

1 **2.0 Purpose and Need**

2 **2.1. Introduction**

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

8 **2.2. Previous Studies**

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

13 **2.2.1. Long Bridge Phase I Study, January 2015**

14 In 2011, the District Department of Transportation (DDOT) received a High-Speed Intercity Passenger
15 Rail grant from the Federal Railroad Administration (FRA) to complete a two-phase feasibility study of
16 the rehabilitation or replacement of the Long Bridge. DDOT launched the Phase I Study in 2012.² The
17 Phase I Study included an evaluation of the existing and future capacity needs of the Long Bridge
18 Corridor.³

19 The Phase I Study found that, in 2013, Long Bridge carried five peak-period and 18 off-peak-period
20 freight trains.^{4,5} Passenger service consisted of 36 peak-period trains (27 Virginia Railway Express [VRE]
21 and nine Amtrak) and 20 off-peak-period trains (five VRE and 15 Amtrak).⁶ Long Bridge therefore carried
22 79 daily trains in 2013, of which 71 percent were passenger trains and 29 percent freight. Operations
23 modeling performed as part of the Phase I Study determined the existing Long Bridge’s daily capacity to
24 be 96 trains. The 2013 combination of daily freight and passenger trains accounted for 82 percent of the
25 daily total capacity of Long Bridge. During peak hours, railroad traffic was at 98 percent of capacity.
26 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.

27 Future train volume assumptions developed from an analysis process using operator plans and a
28 national forecast database showed that by the year 2040 operators would exceed the current daily
29 96-train capacity of Long Bridge by 70 trains per day. The study-based freight operations forecasts on
30 the Federal Highway Administration (FHWA) Freight Analysis Framework dataset.⁷ The study developed
31 passenger train projections (including high-speed rail) using VRE and Amtrak’s operations plans for
32 future service. The Phase I Study concluded in January 2015.

33 **2.2.2. Long Bridge Phase II Study, 2016**

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

40 **2.2.3. 2017 Virginia Statewide Rail Plan**

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

49 **2.2.4. Washington, D.C. to Richmond Southeast High Speed Rail Project** 50 **(DC2RVA) Tier II Final EIS, May 2019**

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

56 In addition to delivering higher-speed passenger railroad service in the corridor, the increased capacity
57 will allow the expansion of commuter railroad service and accommodate the growth of freight railroad
58 service. The regional conditions cited in the DC2RVA EIS supporting the need for the project are also
59 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.

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

62 **2.2.5. VRE System Plan 2040, January 2014**

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

72 **2.2.6. Maryland Area Regional Commuter (MARC) Growth and Investment** 73 **Plan Update 2013 – 2050, September 2013**

74 The *Growth and Investment Plan* is a multi-phased, multi-year plan to triple the capacity of MARC,
75 Maryland’s commuter railroad system. MARC is a key part of Maryland’s commuter network providing
76 railroad service for more than 36,000 commuters a day traveling between Washington Union Station
77 and northern, central, and western Maryland, with ridership demand expected to continue to grow to
78 75,000 riders per day in 2040. The *MARC Growth and Investment Plan* sets up a series of milestones for
79 near-term, long-term, and future infrastructure investments. MARC cites infrastructure constraints as
80 limiting its ability to expand service and implement scheduling flexibility. MARC’s planned expansion of
81 the Penn Line to Alexandria, Virginia, relies on increased capacity within the Long Bridge Corridor.¹³

82 **2.3. Purpose and Need Statement**

83 The purpose of the Project is to provide additional long-term railroad capacity and to improve the
84 reliability of railroad service through the Long Bridge Corridor.¹⁴ Currently, there is insufficient capacity,
85 resiliency, and redundancy to accommodate the projected demand in future railroad services. The
86 Project is needed to address these issues and to ensure the Long Bridge Corridor continues to serve as a
87 critical link connecting the local, regional, and national transportation network. The sections below
88 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.

