

12.0 Land Use and Property

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- 3 This chapter defines the land use and property resources pertinent to the Long Bridge Project (the
- 4 Project), and defines the regulatory context, methodology, and Affected Environment. For each Action
- 5 Alternative and the No Action Alternative, this chapter assesses the potential short-term and long-term
- 6 impacts on land use and property. This chapter also discusses proposed avoidance, minimization, and
- 7 mitigation measures to reduce adverse impacts of the Project.
- 8 The land use and property analysis considers the land uses, development trends, and property that the
- 9 Project may affect, and determines whether the Project is compatible with those conditions or may
- affect them. The analysis also considers the Project's consistency with, and effect on, the area's zoning
- 11 and land use plans.

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- 12 Land use includes the arrangements, activities, and inputs people undertake in a certain land cover type
- 13 to produce, change, or maintain it. Examples of typical land uses include residential and commercial
- development, transportation, resource management, and agricultural lands.
- 25 **Zoning** is the legal method by which municipalities define the land uses permitted on a given parcel of
- 16 land and the physical restrictions, such as bulk, height, or setbacks, for development on that parcel.

12.2. Regulatory Context and Methodology

- 18 This section describes the most pertinent regulatory context for evaluating impacts to land use and
- 19 property and summarizes the methodology for evaluating current conditions and the probable
- 20 consequences of the alternatives. This section also includes a description of the Study Area. Appendix
- 21 **D1, Methodology Report**, provides the complete list of laws, regulations, and other guidance
- 22 considered, and a full description of the analysis methodology.

12.2.1. Regulatory Context

- 24 A combination of Federal, state, and local regulations and policies govern the use of land and property
- 25 within the Project area. The Federal Land Policy and Management Act of 1976 establishes principles and
- 26 procedures for the administration of public lands.² Federal sites fall under jurisdiction of the appropriate
- 27 managing Federal entities, including the National Park Service (NPS), the United States Department of
- 28 Defense (DOD), and the National Capital Planning Commission (NCPC). The following plans provide
- 29 planning guidance for Federally owned land:

¹ Natural Resources Management and Environment Department. Undated. Land Cover Classification System. Accessed from http://www.fao.org/docrep/003/X0596E/x0596e01e.htm. Accessed May 3, 2018.

² 43 USC 1701



- NCPC Comprehensive Plan for the National Capital Federal Elements (2016)³
- NCPC SW Ecodistrict Plan (2013)⁴
- NCPC Monumental Core Framework Plan (2009)⁵
- NCPC Legacy Plan (1997)⁶
- NPS National Mall Plan (2010)⁷
- NPS National Mall and Memorial Parks Foundation Document (2017)⁸
- NPS George Washington Memorial Parkway Foundation Document (2014)⁹
- NCPC Memorials and Museums Master Plan (2001)¹⁰
- Federal regulations, such as those under the National Environmental Policy Act of 1969, also direct
- 39 examination of possible conflicts and inconsistencies with Federal, regional, state, and local land use
- 40 plans, policies, and controls.
- The Project Local Study Area for land use and property includes Federal, state, and local lands. The
- 42 Project has the potential to impact land under Federal, Arlington County, and District of Columbia
- 43 (District) control. Local land use policies and plans guide land use in the District and Arlington County
- 44 under the District's Zoning Regulations of 2016 and the Arlington County Zoning Ordinance (ACZO,
- 45 2017); local zoning controls do not apply to Federal properties. 11,12 Changes to zoning controls require
- review and approval of local governing bodies. The Project may also impact properties or businesses,
- 47 requiring displacement or relocation according to both local and Federal laws. At the Federal level, the
- 48 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 establishes minimum
- 49 standards for acquiring properties for Federally funded programs and projects.¹³
- 50 Additional planning guidance for non-Federal land in the Arlington County portion of the Local Study
- 51 Area include the Arlington County General Land Use Plan (amended 2017)¹⁴ and the Crystal City Sector
- 52 Plan (2010). 15 For non-Federal land in the District, the District Elements of the Comprehensive Plan for

Long Bridge Project Draft EIS

³ NCPC. 2016. Comprehensive Plan for the National Capital-Federal Elements. Accessed from https://www.ncpc.gov/plans/compplan/. Accessed May 10, 2018.

⁴ NCPC. 2013. Southwest Ecodistrict Plan. Accessed from https://www.ncpc.gov/initiatives/swecodistrict/. Accessed January 12, 2018.

⁵ NCPC. 2009. Monumental Core Framework Plan. Accessed from https://www.ncpc.gov/plans/framework/. Accessed January 12, 2018.

⁶ NCPC. 1997. Legacy Plan. Accessed from https://www.ncpc.gov/plans/legacy/. Accessed May 23, 2019.

⁷ NPS. 2010. National Mall Plan. Accessed from https://www.nps.gov/nationalmallplan/National%20Mall%20Plan.html. Accessed January 12, 2018.

⁸ NPS. 2017. National Mall and Memorial Parks Foundation Document. Accessed from

https://www.nps.gov/nama/learn/management/upload/NAMA FD SP2.pdf. Accessed May 15, 2019.

⁹ NPS. 2014. George Washington Memorial Parkway Foundation Document.

¹⁰ NCPC. 2001. Memorials and Museums Master Plan. Accessed from https://www.ncpc.gov/plans/memorials/. Accessed January 12, 2018.

¹¹ DCMR 11

¹² Arlington County Zoning Ordinance. Accessed from https://building.arlingtonva.us/resource/zoning-ordinance/. Accessed January 12, 2018.

^{13 49} CFR 24

¹⁴ Arlington County. 2017. General Land Use Plan. Accessed from https://projects.arlingtonva.us/plans-studies/general-land-use-plan/. Accessed January 12, 2018.

¹⁵ Arlington County. 2010. Crystal City Sector Plan. Accessed from https://projects.arlingtonva.us/neighborhoods/crystal-city-development/crystal-city-sector-plan/. Accessed January 12, 2018.



the National Capital (2006, amended 2011),¹⁶ and two small area plans for land near the Project Area—the Maryland Avenue SW Small Area Plan (2012)¹⁷ and the Southwest Neighborhood Small Area Plan (2014)¹⁸—provide planning guidance.

12.2.2. Methodology

 The Local Study Area for land use and property includes the footprint of the Project Area and adjacent land in the surrounding area that has the potential to be affected by the Project. The Local Study Area encompasses a 0.5 -mile buffer surrounding the Project Area. **Figure 12-1** shows the boundaries of the Local Study Area. There is no Regional Study Area for Land Use and Property, since land use and property impacts related to this resource are not likely to occur at a regional scale. However, the analysis generally considered land uses beyond the Local Study Area to place the Local Study Area in context.

Documenting the Affected Environment involved describing the nature of land use and land ownership in the Local Study Area and identifying potentially sensitive uses such as schools, health care facilities, dependent care facilities, places of worship, community centers, and other community support service providers. The documentation also identified other land uses that provide important local or regional functions.

The impact analysis qualitatively assessed the impacts of each alternative on local land use, land use controls, comprehensive regional planning, and development within the Local Study Area by comparing the alternatives to existing land use planning and ownership information, as well as planned land use changes. The analysis evaluated impacts to determine if there would be any permanent changes to land use, consistent with the analysis framework and methodology presented in **Chapter 4**, **Impact Analysis Framework**. The analysis assessed whether the Project's goals align with local and regional land use policies, goals, and objectives based on the plans described in **Section 12.2.1**, **Regulatory Context**. The analysis also identified any property acquisition or relocations required as a result of the Project.

The analysis of land use impacts from construction evaluated whether any construction activities in the Local Study Area would cause temporary modifications or delays to existing or planned land uses in the Local Study Area. The evaluation identified any acquisition or extended use of property to facilitate construction activities (such as staging areas or temporary access roads) based on the limits of construction staging.

In accordance with Federal guidelines, FRA and DDOT identified mitigation recommendations appropriate to the intensity and duration of the potential impacts. They evaluated the recommendations based on their effectiveness in mitigating the impacts of the alternatives.

