2.0 Purpose and Need

2.1. Introduction

The Council on Environmental Quality regulations that implement the National Environmental Policy Act of 1969 require that an Environmental Impact Statement (EIS) "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the Proposed Action."[1] This chapter presents the Purpose and Need Statement for the Long Bridge Project (the Project), including a detailed assessment of the needs that the Project addresses.

2.2. Previous Studies

The Long Bridge Corridor serves as a critical link in the national and regional railroad network. Several studies drafted or released prior to the Notice of Intent for the Project EIS in August 2016 give context for the importance of the Long Bridge Corridor and highlight long-term capacity needs. The sections below highlight elements of these studies relevant to the Project.

2.2.1. Long Bridge Phase I Study, January 2015

In 2011, the District Department of Transportation (DDOT) received a High-Speed Intercity Passenger Rail grant from the Federal Railroad Administration (FRA) to complete a two-phase feasibility study of the rehabilitation or replacement of the Long Bridge. DDOT launched the Phase I Study in 2012.[2] The Phase I Study included an evaluation of the existing and future capacity needs of the Long Bridge Corridor.[3]

The Phase I Study found that, in 2013, Long Bridge carried five peak-period and 18 off-peak-period freight trains.[4,5] Passenger service consisted of 36 peak-period trains (27 Virginia Railway Express [VRE] and nine Amtrak) and 20 off-peak-period trains (five VRE and 15 Amtrak).[6] Long Bridge therefore carried 79 daily trains in 2013, of which 71 percent were passenger trains and 29 percent freight. Operations modeling performed as part of the Phase I Study determined the existing Long Bridge's daily capacity to be 96 trains. The 2013 combination of daily freight and passenger trains accounted for 82 percent of the daily total capacity of Long Bridge. During peak hours, railroad traffic was at 98 percent of capacity. Railroad traffic was at 70 percent of capacity during non-peak hours.

[1] 40 CFR 1502.13

[2] *Long Bridge Study (Phase I Study)*. DDOT. Accessed from https://ddot.dc.gov/publication/final-long-bridge-study. Accessed September 26, 2018.

[3] Capacity is the number of trains that can pass through an area in a certain period, depending on quantity and configuration of tracks. Practical capacity considers factors such as possible disruptions, maintenance, human decisions, weather, equipment failures, supply and demand imbalances, and seasonal demand. National Rail Freight Infrastructure Capacity and Investment Study. 2007. Association of American Railroads. Accessed from https://expresslanes.codot.gov/programs/transitandrail/resource-materials-new/AARStudy.pdf. Accessed January 12, 2018.

[4] The morning peak period lasts from 6:00 AM to 9:00 AM. The evening peak period lasts from 4:00 PM to 7:00 PM.

[5] CSXT provided data for the Phase I Study existing freight operations.

[6] Passenger train operations for the Phase I Study were based on the existing VRE and Amtrak schedules.

Future train volume assumptions developed from an analysis process using operator plans and a national forecast database showed that by the year 2040 operators would exceed the current daily 96-train capacity of Long Bridge by 70 trains per day. The study-based freight operations forecasts on the Federal Highway Administration (FHWA) Freight Analysis Framework dataset.[7] The study developed passenger train projections (including high-speed rail) using VRE and Amtrak's operations plans for future service. The Phase I Study concluded in January 2015.

2.2.2. Long Bridge Phase II Study, 2016

The Phase II Study began in Fall 2015 and included the development of a long-range service plan and operations simulation. The goal of the operations simulation was to determine which Long Bridge future infrastructure scenario produced the best operational results given expected future service growth. The Future No-Build infrastructure scenario produced fatally poor results that were operationally unacceptable for both passenger and freight operations, confirming that the Long Bridge Corridor presents a critical infrastructure chokepoint.[8]

2.2.3. 2017 Virginia Statewide Rail Plan

The Commonwealth of Virginia developed the *2017 Statewide Rail Plan* to reflect changes in the railroad industry and prioritize investments in the freight and passenger railroad industry across the Commonwealth. The Plan presents Virginia's vision for railroad transportation through the horizon year of 2040 and strategies to achieve that vision. The Plan identifies priority improvements and investments in the Washington to North Carolina Corridor, which includes the Long Bridge Corridor. The Plan notes that Long Bridge presents a "chokepoint that in recent years has proven to be the most significant rail network bottleneck to rail services in Virginia."[9] Adding capacity to Long Bridge, "a major chokepoint affecting CSX[T], Amtrak, and VRE service," is a priority project for Virginia.[10]

