconstruction Project (the Project) would 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 would allow more efficient freight movement and reduce truck traffic (DDOT, District of Columbia 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 would also involve lowering the grade below the rail line's New Jersey Avenue SE Overpass (see Figure 1-1).

Figure 1-1
Location of the Existing Virginia Avenue Tunnel



If the Project were completed, freight rail transportation through the District would 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, eager to have the railroad removed from K Street SE and 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 1905.

Both phases used "cut-and-cover" construction to build the tunnel, which involved digging down to a depth of about 30 feet (see photograph). 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 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 tunnel's wall. The tunnel was shut down for several months so that emergency repairs could be made. This was highly disruptive to both freight rail operations and 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.

Virginia Avenue Tunnel Construction

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

Figure 1-2
CSX Major Rail Network

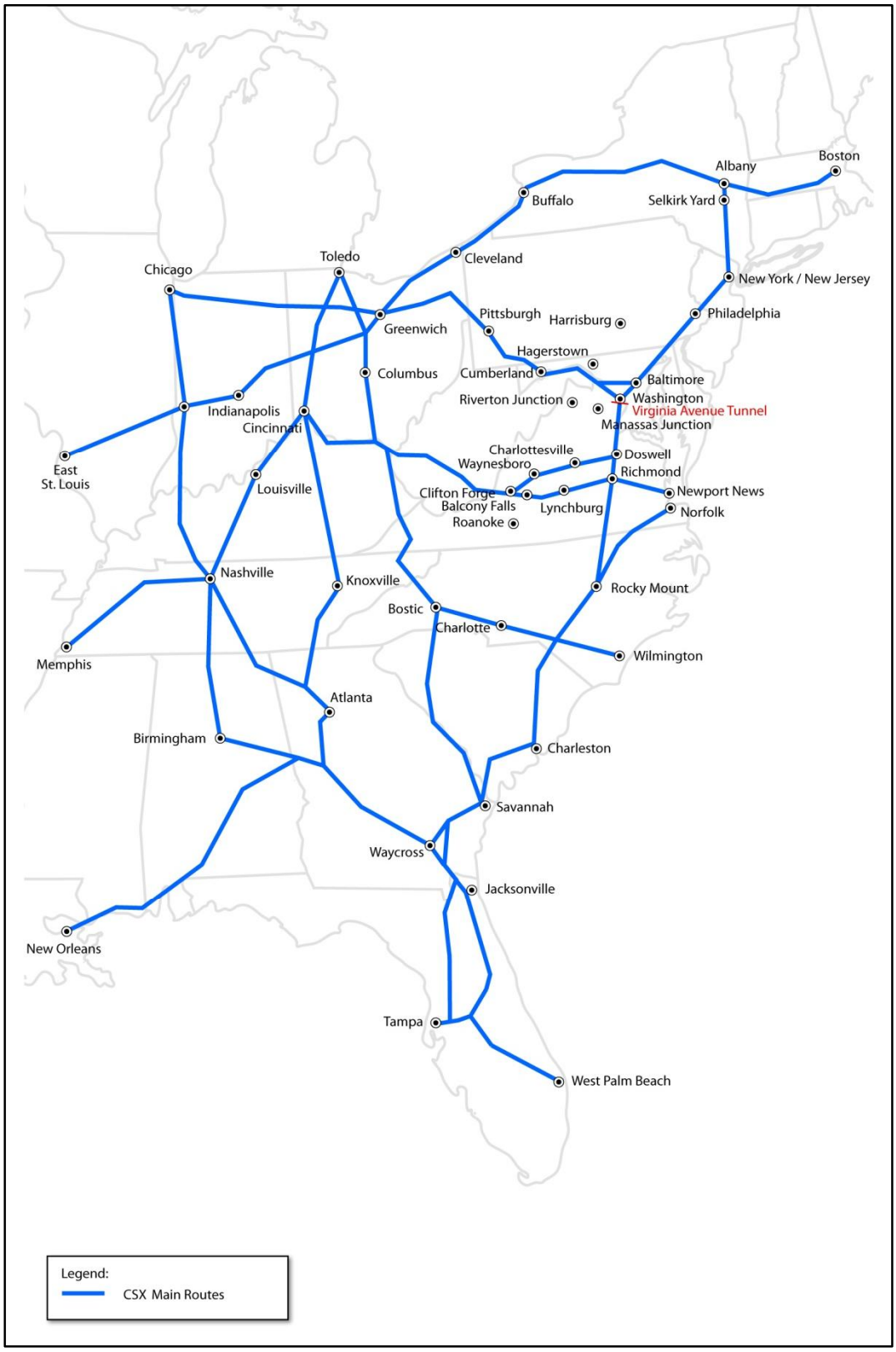
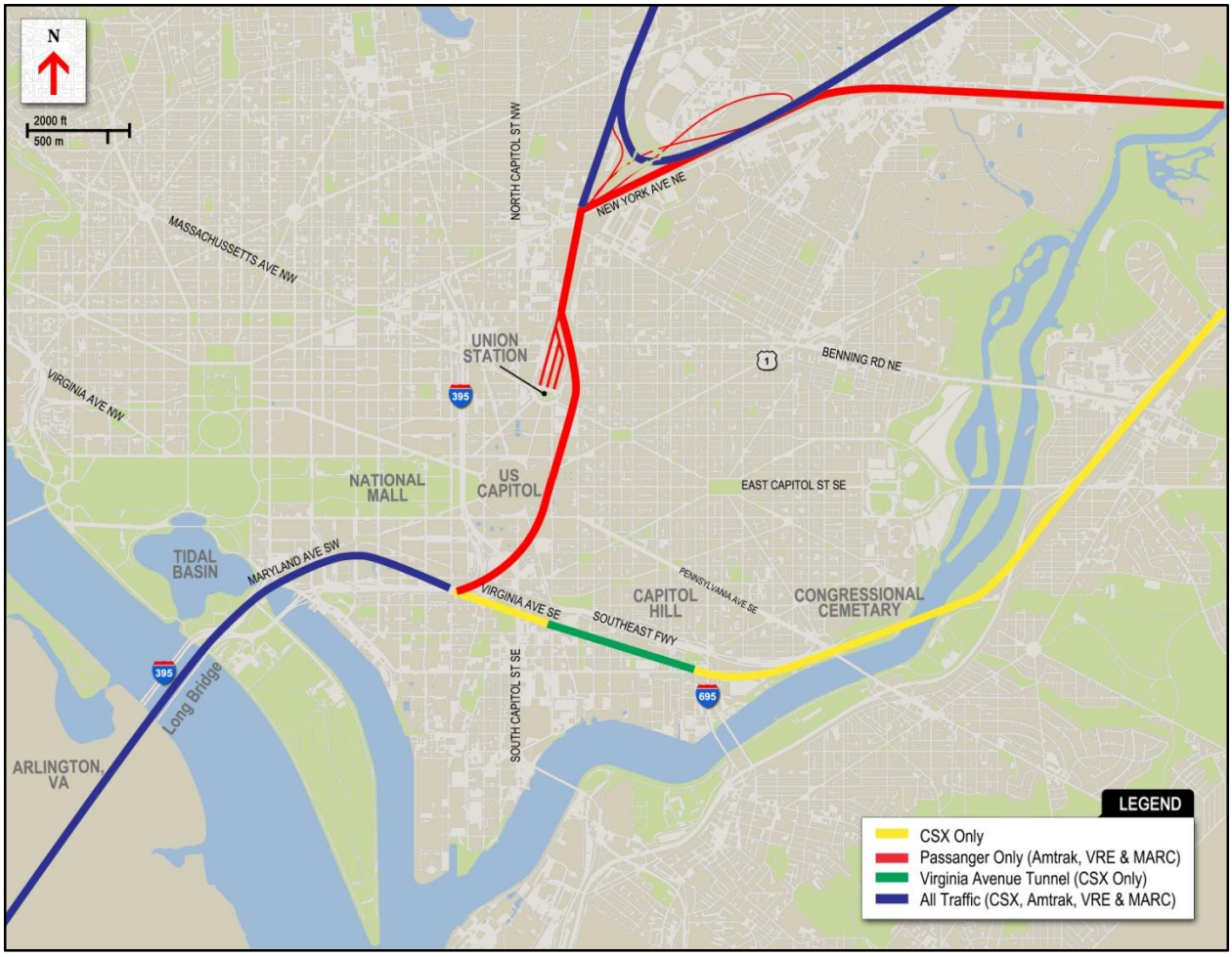