¹⁶ District of Columbia Office of Planning (DCOP). 2012. Comprehensive Plan for the National Capital, District Elements. Accessed from https://www.ncpc.gov/plans/compplan/. Accessed January 12, 2018.

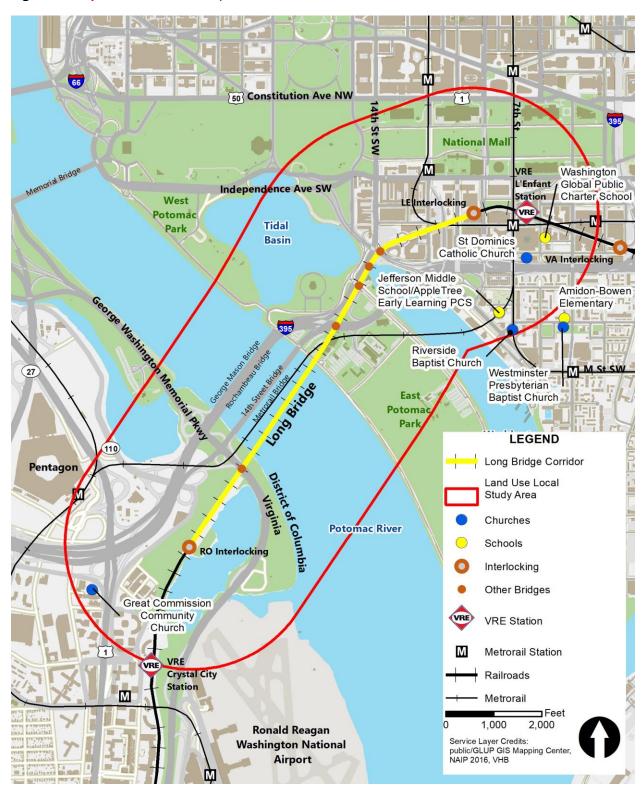
¹⁷ DCOP. Undated. Maryland Avenue SW Small Area Plan. Accessed from https://planning.dc.gov/publication/maryland-ave-small-area-plan. Accessed January 12, 2018.

¹⁸ DCOP. Undated. Southwest Neighborhood Small Area Plan. Accessed from https://planning.dc.gov/publication/southwest-neighborhood-plan. Accessed January 12, 2018.



Figure 12-1 | Land Use Local Study Area

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12.3. Affected Environment 87 88 This section summarizes the existing conditions of the land use, zoning, and property ownership. For a 89 complete description of the Affected Environment, see Appendix D2, Affected Environment Report. 90 12.3.1. **Existing Land Use** 91 The sections below describe existing land use in the District and Arlington County portions of the 92 Local Study Area. For organizational purposes, the documentation of existing land use divided the Local 93 Study Area into a series of land use sub-areas with geographical proximity and shared characteristics 94 (Table 12-1 and Figure 12-2). Figure 12-3 shows a map of existing land use in Arlington County and the 95 District. 96 12.3.1.1. Arlington County 97 Land uses within the Arlington County part of the Local Study Area consist primarily of public land 98 devoted to a mix of parkland and transportation infrastructure. The southernmost part of the Local 99 Study Area includes private commercial, residential, and mixed uses in the Crystal City area, while 100 the westernmost part includes the eastern edge of mixed-use development around Pentagon City. 12.3.1.2. District of Columbia 101 102 In the District, the Local Study Area consists of public- and government-related land uses, including 103 government offices and public parks, recreation areas, and open space. Private land development, 104 transportation infrastructure, and water bodies make up the rest of the land use in this area. The 105 southwestern part of the Local Study Area includes a growing area of residential and commercial land 106 uses. 12.3.2. 107 **Existing Property Ownership** 108 CSX Transportation (CSXT) owns the Long Bridge Corridor, which it acquired in 1999. From the GWMP to the Washington Channel, the Corridor crosses land owned by the Federal government and administered 109 by NPS. Surrounding properties consist of both privately and publicly owned land. Table 12-2 describes 110

property ownership by land use sub-area for Arlington County and the District. The existing land use

map in Figure 12-3 shows Federal and local public land uses.

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113 **Table 12-1** Existing Land Uses by Sub-Area

Land Use Sub-Area	Description of Existing Land Uses
Arlington County	
Crystal City and Long Bridge Park	 Recreational fields, walking paths, and an elevated overlook with views of the Monumental Core (Long Bridge Park); privately controlled open space Privately owned office, commercial, and residential uses Commuter parking; Virginia Railway Express (VRE) Crystal City Station; railroad right-of-way and highways (US 1 and I-395)
Pentagon and Pentagon City	 DOD and associated facilities Regional mall (Fashion Centre at Pentagon City) and big-box retail stores High-rise residential and office buildings Vacant properties Rapidly redeveloping land tracts Commuter parking; Pentagon Metrorail Station and local and commuter bus transit center; highways (US 1 and I-395)
Potomac Waterfront and East of the Long Bridge Corridor	 Federally owned parkland and open space (Mount Vernon Trail [MVT], George Washington Memorial Parkway [GWMP], Navy Merchant Marine Memorial, Roaches Run Waterfowl Sanctuary [Roaches Run], and Gravelly Point Park) Columbia Island Marina Railroad right-of-way, highways and parkways (I-395 and GWMP) Ronald Reagan Washington National Airport
District of Columbia	
L'Enfant Plaza and Near Southwest - South	 Privately owned commercial, office, hotel, and mixed use (including Portals private development and Mandarin Oriental Hotel); Federal offices Public open space (NPS Reservation 115) Railroad right-of-way and highway (I-395)
L'Enfant Plaza and Near Southwest - North	 Federal office; privately owned commercial and office New development including museum, hospitality, and residential uses Public open space (NPS Reservation 113 – Hancock Park, Reservations 197 and 198) Federal Center SW Metrorail Station; L'Enfant Plaza Metrorail Station; VRE L'Enfant Station; railroad right-of-way
Southwest Neighborhood and Waterfront	 Privately owned residential, retail, and office uses, including first phase of the District Wharf mixed-use development Entertainment, education, institutional, public uses, marinas, fish market Public open space (Benjamin Banneker Park, Southwest Duck Pond, and Town Center Park) Highways (I-395)
Monumental Core	 National Mall open space and museums Tidal Basin, Jefferson Memorial, and West Potomac Park Smithsonian Metrorail Station East Potomac Park (Federal parkland, golf course, tennis facility, NPS and United States Park Police offices, DOD facility, NPS maintenance facility, and NPS Parking Lots A, B, and C) Railroad right-of-way and highways (US 1 and I-395)