2.2.4. Washington, D.C. to Richmond Southeast High Speed Rail Project (DC2RVA) Tier II Final EIS, May 2019

In 2002, the Virginia Department of Rail and Public Transportation (DRPT), North Carolina Department of Transportation, FRA, and FHWA completed a Tier I EIS for the Southeast High-Speed Railroad Corridor from the District of Columbia (District) to Charlotte, North Carolina. The DC2RVA Tier II Final EIS (DC2RVA EIS) further analyzes the proposed service and infrastructure improvements necessary to implement higher-speed railroad service between the District and Richmond, Virginia.

In addition to delivering higher-speed passenger railroad service in the corridor, the increased capacity will allow the expansion of commuter railroad service and accommodate the growth of freight railroad service. The regional conditions cited in the DC2RVA EIS supporting the need for the project are also applicable to the Long Bridge Corridor. These existing conditions are population growth, freight growth,

[7] FHWA. Freight Analysis Framework. Accessed from https://ops.fhwa.dot.gov/freight/freight_analysis/faf/#faf3. Accessed June 8, 2018.
[8] The terminology "No-Build" changed to "No Action" for the Project following the Scoping process.
[9] DRPT. 2017 Virginia Statewide Rail Plan. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.
[10] DRPT. 2017 Virginia Statewide Rail Plan. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.

congestion in the I-95 corridor, air travel congestion, future demand for railroad capacity in the corridor, air quality, and reliable and convenient options for the movement of goods and people.[11]

2.2.5. VRE System Plan 2040, January 2014

The *VRE System Plan 2040* (System Plan) provides a framework for VRE system investments and actions to pursue through 2040 to meet regional travel needs and expected future demand. The System Plan includes major investments needed to relieve the key capacity bottlenecks on the VRE system, including the Long Bridge crossing of the Potomac River.[12] The recommendations in the 2040 Plan would provide the capacity for VRE to operate 40,000 new weekday trips by 2040, more than double the 19,000 daily trips carried today. Anticipated new services include short-haul trips within the urban core, reverse-peak commuter service, midday off-peak service, regional service extending to Maryland and further south in Virginia, and weekend service. VRE will need to run up to 92 trains per day to achieve their service expansion goals.

2.2.6. Maryland Area Regional Commuter (MARC) Growth and Investment Plan Update 2013 – 2050, September 2013

The *Growth and Investment Plan* is a multi-phased, multi-year plan to triple the capacity of MARC, Maryland's commuter railroad system. MARC is a key part of Maryland's commuter network providing railroad service for more than 36,000 commuters a day traveling between Washington Union Station and northern, central, and western Maryland, with ridership demand expected to continue to grow to 75,000 riders per day in 2040. The *MARC Growth and Investment Plan* sets up a series of milestones for near-term, long-term, and future infrastructure investments. MARC cites infrastructure constraints as limiting its ability to expand service and implement scheduling flexibility. MARC's planned expansion of the Penn Line to Alexandria, Virginia, relies on increased capacity within the Long Bridge Corridor.[13]

2.3. Purpose and Need Statement

The purpose of the Project is to provide additional long-term railroad capacity and to improve the reliability of railroad service through the Long Bridge Corridor.[14] Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future railroad services. The Project is needed to address these issues and to ensure the Long Bridge Corridor continues to serve as a critical link connecting the local, regional, and national transportation network. The sections below provide more information on the need for the Project.

[11] DC2RVA Tier II Draft Environmental Impact Statement, Chapter 2: Alternatives. 2017. Accessed from http://dc2rvarail.com/files/5315/0412/9086/Chapter_02_Alternatives_DC2RVA_DEIS.pdf. Accessed June 8, 2018.

[12] VRE. *VRE System Plan Summary*. January 2014. Accessed from https://www.vre.org/vre/assets/File/VRE%20System%20Plan%20Summary%20Final.pdf. Accessed June 8, 2018.

[13] MARC. *MARC Growth and Investment Plan Update 2013 to 2050*. September 9, 2013. Accessed from https://mta.maryland.gov/sites/default/files/mgip_update_2013-09-13.pdf. Accessed June 8, 2018.