Figure 1-3
Active Rail Lines within the District of Columbia



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 (DDOT, 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.

1.3 Planning Process

The National Environmental Policy Act (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 would 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 would temporarily affect I-695 ramps located at 6th and 8th Streets SE. This FHWA approval is subject to the requirements of NEPA. In maintaining the same existing railroad line, any new tunnel within the I-695 right-of-way would not require receipt of new air rights of an interstate highway.

Following completion of a new Virginia Avenue Tunnel, the surface streets at and surrounding Virginia Avenue SE would return to pre-construction conditions. For example, the operation of the I-695 ramps and the Virginia Avenue SE roadway would be restored back to current conditions, except to the extent that the 8th Street ramp would 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, would occur following construction.

In addition to the FHWA approval, the Project would require approvals from the National Park Service (NPS) and the U.S. Marine Corps to allow construction on their properties. The NPS affected property is Virginia Avenue Park located at the east end of Virginia Avenue SE between 9th and 11th Streets SE. NPS owns other properties along Virginia Avenue SE, but they are under the jurisdiction of DDOT and used for transportation purposes. This includes Reservation 122, which contains a triangular grassy lawn between 4th and 5th Streets SE. Construction of the Project does not require the use of the grassy lawn. 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.

The Project may require a formal project review by the National Capital Planning Commission (NCPC) because construction of the Project would 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 later 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. DDOT assumed the role as the lead local agency for NEPA compliance. 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.

This Draft EIS:

- Describes the Purpose and Need for the Project (Chapter 2);
- Presents the alternatives considered for the Project (Chapter 3);
- 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); and
- Documents agency coordination and public involvement activities conducted for the Project (Chapter 6).

This Draft EIS also documents compliance with other federal laws that would 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. In addition, this Draft EIS documents project compliance with Section 4(f) of the US DOT Act of 1966. It includes a stand-alone Section 4(f) Evaluation as provided immediately following Chapter 10 (Index).

This Draft EIS will be available for agency and public review for 45 days from the date of the Federal Register notice of availability. During this comment period, a public hearing will be held to provide the general public the opportunity to comment on the Project, its potential impacts and environmental mitigation measures. Following the public comment period, FHWA and DDOT will review all comments and testimony received for the Administrative Record and will prepare a Final EIS, which will contain all comments received on the Draft EIS and responses from the FHWA and/or DDOT. The Final EIS will also identify a preferred alternative for the Project.

Following the Federal Register notice of the Final EIS, the FHWA will issue a Record of Decision (ROD), completing FHWA's NEPA process. The ROD will summarize comments on the Final EIS,

and specify commitments by FHWA, DDOT and CSX to avoid, minimize, or mitigate adverse impacts. The ROD will also include the reasons for selecting the preferred alternative, and document any required Section 4(f) approval. NCPC, NPS and the U.S. Marine Corps have the option of adopting the FHWA ROD or preparing their own RODs to complete their NEPA requirements, if needed.

After completion of the NEPA process, other required federal and District approvals and permits would be obtain 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.

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