89 **2.3.1. Insufficient Railroad Capacity**

90 The Long Bridge Corridor must accommodate combined commuter, intercity passenger, and freight
 91 railroad services with minimal operational delays now and in the future. Based on existing track
 92 infrastructure and train scheduling constraints, railroad services operate at or close to maximum
 93 capacity limits within the Corridor during the morning peak hour, with eight passenger train movements
 94 scheduled in 60 minutes.¹⁵ Over the course of a full weekday, Amtrak and VRE currently operate 24 and
 95 34 trains across Long Bridge, respectively. CSXT operates approximately 18 through-freight trains each
 96 day on the Corridor on the same tracks used by the two passenger train operations.

97 By the forecast year of 2040, operator plans would increase passenger and freight train volumes by
 98 153 percent (**Figure 2-1**).¹⁶ In 2040, VRE anticipates operating 92 trains per day, based on their 2040
 99 System Plan.¹⁷ Between 2030 and 2050, MARC plans to expand their Penn Line, which currently
 100 terminates at Washington Union Station, to terminate in Alexandria, Virginia. As part of this plan, MARC
 101 anticipates operating eight trains per day in the Long Bridge Corridor versus none today.¹⁸ Amtrak
 102 anticipates operating 44 trains per day, based on ridership forecasting conducted for the DC2RVA
 103 Project and confirmed by the operator.¹⁹ CSXT operations expect to increase to 42 freight trains per day
 104 in the Corridor. Norfolk Southern anticipates exercising their trackage and haulage rights, operating six
 105 trains per day.²⁰

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

- 108 • **Population and Employment Growth.** Forecasts estimate that the Washington Metropolitan
 109 Region’s population will grow by more than 1.5 million people between 2010 and 2040. In the
 110 same period, forecasts show that the regional economy will add 1.1 million new jobs. About a
 111 third of the new jobs will locate in the primary employment centers of the region, including the
 112 District, and Arlington and Alexandria, Virginia.²¹ The 2017 Virginia Statewide Rail Plan
 113 recognizes population and employment growth as a critical driver of passenger and freight
 114 railroad needs. Transportation models project more demand for passenger train travel within
 115 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.

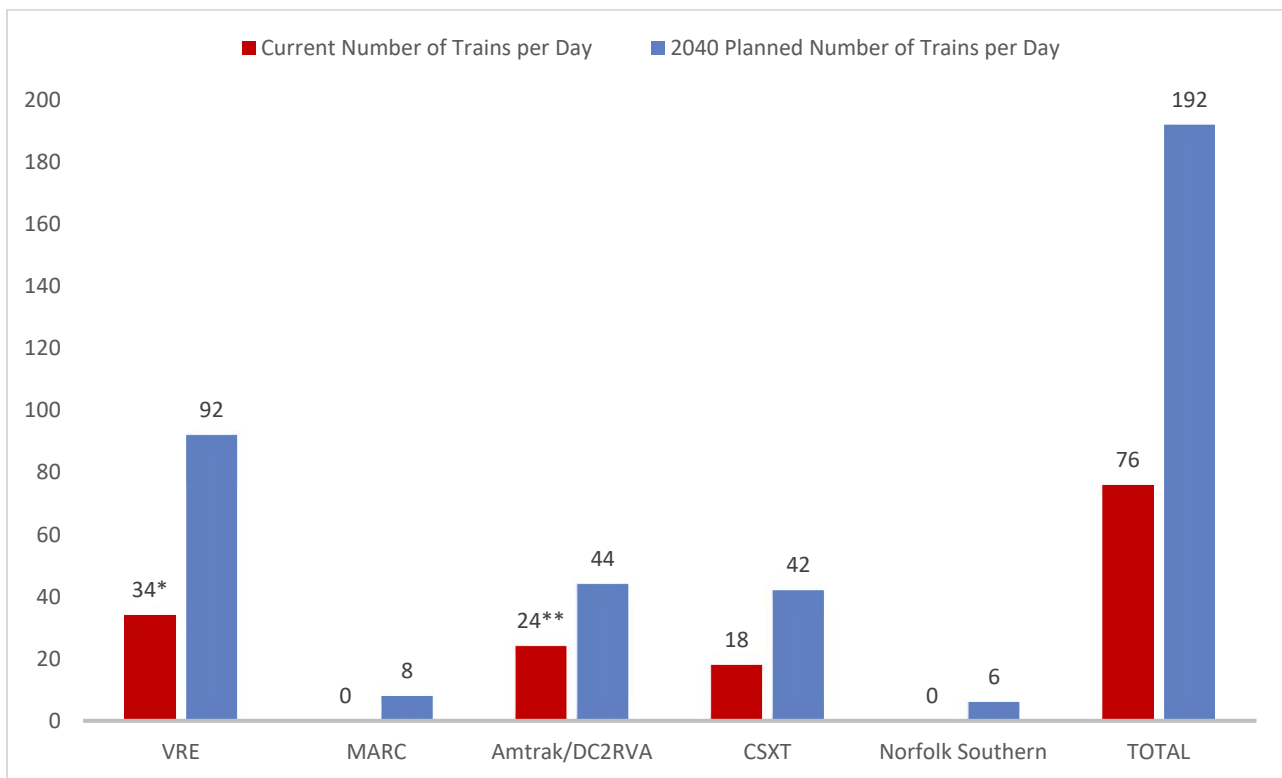
²¹ Metropolitan Washington Council of Governments. Cooperative Forecasts: Employment, Population, and Household Forecasts by Transportation Analysis Zone. 2016. Accessed from <https://www.mwcog.org/documents/2016/11/16/cooperative-forecasts-employment-population-and-household-forecasts-by-transportation-analysis-zone-cooperative-forecast-demographics-housing-population/>. 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.