Figure 12-2 | Land Use Sub-Areas

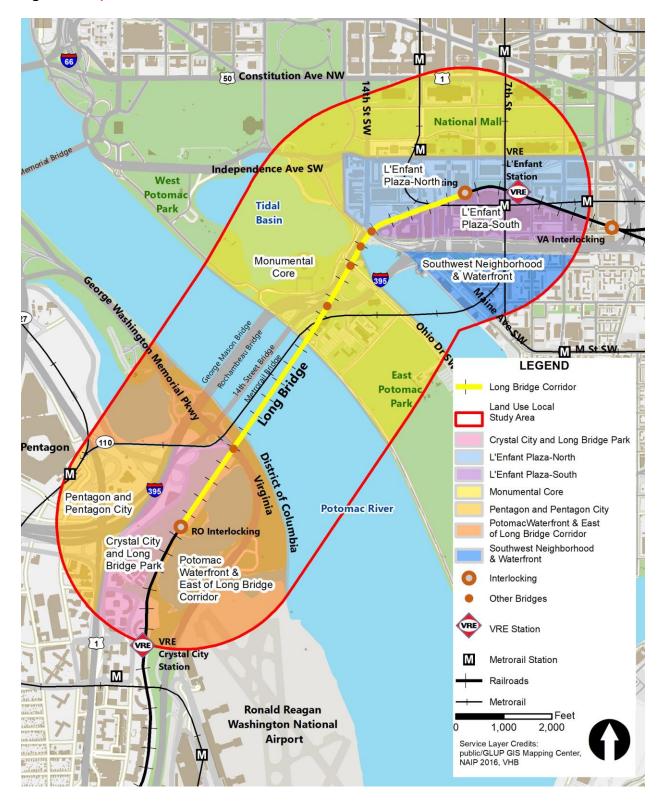
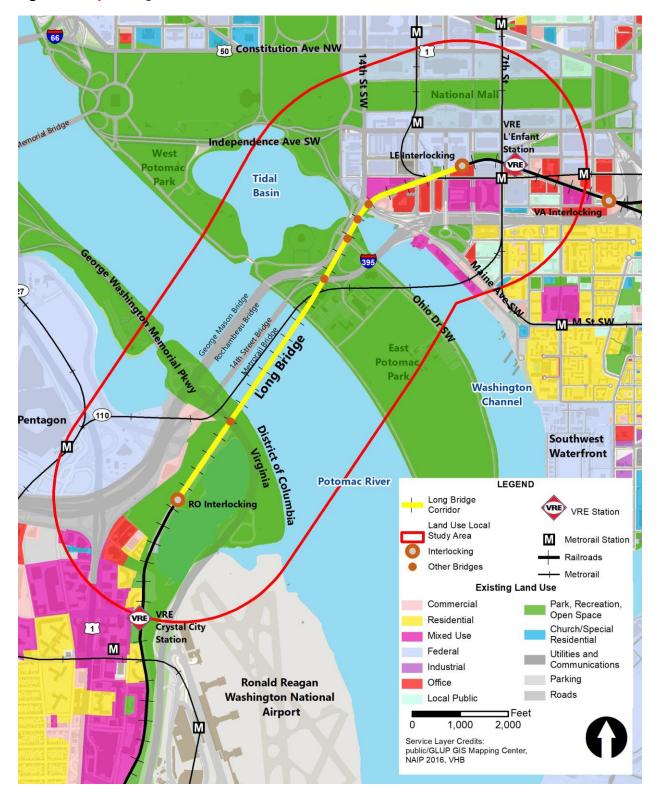




Figure 12-3 | Existing Land Use

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119 **Table 12-2** | Property Ownership by Land Use Sub-Area

Property Description	Ownership	
Arlington County		
Crystal City and Long Bridge Park		
Parcels in Crystal City	Generally private	
Parcel west of Long Bridge Park	Private	
Long Bridge Park	Arlington County	
Railroad Corridor	Private (permanent easement held by CSXT)	
Pentagon and Pentagon City		
Parcels in Pentagon City	Predominantly private	
I-395	Virginia Department of Transportation	
Pentagon Reservation	Federal	
Potomac Waterfront and East of the Long Brid	dge Corridor	
GWMP	Federal (administered by NPS)	
Roaches Run	Federal (administered as part of the GWMP)	
Western shoreline of Roaches Run	Arlington County	
Ronald Reagan Washington National Airport	United States Department of Transportation (leased by the Metropolitan Washington Airports Authority)	
District of Columbia	metropolitan viasnington vin porto viatnontej	
L'Enfant Plaza and Near Southwest - South		
I-395	DDOT	
Metrorail Yellow Line	Washington Metropolitan Area Transit Authority (WMATA)	
Maine Avenue	DDOT	
Portals (south of Maryland Avenue)	Private	
Parcels south of D Street SW	Generally private	
Building between the 12th Street Expressway and 10th Street SW	Federal	
Parcels abutting the Corridor east of 10th Street SW	Mix of Federal and private	
L'Enfant Plaza and Near Southwest - North		
Portals (north of Maryland Avenue)	Private	
Parcels abutting the railroad Corridor east of 12th Street SW	Mix of Federal and private	
Southwest Neighborhood and Waterfront		
Most parcels	Private	
Benjamin Banneker Park	Federal	
Monumental Core		
All property	Federal	



122 123 124 125 126	The rapidly evolving nature of land use within the Local Study Area means assessing potential land use impacts requires a baseline understanding of expected land use changes by the planning year of 2040. Local planning guidance in the District and Arlington County informs this understanding of future land use, combined with ongoing and future development projects. The sections below describe planned future land use in the Local Study Area.
127	12.3.3.1. Arlington County
128 129 130 131 132 133	Figure 12-4 illustrates future land use in Arlington County based on its General Land Use Plan (GLUP). Arlington County regularly updates the GLUP to reflect the latest future land use plans. ¹⁹ In addition, the <i>Crystal City Sector Plan</i> offers a 40-year vision for Crystal City. ²⁰ Land surrounding the Long Bridge Corridor is likely to reflect the plan's goals of encouraging denser development that supports a balance of office, residential, retail, cultural, and civic uses. Over time, redevelopment will retrofit existing buildings and convert existing commercial uses to a greater mix of uses that includes new residential development.
135 136 137 138 139	In November 2018, Amazon announced they had selected National Landing in Arlington as the site of one of their new East Coast headquarters. ²¹ The headquarters will eventually bring more than 25,000 jobs to Crystal City and Pentagon City. The new headquarters will not change future land use plans in the Local Study Area. As stated in the proposal for the new headquarters, "all buildings, existing or proposed, are fully master plan approved, with all zoning in place." ²²
140 141 142	The County broke ground in July 2018 on an aquatic and fitness center (Long Bridge Aquatics and Fitness Center and Park Expansion). This facility sits on an approximately 10.5-acre parcel in the new northern part of Long Bridge Park, adjacent to the Long Bridge Corridor. The facility is expected to open in 2021.

Planned Future Land Use (2040)

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¹⁹ Arlington County. 2017. General Land Use Plan. Accessed from https://projects.arlingtonva.us/plans-studies/general-land-use-plan/. Accessed September 10, 2018.

²⁰ Arlington County. 2010. Crystal City Sector Plan. Accessed from https://projects.arlingtonva.us/neighborhoods/crystal-city-development/crystal-city-sector-plan/. Accessed September 10, 2018.

²¹ Arlington County. "Northern Virginia's National Landing Selected for Major New Amazon Headquarters." November 13, 2018. Accessed from https://www.arlingtoneconomicdevelopment.com/resources/news/news-releases/northern-virginias-national-landing-selected-for-major-new-amazon-headquarters/. Accessed December 20, 2018.

²² Innovation Lives Here: Northern Virginia Amazon HQ2 Submission, p. 208. 2017. Accessed from https://hqnova.com/downloads.html. Accessed December 20, 2018.



Figure 12-4 | Planned Future Land Use (2040)





12.3.3.2. District of Columbia

Figure 12-4 illustrates future land use, as envisioned by the DCOP *Comprehensive Plan for the National Capital – District Elements*, as amended in 2012.²³ DCOP is currently updating this plan. In addition, small area plans in or near the Local Study Area adopted since 2012 include the *Southwest Neighborhood Plan*,²⁴ the NCPC *Southwest Ecodistrict Plan*,²⁵ the *Maryland Avenue SW Plan*,²⁶ and the *Maryland Avenue SW Transportation Study*.²⁷ Existing plans envision the evolution of the L'Enfant Plaza and Near Southwest areas into a well-connected series of mixed-use districts that balance existing commercial and government uses with additional commercial, residential, and cultural uses. The existing plans also envision Maryland Avenue SW will become a more continuous pedestrian corridor.

12.4. Permanent or Long-Term Effects

This section discusses the permanent or long-term effects following the construction of the No Action Alternative and Action Alternatives on land use and property resources within the Local and Regional Study Areas. For a complete description of the permanent or long-term effects, see **Appendix D3**, **Environmental Consequences Report**.

12.4.1. Land Use

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12.4.1.1. No Action Alternative

In the No Action Alternative, the Long Bridge Corridor would continue to operate with two tracks crossing the Potomac River. The No Action Alternative presumes that Long Bridge remains in service, with continued maintenance as necessary. The No Action Alternative also presumes that the Virginia Department of Rail and Public Transportation (DRPT) and VRE complete the other planned railroad projects that would expand capacity to four tracks on either side of the Long Bridge Corridor.