[14] Railroad reliability is the continuity of correct service. Reliability can be divided into two related concepts, regularity and punctuality. Regularity is the variation in headways, while punctuality relates to the deviation from the scheduled arrival and departure times. Service reliability is a key factor affecting the traveling public's choice of transportation mode and in efficient, cost-effective transportation of freight.

2.3.1. Insufficient Railroad Capacity

The Long Bridge Corridor must accommodate combined commuter, intercity passenger, and freight railroad services with minimal operational delays now and in the future. Based on existing track infrastructure and train scheduling constraints, railroad services operate at or close to maximum capacity limits within the Corridor during the morning peak hour, with eight passenger train movements scheduled in 60 minutes.[15] Over the course of a full weekday, Amtrak and VRE currently operate 24 and 34 trains across Long Bridge, respectively. CSXT operates approximately 18 through-freight trains each day on the Corridor on the same tracks used by the two passenger train operations.

By the forecast year of 2040, operator plans would increase passenger and freight train volumes by 153 percent (**Figure 2-1**).[16] In 2040, VRE anticipates operating 92 trains per day, based on their 2040 System Plan.[17] Between 2030 and 2050, MARC plans to expand their Penn Line, which currently terminates at Washington Union Station, to terminate in Alexandria, Virginia. As part of this plan, MARC anticipates operating eight trains per day in the Long Bridge Corridor versus none today.[18] Amtrak anticipates operating 44 trains per day, based on ridership forecasting conducted for the DC2RVA Project and confirmed by the operator.[19] CSXT operations expect to increase to 42 freight trains per day in the Corridor. Norfolk Southern anticipates exercising their trackage and haulage rights, operating six trains per day.[20]

Several conditions drive the future demand for railroad service in the Corridor, including population and employment growth, roadway congestion, and freight growth.

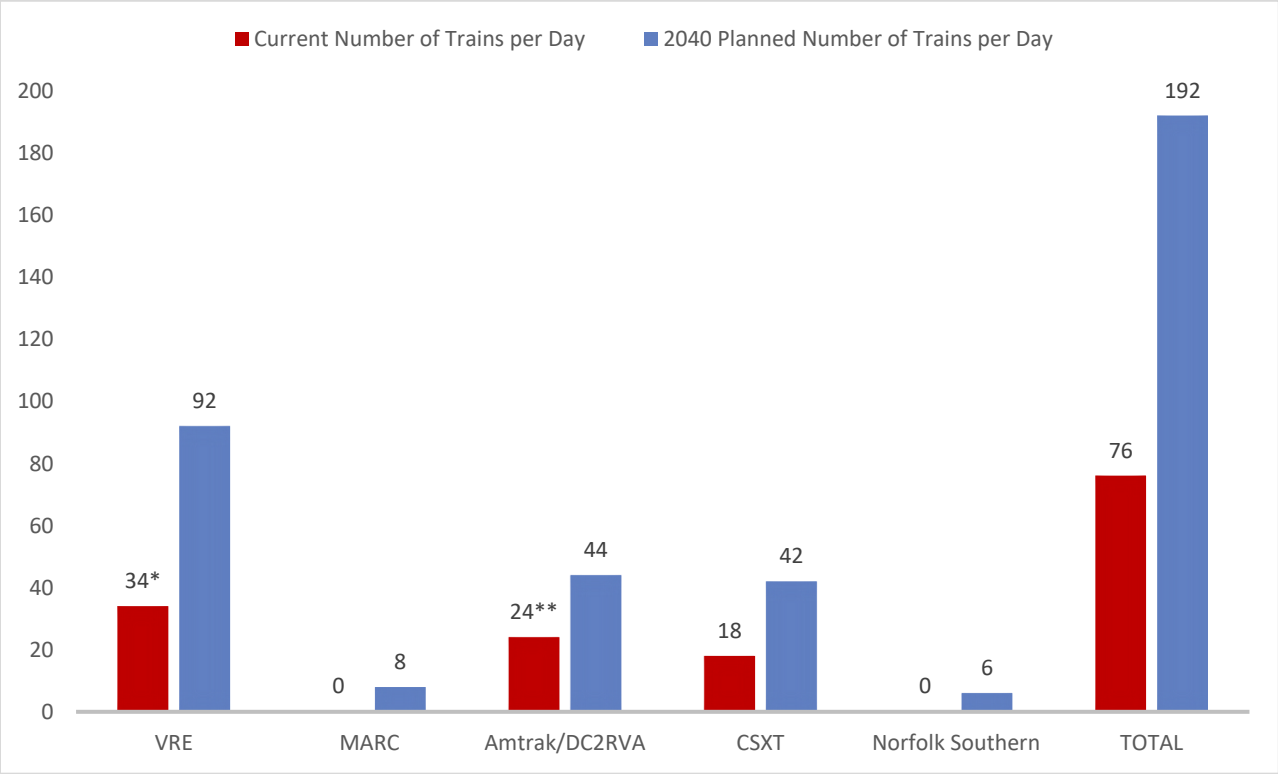
- **Population and Employment Growth.** Forecasts estimate that the Washington Metropolitan Region's population will grow by more than 1.5 million people between 2010 and 2040. In the same period, forecasts show that the regional economy will add 1.1 million new jobs. About a third of the new jobs will locate in the primary employment centers of the region, including the District, and Arlington and Alexandria, Virginia.[21] The 2017 Virginia Statewide Rail Plan recognizes population and employment growth as a critical driver of passenger and freight railroad needs. Transportation models project more demand for passenger train travel within the Long Bridge Corridor because of this growth in the Washington Metropolitan Region.[22]