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

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

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



129
 130 *including non-revenue movements

131 **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.

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- **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.
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- 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.

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

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

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

181 **2.3.2. Insufficient Railroad Resiliency and Redundancy**

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

- 190 • **Track Configuration.** The current two-track configuration of the Long Bridge creates a physical
191 bottleneck and prevents efficient train flow to the existing three-track and planned four-track
192 sections to the north and south of the Long Bridge Corridor. Operators must strictly schedule
193 movements to maintain normal operations in the Corridor because of the two-track
194 configuration. When the schedule slips, even slightly, it results in substantial delays to intercity
195 train service. These delays are a daily event in the Long Bridge Corridor, particularly between the
196 District and Alexandria, Virginia, and cause cascading service disruptions. The frequent delays
197 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.

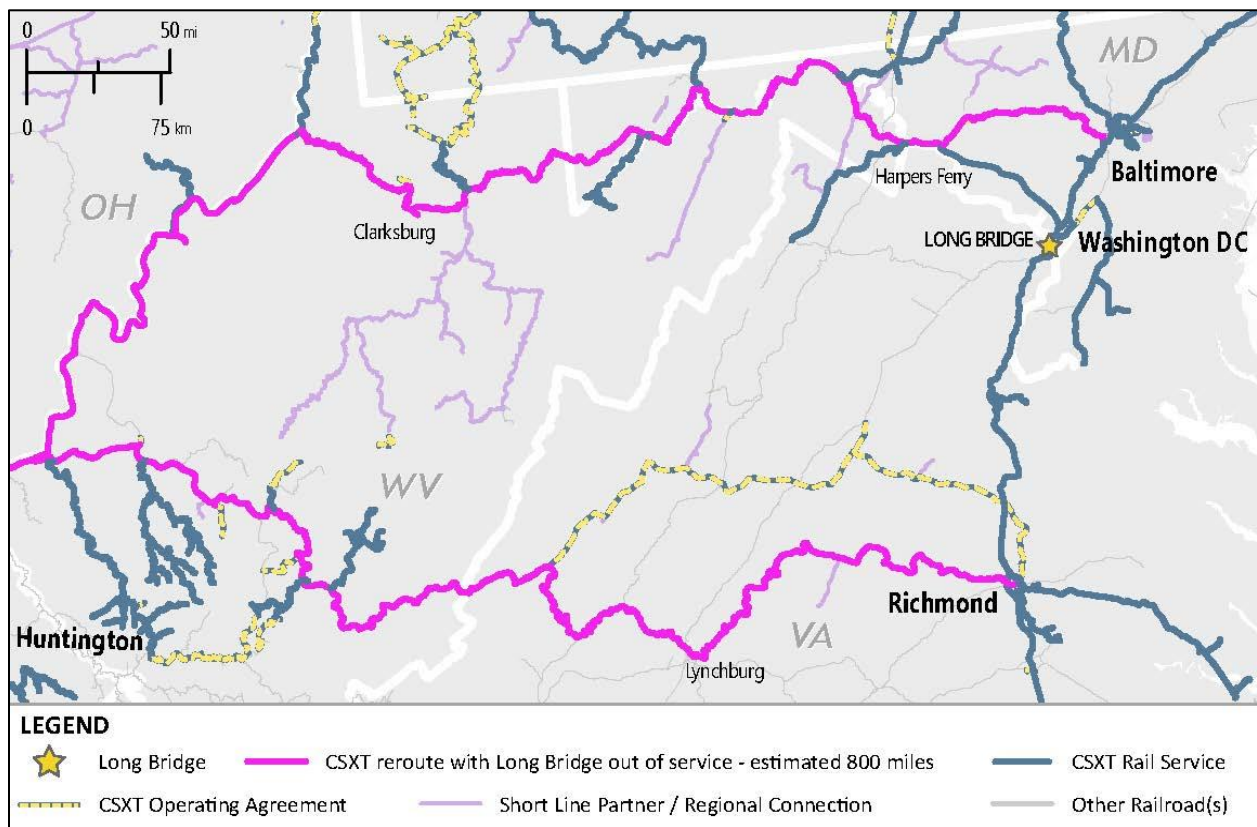
³⁴ "Time slot" is defined as the time and location in the corridor a train is assigned in a timetable. Time slots vary based on the operating characteristics of a train, including whether it makes intermediate stops within the corridor.

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

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

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

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



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

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

219 **2.3.3. Maintain Transportation Network Connectivity**

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

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

240 For commuter railroad passengers, network connectivity also includes access to and from stations within