Without expanded capacity across the Potomac River, VRE and Amtrak would be unable to increase commuter and passenger railroad service in accordance with their plans. ²⁸ In addition, Maryland Area Regional Commuter (MARC) would likely be unable to extend service to Northern Virginia. As travel demand between Maryland, the District, and Northern Virginia continues to grow, particularly with the selection of Crystal City as the site of Amazon's HQ2, the lack of railroad service would push travelers to other modes, increasing congestion on roadways and Metrorail. Eventually, this would have negative effects on the region's economy that could in turn inhibit development and land use change, creating an

²³ DCOP. 2012. Comprehensive Plan for the National Capital, District Elements. Accessed from https://www.ncpc.gov/plans/compplan/. Accessed September 10, 2018.

²⁴ DCOP. Undated. Southwest Neighborhood Small Area Plan. Accessed from https://planning.dc.gov/publication/southwest-neighborhood-plan. Accessed September 10, 2018.

²⁵ NCPC. 2013. Southwest Ecodistrict Plan. Accessed from https://www.ncpc.gov/initiatives/swecodistrict/. Accessed September 10, 2018.

²⁶ DCOP. Undated. Maryland Avenue SW Small Area Plan. Accessed from https://planning.dc.gov/publication/maryland-ave-small-area-plan. Accessed September 10, 2018.

²⁷ DCOP. Undated. Maryland Avenue SW Transportation Study. Accessed from https://ddot.dc.gov/page/maryland-avenue-sw-transportation-study. Accessed September 10, 2018.

²⁸ While VRE and Amtrak would each be able to increase their service by two trains per day in the No Action Alternative, this is not consistent with their plans. VRE plans to run an additional 58 trains per day by 2040 and Amtrak (through DRPT's DC to Richmond High Speed Rail project) plans to add an additional 20 trains per day.



174 within the Local Study Area. 12.4.1.2. Action Alternative A (Preferred Alternative) 175 176 Action Alternative A would cause minor permanent direct adverse impacts to land use through 177 conversion of land to railroad use. Action Alternative A would also cause moderate permanent indirect 178 adverse impacts to land use due to noise and visual effects. 179 In Arlington County, Action Alternative A would cause minor permanent direct adverse impacts due to 180 the conversion of park land within Long Bridge Park to railroad use (Figure 12-5). The area is currently vegetated and serves as a buffer between the park and surrounding transportation infrastructure, 181 including the railroad and roadways. Sufficient land would remain to serve as a buffer between the park 182 183 users and transportation infrastructure. Moderate adverse indirect impacts to land use in Long Bridge 184 Park would occur as a result of noise, due to the proximity of the tracks to passive areas of the park and 185 the increased frequency of trains traveling the Corridor. The intensity of noise impacts would vary by 186 location within the park, depending on the location. Noise impacts are described in greater detail in 187 **Chapter 13, Noise and Vibration.** 188 Action Alternative A would cause moderate adverse direct effects to the GWMP through the conversion 189 of the landscaped area between the existing Long Bridge and the Metrorail Bridge to railroad use. The 190 landscaping in this area currently screens this transportation infrastructure from the view of park users. 191 The conversion of this land to railroad use would reduce the ability to screen these views. 192 In the District, Action Alternative A would cause minor adverse direct effects with the greatest area of 193 impact in the Monumental Core sub-area. Effects would include use of East and West Potomac Park 194 lands and reconfiguration of an NPS parking lot, including relocation of the parking lot entrance (Figures 195 12-6, 12-7, and 12-8). However, the effects would be relatively small and localized and would not affect 196 the function of the land uses. Effects would also include loss of Washington Marina parking lot spaces 197 (Figure 12-9) and small impacts to properties along the railroad right-of-way (Figure 12-10). However, 198 these impacts would not affect the function of the land uses. 199 Moderate adverse indirect effects to land use would occur as a result of noise impacts to both the 200 existing Mandarin Oriental Hotel and the Portals V residential uses. Noise impacts would result from the 201 increase in train operations and addition of tracks closer to receptors. Noise impacts are described in 202 greater detail in Chapter 13, Noise and Vibration. 12.4.1.3. Action Alternative B 203 204 Effects to land use resulting from Action Alternative B would be similar to those resulting from Action 205 Alternative A. Action Alternative B would require replacement of the existing Long Bridge over the 206 GWMP. The replacement bridge would also cross over the MVT and the Potomac River. As this 207 replacement bridge would be constructed in the same location as the existing bridge, and future use 208 would continue as it does today, there would be no additional permanent effects to land use.

adverse indirect effect. Locally, the No Action Alternative would have no direct effect on land uses



Figure 12-5 Permanent and Temporary Land Use and Property Impacts – Long Bridge Park to Potomac River (Action Alternative A)

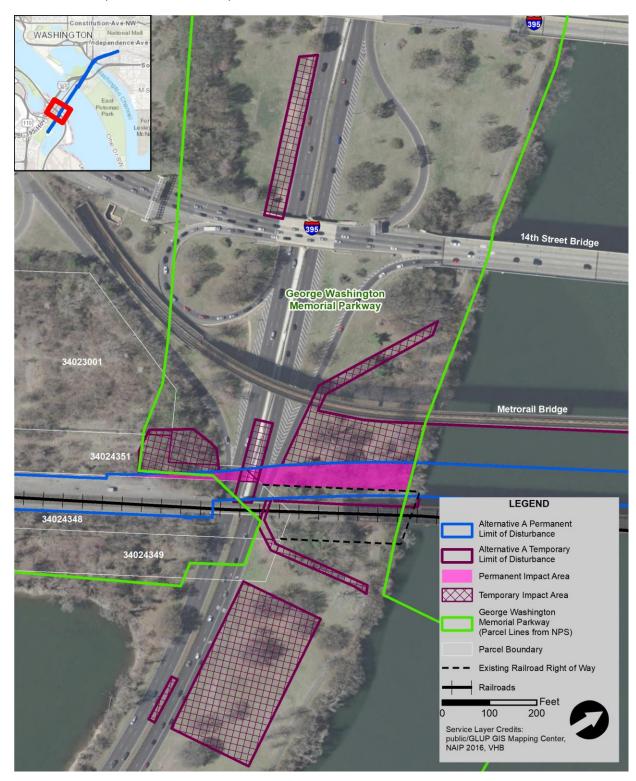




Figure 12-6 | Permanent and Temporary Land Use and Property Impacts – Potomac River to I-395 (Action Alternative A)

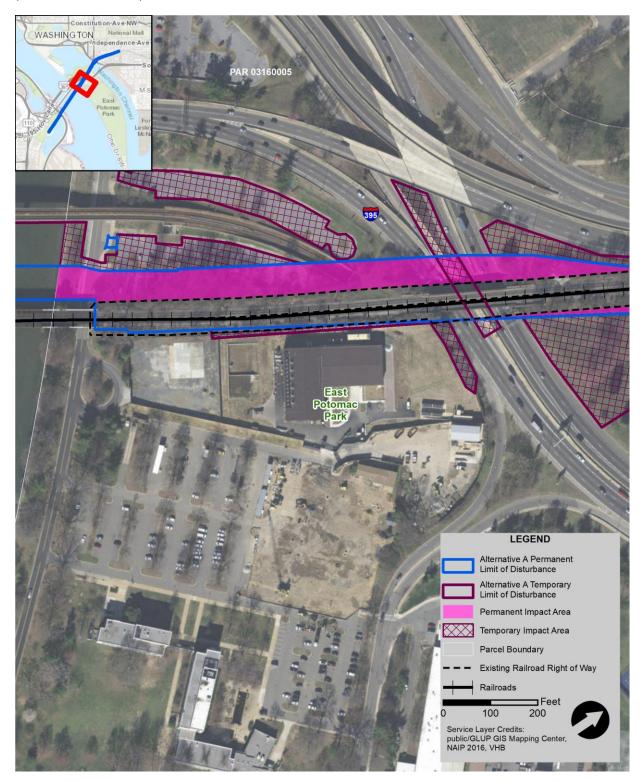




Figure 12-7 | Permanent and Temporary Land Use and Property Impacts – I-395 to Washington Channel (Action Alternative A)