[15] One Amtrak and six VRE trains in the peak direction and one VRE train in the reverse peak direction.
[16] Expected train volumes in 2040 were established based on input from bridge stakeholders, including CSXT, VRE, Amtrak, Norfolk Southern, and MARC, as well as the concurrent DC2RVA DEIS. August 2017. Accessed from http://dc2rvarail.com/files/7415/0420/1319/Signature_Page_DC2RVA_DEIS.pdf. Accessed April 11, 2018.
[17] VRE. Virginia Railway Express System Plan 2040 Study. 2014. Accessed from https://www.vre.org/vre/assets/File/2040%20Sys%20Plan%20VRE%20finaltech%20memo%20combined.pdf. Accessed June 8, 2018.
[18] Maryland Transit Administration. MARC Growth and Investment Plan Update 2013 to 2050. 2013. Accessed from https://mta.maryland.gov/sites/default/files/mgip_update_2013-09-13.pdf. Accessed June 8, 2018.
[19] DC2RVA Tier II Draft Environmental Impact Statement, Appendix J: Ridership. 2017. Accessed from http://dc2rvarail.com/files/3915/0413/3646/APPENDIX_J_Ridership_DC2RVA_DEIS.pdf. Accessed June 8, 2018.
[20] CSXT and Norfolk Southern provided their anticipated operation volumes for 2040.
[21] Metropolitan Washington Council of Governments. Cooperative Forecasts: Employment, Population, and Household Forecasts by Transportation Analysis Zone. 2016. Accessed from https://www.mwcog.org/documents/2016/11/16/cooperative-forecasts-employment-population-and-household-forecasts-by-transportation-analysis-zone-cooperative-forecast-demographics-housing-population/. Accessed June 8, 2018.
[22] DRPT. 2017 Virginia Statewide Rail Plan Executive Summary. 2017. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.

Additionally, projections indicate that young professionals will comprise much of the population growth in the Washington Metropolitan Region.[23] The increasing number of young professionals as well as the increasing proportion of residents over 65 in the urban region affect the need for public transportation choices like passenger trains. Trends indicate that both the young and the elderly are driving less and choosing public transportation options over car ownership in urban areas, also increasing the demand for passenger railroad service.[24]

Population growth and increasing railroad ridership throughout the South, Mid-Atlantic, and Northeast are also creating more demand for intercity passenger railroad services that traverse the Long Bridge Corridor as a part of the national passenger railroad network.[25] This demand includes service to economic centers north and south of Long Bridge. Expanded infrastructure in the Long Bridge Corridor would allow railroad operators to accommodate future demand without interrupting the movement of passengers and goods across the Potomac River.

Figure 2-1 | Train Volumes in the Long Bridge Corridor



*including non-revenue movements

**does not include the Auto Train from Lorton, Virginia, to Sanford, Florida

[23] Young professionals are employed persons under 40 years of age.