241 the Corridor as well as transfers to other transportation services such as Metrorail at transportation
242 hubs. VRE's two most used stations are just outside the Corridor at Crystal City and L'Enfant Plaza. More
243 than 89 percent of VRE customers transfer to their destination via Metrorail, bus, biking, or walking.³⁸
244 Recent ridership estimates show 9,068 VRE passenger trips to and from L'Enfant Station in 2017. VRE
245 projects passenger trips will increase to 17,962 by 2040. In 2017, 23 percent of VRE riders who
246 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.

247 29 percent of riders traveled more than 3 miles to their destination.^{39,40} Connections to the local
248 multimodal network in the District will be increasingly important as ridership grows.

249 **2.4. Purpose and Need for the National Park Service Proposed Action**

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

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

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

261 The Federal action by NPS is needed because DRPT, the project sponsor for final design and
262 construction, has requested an exchange in properties or transfer of jurisdiction and submitted
263 preliminary plans to construct and operate a new railroad bridge over the Potomac River upstream of
264 the existing Long Bridge. The Project would also include construction of a new two-track railroad bridge
265 over the GWMP and demolition of the existing railroad bridge over the Washington Channel, to be
266 replaced by a new four-track bridge. The Project would require NPS to issue a permit for the temporary
267 use of land under its administration for construction staging and to undertake the exchange of property
268 or transfer of jurisdiction for the proposed permanent use of a portion of that land for the Project.
269 Construction would require temporary construction staging areas within the GWMP and East Potomac
270 Park, and the new bridge, its piers and abutments, and the expanded railroad right-of-way would have
271 permanent property and visual impacts on the GWMP and East Potomac Park. NPS will need to consider
272 the Project’s impacts to natural and cultural resources of the GWMP and East and West Potomac Parks
273 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.