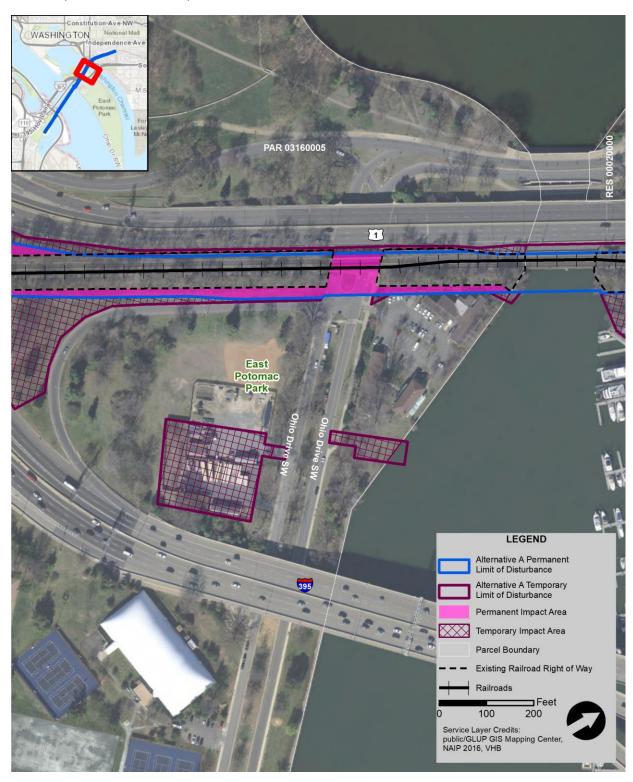




Figure 12-8 | Permanent and Temporary Land Use and Property Impacts – Zoomed in to NAMA Headquarters (Action Alternative A)

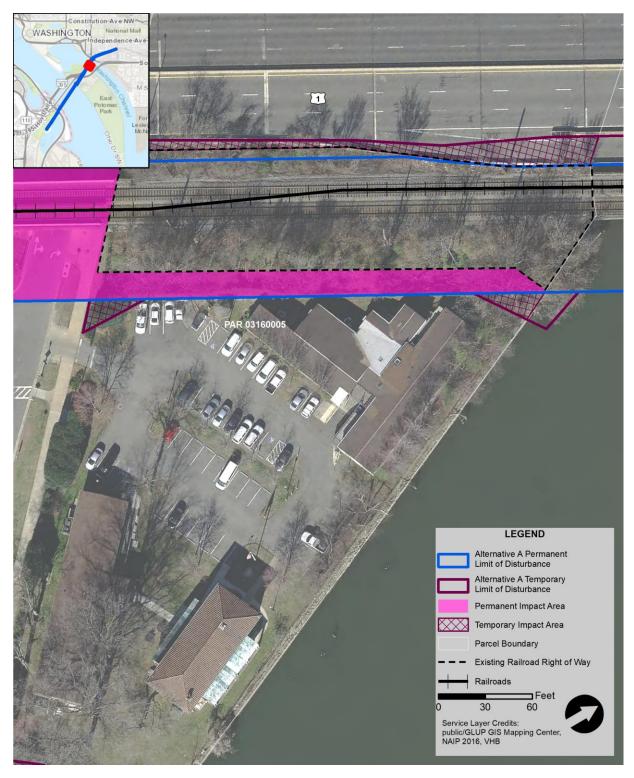




Figure 12-9 | Permanent and Temporary Land Use and Property Impacts – Washington Marina and Portals Development (Action Alternative A)

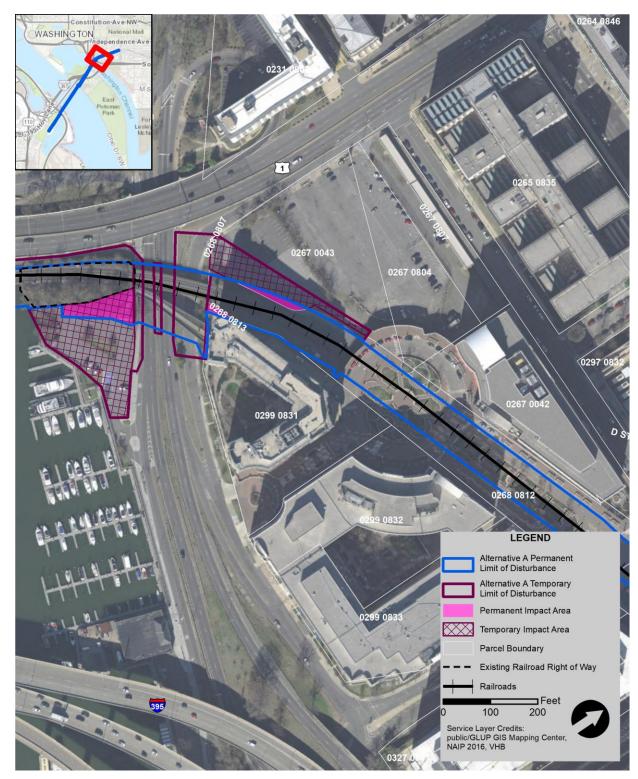
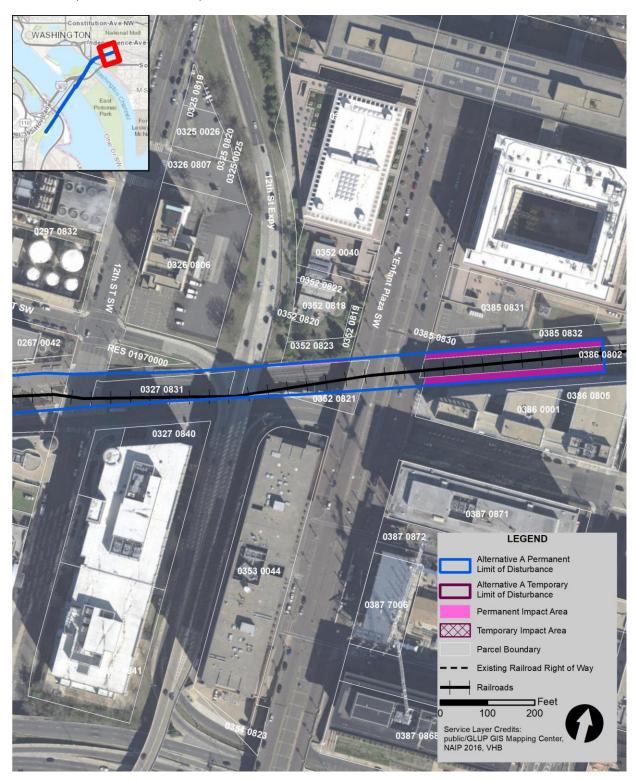




Figure 12-10 | Permanent and Temporary Land Use and Property Impacts – 12th Street SW to 9th Street SW (Action Alternative A)





12.4.2. Property

12.4.2.1. No Action Alternative

In the No Action Alternative, the Long Bridge Corridor would continue to operate with two tracks crossing the Potomac River. The No Action Alternative presumes that Long Bridge remains in service, with continued maintenance as necessary. The No Action Alternative also presumes that DRPT and VRE complete the other planned railroad projects that would expand capacity to four tracks on either side of the Long Bridge Corridor.

Based on current information, the Washington, DC to Richmond Southeast High Speed Rail (DC2RVA) Project, the VRE L'Enfant Station Improvements, and the fourth track between L'Enfant and Virginia interlockings are not expected to have any property impacts within the Local Study Area.

12.4.2.2. Action Alternative A (Preferred Alternative)

Action Alternative A would result in minor to moderate permanent direct adverse impacts from a transfer of property outside the existing railroad right-of-way to railroad use. While there would be several private properties affected, none of the property impacts would result in displacement of residences or businesses. The majority of the property impacts (approximately 3.08 acres) would affect local or Federal park properties. These impacts would occur in areas predominantly characterized by transportation uses. Therefore, the property impacts would not affect the function of the property. Action Alternative A would impact two parcels in Virginia and eight parcels in the District. Four of the parcels affected are within Federal properties, including the GWMP, East Potomac Park, and Reservation 197. The total property impact area resulting from Action Alternative A would be approximately 3.46 acres, as shown in Table 12-3 and illustrated in Figures 12-5 through 12-10. Action Alternative A would also affect 22,000 square feet of the Potomac River bottom, which is owned by NPS. Affected property owned by NPS will require either an exchange of land or a transfer of jurisdiction. In addition, airspace approval would be required from FHWA for the new railroad bridge over I-395. Airspace approval would also be required from DDOT for the replacement railroad bridge over Maine Avenue SW.