[24] U.S. Public Interest Research Group Education Fund & Frontier Group. Transportation and the New Generation. 2012. Accessed from https://uspirg.org/sites/pirg/files/reports/Transportation%20&%20the%20New%20Generation%20vUS_0.pdf. Accessed July 20, 2018.

[25] District Department of Transportation. State Rail Plan: Final Report. 2017. Accessed from https://ddot.dc.gov/sites/default/files/dc/sites/ddot/page_content/attachments/DC%20SRP%20FinalReport.pdf. Accessed June 30, 2019.

- **Roadway Congestion.** Population growth and employment growth in the Washington Metropolitan Region are causing increased congestion on area highways. The Potomac River is a major chokepoint for regional vehicular travel, especially during rush hour commutes, and highways crossing the river often cannot offer reliable travel times during peak periods. Projections indicate that by 2040 drivers in the region will spend 74 percent more time sitting in traffic.[26] The National Capital Region's Transportation Planning Board Long-Range Plan Task Force projects that delays per trip between the District and Alexandria will increase by 37 percent, from 27 minutes in 2017 to 37 minutes in 2040.[27] Passenger railroad service provides an alternative to congested highways, and projections indicate that demand for reliable passenger railroad service will increase alongside roadway congestion.[28]

- **Freight Growth.** Demand for freight movement through and within the Long Bridge Corridor is growing as economic activity and population increase. Since the early 1990s, freight railroad density has substantially increased, with the result that available capacity on major railroad corridors has become scarce.[29] This is particularly true for the Long Bridge Corridor, which is a critical link in the national freight railroad network between the Northeast megaregion (which includes the District) and the Piedmont Atlantic megaregion to the south. The National Gateway Corridor is the primary intermodal train corridor for CSXT connecting the ports of Virginia to the Midwest and national markets. CSXT's I-95 Corridor linking New York and Jacksonville, Florida, plays a vital role in moving freight along the Eastern Seaboard. The two freight railroad corridors share one alignment connecting the District, through the Long Bridge Corridor, to south of Richmond, Virginia.

  Projections show freight movement by railroad will increase 14 percent in Virginia by 2040.[30] The ongoing enlargement of Virginia's deep-water ports and the recent expansion of the Panama Canal, which allows larger container vessels to reach the East Coast, will further increase the demand for freight railroad capacity to move goods to and from these ports.[31] The *2017 Virginia Statewide Rail Plan* indicates that the Port of Virginia's cargo capacity will triple by 2040, and freight railroads will move 45 percent of the cargo from the port, up from 35 percent in 2014.[32] Mid- to long-distance freight movement via rail is generally considered more timely

[26] National Capital Region's Transportation Planning Board Long-Range Plan Task Force. Performance Analysis of the Constrained Long-Range Plan. Accessed from https://www.mwcog.org/assets/1/28/10192016_-_Item_9_-_2016_CLRP_Performance_Analysis.pdf. Accessed July 20, 2018.

[27] National Capital Region's Transportation Planning Board Long-Range Plan Task Force. Performance Analysis of the Constrained Long-Range Plan. Accessed from https://www.mwcog.org/assets/1/28/10192016_-_Item_9_-_2016_CLRP_Performance_Analysis.pdf. Accessed July 20, 2018.

[28] DRPT. Virginia Statewide Rail Plan. 2017. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.

[29] DC2RVA Tier II Draft Environmental Impact Statement, Chapter 1 Purpose and Need. 2017. Accessed from http://dc2rvarail.com/files/2415/0412/9077/Chapter_01_Purpose_and_Need_for_the_Proposed_Action_DC2RVA_DEIS.pdf. Accessed June 8, 2018.

[30] DRPT. Virginia Statewide Rail Plan. 2017. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.

[31] American Shipper. Panama Canal Expansion Helps Boost Business at U.S. Gulf, East Coast Ports. September 21, 2017. Accessed from https://www.americanshipper.com/news/panama-canal-expansion-helps-boost-business-at-us-gulf-east-coast-ports?autonumber=69109&via=sharecodev1. Accessed June 28, 2019.

[32] DRPT. 2017 Virginia Statewide Rail Plan. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.

and reliable than shipping by truck, as rail is not subject to the same traffic patterns and road conditions.[33] But as capacity is further constrained in the Long Bridge Corridor, this will erode the punctuality and dependability advantages of freight rail. Capacity in the Corridor must increase alongside freight movement demand to keep freight rail prompt and competitive with the trucking industry.