Property impacts were calculated based on available GIS data from Arlington County, the District, and NPS, as well as as-built plans for the railroad Corridor. None of these data show dedicated railroad right-of-way between the GWMP roadway and the east bank of the Potomac River. Therefore, the analysis estimated the extent of the existing right-of-way based on the location of railroad infrastructure. In addition, NPS and Arlington County data conflict in the vicinity of the GWMP, resulting in the range of potential impact shown in **Table 12-3**. Finally, several small parcel impacts are shown for properties bordering the railroad Corridor between the 12th Street Expressway and 9th Street SW. However, there would be no impacts outside of the existing retaining walls that border the railroad right-of-way. During final design, a title search and survey would be required to establish definitive property ownership and any other existing easements or agreements.

12.4.2.3. Action Alternative B

Action Alternative B would cause the same property impacts as Action Alternative A, plus an additional 0.1-acre impact in East Potomac Park. As Action Alternative B would replace the existing bridge, it would require the Project acquire a wider right-of-way over Ohio Drive SW, as shown in **Figure 12-11**.



Table 12-3 Action Alternative A Permanent Property Impacts

Property Description/

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Ownership	GIS Parcel ID	Sub-Area	Impact Area (Acres)
Long Bridge Park	34024351	Long Bridge Park	0.04 or 0.14 ¹
GWMP	None	Potomac Waterfront	0.4 or 0.5 ¹
	Subtotal, Virginia	0.54	
East Potomac Park	03160005	Monumental Core	2.4
Washington Marina	n/a	L'Enfant Plaza South	0.16
Private	0267 0043	L'Enfant Plaza North	0.04
Private	0268 0813	L'Enfant Plaza South	0.01
Private	0299 0831	L'Enfant Plaza South	0.02
NPS	0352 0823	L'Enfant Plaza North	0.02
NPS	0385 0832	L'Enfant Plaza North	0.12
Private	0386 0001	L'Enfant Plaza South	0.15
	Subtotal, District of Columbia		2.92
	Total		3.46

 $^{^{1}}$ The range in impact area for Long Bridge Park and the GWMP is due to the discrepancy in property records. The total impact is approximately 0.54 acres total for the two parks.

Source: Arlington Virginia, District of Columbia, and NPS Property Data, VHB, GIS analysis.

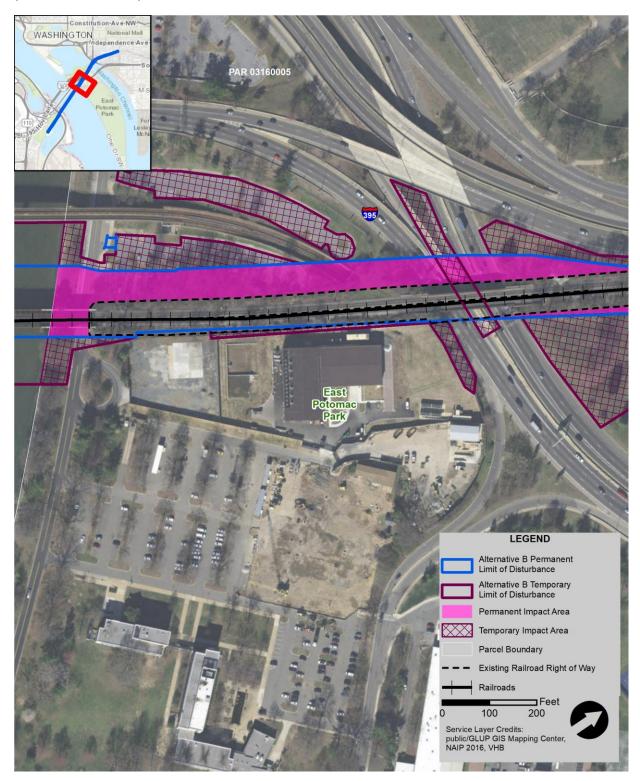
Consistency with Local and Federal Plans 12.4.3.

12.4.3.1. No Action Alternative

As noted above, in the No Action Alternative, the Long Bridge Corridor would continue to operate with two tracks crossing the Potomac River. The No Action Alternative would have adverse direct impacts on consistency with local plans because it would not include expansion of the Long Bridge Corridor from two tracks to four tracks, a goal articulated in numerous local and Federal plans. A series of NCPC plans for the Local Study Area—starting with Extending the Legacy and the Monumental Core Framework Plan and elaborated in later plans such as the Federal Elements of the Comprehensive Plan of the National Capital and the SW Ecodistrict Plan—have recommended the expansion of the railroad right-of-way from two tracks to four tracks, specifically in the portion of the Local Study Area adjacent to Maryland Avenue SW. The No Action Alternative would not implement these capacity improvements.



Figure 12-11 | Permanent and Temporary Land Use and Property Impacts – Potomac River to I-395 (Action Alternative B)





281 12.4.3.2. Action Alternative A (Preferred Alternative) 282 Action Alternative A would have minor permanent direct beneficial impacts on consistency with local 283 and Federal plans because it would be either largely consistent with plans, or not inconsistent with plans 284 that do not directly address the Project or similar projects. 285 Action Alternative A would be consistent with local plans for Arlington County, including the General 286 Land Use Plan and the Crystal City Sector Plan, both of which envision the continuation of railroad service within the CSXT right-of-way. Action Alternative A would require acquisition of a small portion of 287 property planned for Long Bridge Park (less than 0.1 acres). However, it would not affect any of the 288 289 planned elements or activities within the park. 290 Action Alternative A would be consistent with aspects of Federal plans for the GWMP and MVT, 291 including the NCPC Federal Elements of the Comprehensive Plan of the National Capital. While these 292 plans do not directly address the construction of railroad bridges in the Local Study Area, they 293 emphasize the importance of protecting the natural and historic character of the Potomac River 294 shoreline as well as the iconic and scenic vistas along the GWMP and across the Potomac River. Policy 295 UD.B.2.4 of the Urban Design Element of the Federal Elements recommends "if transportation system 296 impacts are unavoidable," requiring actions "to minimize and mitigate negative impacts to maintain 297 parkway characteristics." Policy UD.B.2.5 includes the recommendation to "design and locate bridges to 298 minimally affect local riverine habitat, waterways, shorelines, and valleys, as described within the 299 Federal Environment Element." 300 In the District, Action Alternative A would be largely consistent with local plans for the Local Study Area. 301 Action Alternative A would not preclude the evolution of the L'Enfant Plaza and Near Southwest areas 302 into a well-connected series of mixed-use districts as envisioned in the Southwest Neighborhood Plan,²⁹ the NCPC Southwest Ecodistrict Plan, 30 the Maryland Avenue SW Plan, 31 and the Maryland Avenue SW 303 304 *Transportation Study.*³² 305 Action Alternative A would also be consistent with multiple NCPC plans for the Local Study Area— 306 starting with Extending the Legacy and the Monumental Core Framework Plan and elaborated in later 307 plans such as the Federal Elements of the Comprehensive Plan of the National Capital and the Southwest 308 Ecodistrict Plan—that have recommended the expansion of the adjacent CSXT right-of-way capacity 309 from two to four tracks. While Action Alternative A would not fulfill the vision of decking over the 310 railroad tracks, reestablishing Maryland Avenue SW as a grand boulevard and reconnecting the 311 surrounding street grid, it would not preclude this from happening in the future as part of a separate 312 action.

²⁹ DCOP. Undated. Southwest Neighborhood Small Area Plan. Accessed from https://planning.dc.gov/publication/southwest-neighborhood-plan. Accessed September 10, 2018.