Based on the conditions described above, capacity constraints at critical infrastructure chokepoints, such as the current Long Bridge, limit service expansion as well as the ability to recover from service delays, which makes it difficult to accommodate growth in ridership and to offer reliable service. Without added capacity, the increased train volumes in 2040 and beyond would strain the railroad network through the Long Bridge Corridor.

To meet future demand, the railroad network will need to be able to maintain schedules under normal operations for all types of train travel and offer flexibility to recover during periods of higher demand and service delays. Based on long-term adopted regional, state, and local transportation plans, commuter, intercity passenger, and freight railroad services will continue to share the Long Bridge Corridor. Each of these operators has different operating characteristics that may conflict with the others' operating characteristics (for example, commuter railroads usually make intra-corridor station stops, while intercity railroads usually do not). Under scheduled conditions, each train occupies an assigned time slot and does not interfere with other trains.[34] However, if a train falls outside its time slot due to delays, it can delay other trains. Under those conditions, the slowest train governs the capacity of the Corridor. Tracks and crossovers limit conflicts and allow trains to pass each other and recover from service delays.

2.3.2. Insufficient Railroad Resiliency and Redundancy

Resiliency and redundancy help operators maintain normal operations during planned and unplanned events. Resiliency in a railroad context is the ability of a railroad network to resume normal operations and minimize cascading delays following an unplanned event. System redundancy is the duplication of critical components or functions of the railroad system to increase the reliability of the railroad corridor and ensure that it is resilient to changing circumstances. Redundancy enables the railroad system to continue to function during unanticipated outages, catastrophic incidents, or weather-related events, as well as during planned maintenance. Currently, the railroad network lacks resiliency and redundancy due to the configuration of the tracks and lack of suitable detours.

- **Track Configuration.** The current two-track configuration of the Long Bridge creates a physical bottleneck and prevents efficient train flow to the existing three-track and planned four-track sections to the north and south of the Long Bridge Corridor. Operators must strictly schedule movements to maintain normal operations in the Corridor because of the two-track configuration. When the schedule slips, even slightly, it results in substantial delays to intercity train service. These delays are a daily event in the Long Bridge Corridor, particularly between the District and Alexandria, Virginia, and cause cascading service disruptions. The frequent delays and current volume of commuter and intercity passenger trains also affect CSXT freight

[33] American Association of Railroads. 6 Milestones of Intermodal Growth. Undated. Accessed from https://www.aar.org/article/6-milestones-intermodal-growth/. Accessed July 23, 2018.