³⁰ NCPC. 2013. Southwest Ecodistrict Plan. Accessed from https://www.ncpc.gov/initiatives/swecodistrict/. Accessed September 10, 2018.

³¹ DCOP. Undated. Maryland Avenue SW Small Area Plan. Accessed from https://planning.dc.gov/publication/maryland-ave-small-area-plan. Accessed September 10, 2018.

³² DCOP. Undated. Maryland Avenue SW Transportation Study. Accessed from https://ddot.dc.gov/page/maryland-avenue-sw-transportation-study. Accessed September 10, 2018.



313 314 315 316 317	Action Alternative A would be largely consistent with future land uses identified in the <i>District Elements</i> of the Comprehensive Plan of the National Capital and with the NPS National Mall Plan. However, Action Alternative A would be inconsistent with recommendations in the NCPC Monumental Core Framework Plan that recommend the relocation and realignment of railroad and other transportation infrastructure crossing the Potomac River.
318 319 320 321 322	The NCPC Memorials and Museums Plan identifies one site in East Potomac Park, just east of the Project Area, as one of 20 "prime candidate sites" for a future memorial or museum. Tied to the relocation of the 14th Street Bridges recommended in NCPC's Extending the Legacy and subsequently in the Monumental Core Framework Plan, the potential memorial site is not incompatible with Action Alternative A.
323 324 325 326	Action Alternative A would add new visual elements to significant viewsheds and vistas identified in the Urban Design Element and associated technical addendum of the <i>Federal Elements</i> , NPS cultural landscape reports, and other NCPC, NPS, and District plans. Impacts on aesthetics and visual resources are addressed in further detail in Chapter 14 , Aesthetics and Visual Resources .
327	12.4.3.3. Action Alternative B
328 329 330	Under Action Alternative B, consistency with local plans would be the same as described for Action Alternative A as its footprint would be similar. While this alternative would require replacement of the existing Long Bridge, this difference would not affect its consistency with current plans.
331	12.5. Temporary Effects
332 333 334 335	This section discusses the direct and indirect temporary effects of the No Action Alternative and Action Alternatives during construction, based on conceptual engineering design. For the complete technical analysis of the potential temporary impacts to land use and property resources, see Appendix D3 , Environmental Consequences Report.
336	12.5.1. Land Use
337	12.5.1.1. No Action Alternative
338 339 340 341	The No Action Alternative may result in temporary land use impacts due to the need for staging areas during construction. The land use impacts related to the construction of projects included in the No Action Alternative as well as any other large capital projects would be assessed and determined within the context of each project.
342	12.5.1.2. Action Alternative A (Preferred Alternative)
343 344 345 346 347 348 349	Overall, Action Alternative A would result in moderate temporary direct adverse impacts to land use due to construction. This is because construction activities and staging (for example, of construction cranes) affecting the GWMP (including temporary relocation of the MVT) and East Potomac Park would make portions of these parks unavailable to park users for approximately 2 years to slightly less than 5 years. Construction activities within the GWMP would require temporary relocation of the MVT and use of portions of the landscaped area between the roadway and the Potomac River to the north and south of the existing Long Bridge. Within East Potomac Park, construction activities would affect two surface



parking areas and two ballfields. However, the majority of park uses would remain undisturbed. Within the GWMP, access would be maintained for roadway and trail users. Access to East Potomac Park roadways would be maintained, and construction activities would take place away from the tennis center, golf course, swimming pool, and picnic areas within the park. Other land uses affected by construction include:

- Open space at the south end of Long Bridge Park (negligible adverse direct impact, as park uses would remain undisturbed).
- Cloverleafs at I-395 and Boundary Channel Drive (negligible adverse direct impact, as these areas are not used for any activities).
- Undeveloped open space at the north end of Long Bridge Park (negligible adverse direct impact, as park uses would remain undisturbed).
- NPS Parking Lots B and C and additional areas of temporary access (moderate adverse direct impact, as temporary loss of parking would affect access to East Potomac Park for motorists).
- Washington Marina parking lot (major direct adverse impact, as temporary loss of parking would impact the use and operation of the business).
- Hancock Park, also called NPS Reservation 113 (minor adverse direct impact, as park uses would remain undisturbed).
- See **Figures 12-5** through **12-10** and **Figures 12-12** through **12-14** for construction-period land use impacts due to Action Alternative A.

12.5.1.3. Action Alternative B

Construction activities under Action Alternative B would generate temporary impacts similar in location and extent as those caused in Action Alternative A. However, the durations for several of Action Alternative B's construction activities would be substantially longer. Impacts to the GWMP would last over 5 years and impacts in East Potomac Park would last over 8 years.

12.5.2. Property

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12.5.2.1. No Action Alternative

The No Action Alternative may result in temporary property impacts due to the need for staging areas during construction. The property impacts related to the construction of projects included in the No Action Alternative as well as any other large capital projects would be assessed and determined within the context of each project.



Figure 12-12 | Temporary Land Use and Property Impacts – Crystal City

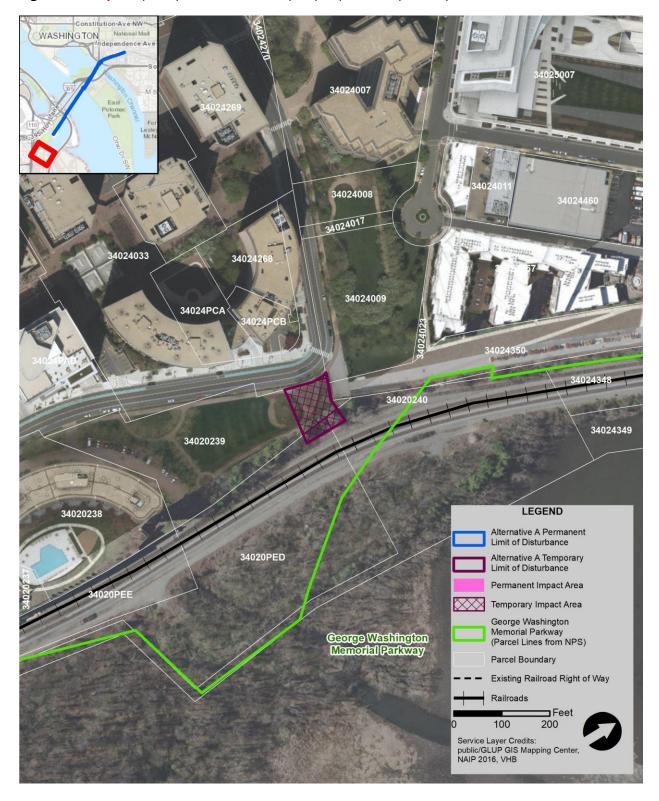




Figure 12-13 | Temporary Land Use and Property Impacts – I-395 Cloverleaf

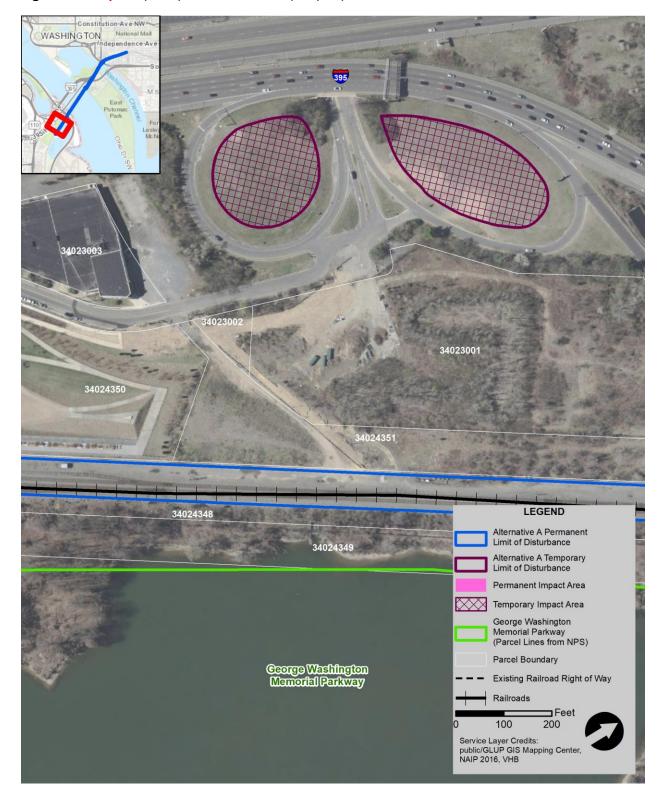
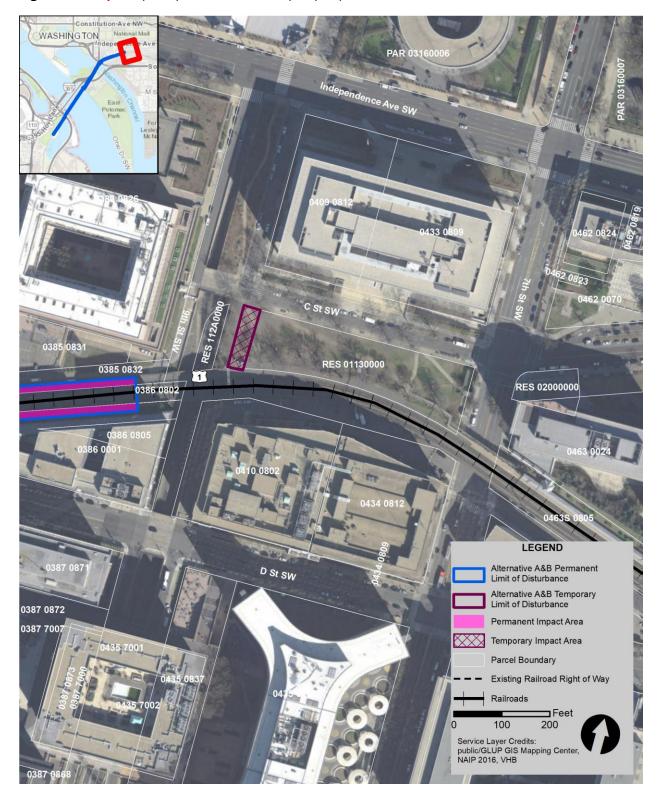




Figure 12-14 | Temporary Land Use and Property Impacts – Hancock Park





12.5.2.2. Action Alternative A

Action Alternative A would result in minor to major temporary direct adverse impacts due to use of property outside the existing railroad right-of-way for construction access and staging. The majority of the property impacts (approximately 3.08 acres) would affect local or Federal park properties. These impacts would occur in areas predominantly characterized by transportation uses. Therefore, the property impacts would not affect the function of the property. Action Alternative A would impact 10 parcels in Virginia and 6 parcels in the District. Three of the parcels affected are within Federal properties - the GWMP, East Potomac Park, and Hancock Park (Reservation 113). The total property impact area resulting from Action Alternative A would be approximately 11.2 acres, as shown in **Table 12-4** and illustrated in **Figures 12-5** through **12-10**.³³

Table 12-4 Action Alternative A Temporary Property Impacts

Property Description/

Ownership	GIS Parcel ID	Impact Area (Acres)
Long Bridge Park	34024351 & 34023001	0.01 or 0.4
GWMP	None	3.4 or 3.8
I-395 Cloverleaf	None	2.08
Private	34020239	0.16
Private	34020240	0.02
Private	34024009	0.001
Private	34024033	0.002
Arlington County	34024349	0 or 0.21
Private	34020PED	0.03
Subtotal, Virg	6.30	
East Potomac Park	03160005	4.8
Washington Marina	n/a	0.76
Private	0267 0043	0.33
Private	0268 0813	0.01
Private	0299 0831	0.01
Hancock Park (Reservation 113)	RES 01130000	0.09
Subtotal, District of Colum	6.00	
	12.3	

Action Alternative A would result in a major temporary direct adverse impact to the Washington Marina property through use of its surface parking for approximately 4 years and 1 month. Without mitigation, this use of the marina's surface parking area would affect its ability to operate, since many of the marina users access the facility by car. Therefore, alternate parking accommodations would be evaluated as described in **Chapter 9, Transportation**.

³³ The range in impact area is due to the discrepancy in property records for Long Bridge Park and the GWMP.



403 Action Alternative A would also temporarily affect 42,781 square feet of the Potomac River bottom, 404 which is owned by NPS. Therefore, NPS would need to issue a permit for temporary use of the river 405 bottom during construction. 406 12.5.2.3. Action Alternative B 407 Construction activities under Action Alternative B would generate temporary impacts similar in location 408 and extent as those caused in Action Alternative A. However, the durations for several of Action 409 Alternative B's construction activities would be substantially longer. **12.5.3**. **Consistency with Local and Federal Plans** 410 411 As local plans are generally focused on long-term actions and goals, the No Action Alternative and the 412 Action Alternatives are neither consistent nor inconsistent with the plans analyzed earlier in this 413 chapter. 12.6. Avoidance, Minimization, and Mitigation 414 415 This section describes proposed mitigation for the impacts to land use and property. 12.6.1. **Land Use** 416 417 Potential measures that the project sponsor for final design and construction, the Virginia Department 418 of Rail and Public Transportation (DRPT), would employ to avoid, minimize, or mitigate the adverse 419 impacts of the Project on land use include: 420 Using areas already disturbed for construction of other projects, such as the cloverleafs at I-395 421 and Boundary Channel Drive, to minimize the impacts of construction staging. 422 Screening construction staging areas as practicable to minimize impacts to adjacent land uses. 423 Following construction, restoring land or property adversely impacted by construction activities 424 (including trees, other vegetation, and landscaping), to the extent practicable. 425 Incorporating vegetative buffers and screening as practicable between new transportation 426 infrastructure and potentially sensitive land uses to minimize adverse impacts on business 427 activities and building tenants. 428 Coordinating with property owners, Arlington County, the District, and NPS regarding traffic 429 control strategies to minimize traffic disruptions and maintain vehicular, pedestrian, and bicycle mobility on roadways in and around the Local Study Area. 430 431 Constructing a new bike-pedestrian bridge connecting Long Bridge Park, GWMP, and East

Potomac Park. The new connection would mitigate adverse impacts to the parks. This new

connection is proposed as mitigation for impacts under Section 4(f) of the U.S. Department of

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34 49 USC 303

Transportation Act of 1966.34



 Maintaining visitor access to parkland and trails in the Local Study Area to the extent practicable during construction.

12.6.2. Property

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For impacts to NPS-administered properties requiring a change in ownership, DRPT would coordinate with NPS to identify the appropriate mechanism. Potential mechanisms could include a transfer of jurisdiction or an exchange of land in accordance with 54 USC 102901(b) or other applicable authorities. If a land exchange is required, DRPT and NPS would identify appropriate properties for the exchange during final design.

DRPT would be responsible for potential measures to avoid, minimize, or mitigate adverse impacts of the Project on property including:

- For privately-owned properties, complying with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and applicable District, Commonwealth of Virginia, and Arlington County laws in any instances where property acquisition or displacement would be necessary to implement the Project. If full property acquisition is required, DRPT will fairly compensate property owners for the land acquired and, if necessary, provide relocation assistance.
- Establishing agreements with private property owners and building tenants to provide
 construction access in a manner that minimizes adverse impacts to business activities and other
 land uses. Coordinating with property owners to address specific access requirements and
 minimize disruptions, wherever possible.
- For impacts to parking, working with property owners to temporarily relocate parking spaces where feasible, or appropriately compensate property owners for loss of parking spaces and revenue.

12.6.3. Consistency with Local and Federal Plans

Potential measures to avoid, minimize, or mitigate adverse impacts of the Project on consistency with local and Federal plans include:

Where the Project may be inconsistent, or potentially in conflict with, local plans, coordinating
with the Arlington Department of Community Planning, Housing & Development; DCOP; NCPC;
and NPS on strategies to minimize adverse impacts on these plans and to avoid or minimize
potential conflicts with the implementation of local plans.