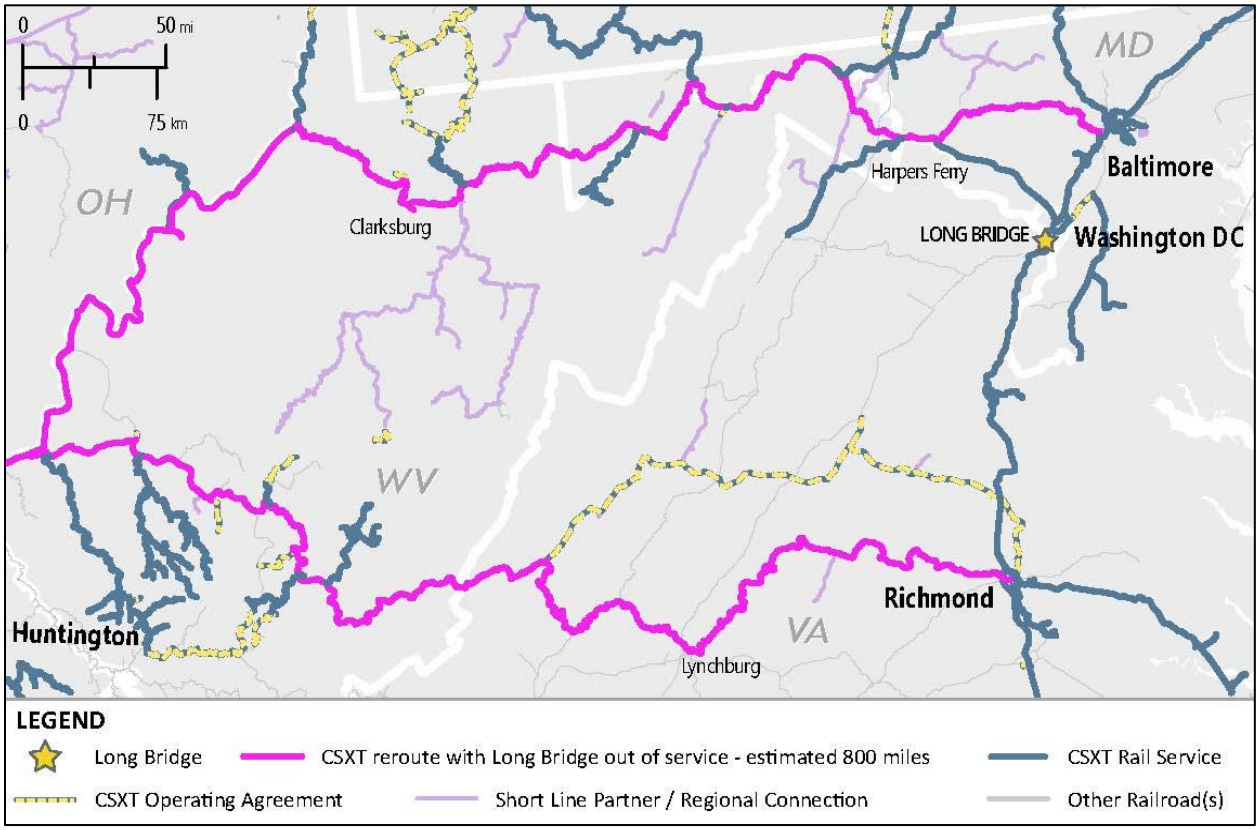
[34] "Time slot" is defined as the time and location in the corridor a train is assigned in a timetable. Time slots vary based on the operating characteristics of a train, including whether it makes intermediate stops within the corridor.

operations, limiting CSXT's ability to operate during peak passenger periods and hindering the flow of the national network. Freight trains are frequently stopped to allow passenger railroad service to pass through the Corridor, affecting the efficiency and reliability of freight movements.

The two-track configuration is also problematic due to the proximity of the two tracks to one another. The narrow spacing between the existing two tracks does not allow for single-tracking and results in closure of both tracks for safety reasons during construction or maintenance.

- **No Practical Detours.** Closing both tracks interrupts service across Long Bridge. During these times, VRE and Amtrak cannot offer train service from Virginia across the Potomac River to L'Enfant Plaza or Washington Union Station and vice versa. Closing both tracks across Long Bridge requires CSXT to redirect its trains hundreds of railroad miles to Harpers Ferry, West Virginia (**Figure 2-2**). This detour substantially increases service cost and time for CSXT.

Figure 2-2 | Rerouting for CSXT Trains with Long Bridge Out of Service



Incorporating redundant and resilient railroad facilities in the Long Bridge Corridor offers the necessary back-up resources to maintain corridor services and minimize service disruptions during a range of planned and unplanned maintenance and upgrades to the system. The economies of the urban areas on

the East Coast depend on maintained passenger and freight railroad service to function and thrive.[35] Additional resiliency and redundancy will enhance the reliability of the Long Bridge Corridor and help ensure that it is adaptable to changing circumstances.

2.3.3. Maintain Transportation Network Connectivity

The Long Bridge Corridor plays an essential role in the Washington Metropolitan Region, the East Coast transportation network, and the national railroad network. The Long Bridge Corridor connects intercity passenger trains from the Northeast Corridor to major transportation points in the South. The Long Bridge Corridor also connects the Virginia suburbs to major employment centers in downtown Washington, DC, and Crystal City in Arlington, Virginia. CSXT uses the Long Bridge Corridor to connect goods and customers using freight and intermodal facilities through CSXT's network, including Philadelphia, Pennsylvania; Baltimore and Cumberland, Maryland; Newport News, Virginia; and Rocky Mount, North Carolina. Consistent with features shown in adopted regional, state, and local transportation plans, and with railroad operator plans, the Long Bridge Corridor must facilitate the movement of people and goods, including connections to other parts of the transportation network.

Currently, Long Bridge is a chokepoint that limits the ability to run planned high-performance passenger railroad service between population centers and to offer freight service along the Eastern Seaboard. As noted in the *2017 Virginia Statewide Rail Plan*, the Long Bridge Corridor presents the most severe bottleneck on the District to North Carolina freight railroad network.[36] The existing commuter railroad systems in the region (MARC and VRE) both end all trains at Washington Union Station, which limits the ability to offer cross-jurisdictional trips for passengers (Virginia to Maryland and vice versa). Cross-jurisdictional connections present an underserved market projected to generate significant ridership in the Long Bridge Corridor. VRE estimates that this market could generate up to 100,000 trips per week (Monday to Friday) between Maryland and Virginia by 2040 if there is the capacity to run such cross-jurisdictional connections.[37] This capacity does not currently exist in the corridor.

For commuter railroad passengers, network connectivity also includes access to and from stations within the Corridor as well as transfers to other transportation services such as Metrorail at transportation hubs. VRE's two most used stations are just outside the Corridor at Crystal City and L'Enfant Plaza. More than 89 percent of VRE customers transfer to their destination via Metrorail, bus, biking, or walking.[38] Recent ridership estimates show 9,068 VRE passenger trips to and from L'Enfant Station in 2017. VRE projects passenger trips will increase to 17,962 by 2040. In 2017, 23 percent of VRE riders who disembarked at L'Enfant station transferred to Metrorail to reach their destination, and

[35] DC2RVA Tier II Draft Environmental Impact Statement, Chapter 1 Purpose and Need. 2017. Accessed from http://dc2rvarail.com/files/2415/0412/9077/Chapter_01_Purpose_and_Need_for_the_Proposed_Action_DC2RVA_DEIS.pdf. Accessed June 30, 2019.
[36] DRPT. Virginia Statewide Rail Plan. 2017. Accessed from http://www.drpt.virginia.gov/media/2345/varailplan_execsummary_final_011818.pdf. Accessed June 8, 2018.
[37] VRE. Virginia Railway Express System Plan 2040 Study. 2014. Accessed from https://www.vre.org/vre/assets/File/2040%20Sys%20Plan%20VRE%20finaltech%20memo%20combined.pdf. Accessed June 8, 2018.
[38] VRE. 2017 Annual Customer Survey. 2017. Accessed from https://www.vre.org/vre/assets/File/2017%20Customer%20Survey%20Results.pdf. Accessed April 11, 2018.

29 percent of riders traveled more than 3 miles to their destination.[39,40] Connections to the local multimodal network in the District will be increasingly important as ridership grows.

2.4. Purpose and Need for the National Park Service Proposed Action

The proposed Federal action of the National Park Service (NPS) includes the following:

- Issuance of a permit to authorize all activities impacting areas of the Potomac riverbed under NPS jurisdiction, including construction and maintenance of a new railroad bridge.
- Issuance of a permit or permits to authorize construction activities occurring on NPS-administered parkland.
- Exchange of land interests in Virginia and the District.
- Transfer of jurisdiction in the District.

The purpose of the Federal action by NPS is to respond to FRA's proposed project, considering the purpose and resources of the George Washington Memorial Parkway (GWMP), the Potomac River, East Potomac Park, and their accompanying administered properties, as expressed in statute, regulation, and policies.

The Federal action by NPS is needed because DRPT, the project sponsor for final design and construction, has requested an exchange in properties or transfer of jurisdiction and submitted preliminary plans to construct and operate a new railroad bridge over the Potomac River upstream of the existing Long Bridge. The Project would also include construction of a new two-track railroad bridge over the GWMP and demolition of the existing railroad bridge over the Washington Channel, to be replaced by a new four-track bridge. The Project would require NPS to issue a permit for the temporary use of land under its administration for construction staging and to undertake the exchange of property or transfer of jurisdiction for the proposed permanent use of a portion of that land for the Project. Construction would require temporary construction staging areas within the GWMP and East Potomac Park, and the new bridge, its piers and abutments, and the expanded railroad right-of-way would have permanent property and visual impacts on the GWMP and East Potomac Park. NPS will need to consider the Project's impacts to natural and cultural resources of the GWMP and East and West Potomac Parks as part of its action.

[39] Distances are based on aerial distances rather than the road network.
[40] VRE. VRE National Transit Database survey. 2017. Accessed from https://www.transit.dot.gov/ntd. Accessed June 8, 2018.