

Long Bridge Project

Draft Environmental Impact Statement and Draft Section 4(f) Evaluation

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Appendices

Appendix A: Agency and Public Coordination

- Appendix A1: Scoping Report
- Appendix A2: Agency and Public Coordination Plan
- Appendix A3: December 2017 Public Meeting Summary
- Appendix A4: November 2018 Public Meeting Summary

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- Appendix B1: Alternatives Development Report
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- Appendix E4: Phase IA Archaeological Assessment Public Summary
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How to Read this Document

Purpose of this Environmental Impact Statement

The Federal Railroad Administration (FRA) and District Department of Transportation (DDOT) prepared this Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act of 1969 (NEPA) to disclose the environmental consequences of a Proposed Action (the Long Bridge Project, or “Project”). The EIS informs decision-makers and the public of any reasonable alternatives that would avoid or minimize adverse impacts to the natural or human environment. Agencies that are considering an action on the proposed Long Bridge Project can use this EIS to help plan and make decisions.

Abbreviations and Acronyms

The **Abbreviations and Acronyms** section lists all of the abbreviations and acronyms used in this document. This section follows **How to Read this Document**.

Executive Summary

The **Executive Summary** succinctly describes the Project, the NEPA process, and major conclusions to acquaint readers with the EIS.

Chapter 1 – Introduction

Chapter 1 describes the history of the Project, the Project Area and setting, and identifies the roles and jurisdiction of Lead and Cooperating Agencies.

Chapter 2 – Purpose and Need

Chapter 2 describes the purpose of the Project and the transportation needs that the Project will address. It also highlights related studies relevant to the Project.

Chapter 3 – Alternatives

Chapter 3 describes the development and screening process for the Action Alternatives, and gives a detailed description of the infrastructure elements included in the Action Alternatives. This chapter also describes the No Action Alternative (planning year 2040), which provides a base scenario against which to compare the effects of the Project. Additionally, the chapter provides information on the construction methods and activities for the Action Alternatives. Finally, the chapter identifies the Lead Agencies’ Preferred Alternative.

Chapter 4 – Impact Analysis Framework

Chapter 4 defines the framework and methodology used to analyze the potential impacts of the Project. This chapter notes that the impact analysis evaluates operational (long-term) and construction (short-term) direct, indirect, and cumulative impacts for each environmental resource. This chapter also defines key impact analysis terms.

Chapters 5 through 21 – Analysis of Resource Categories

Chapters 5 through 21 include descriptions of the resource study area, the methodology used to evaluate impacts, and the affected environment for each resource. The chapters also summarize the potential short-term and long-term impacts of the No Action Alternative and Action Alternatives on various resources (the environmental consequences). Measures to avoid, minimize, or mitigate adverse impacts to the resources are identified. The full analysis for each resource is in **Appendix D3, Environmental Consequences Report**. The chapters address the following resources:

- Chapter 5 – Natural Ecological Systems and Endangered Species
- Chapter 6 – Water Resources and Water Quality
- Chapter 7 – Geologic Resources
- Chapter 8 – Solid Waste Disposal and Hazardous Material
- Chapter 9 – Transportation and Navigation
- Chapter 10 – Air Quality and Greenhouse Gases
- Chapter 11 – Energy
- Chapter 12 – Land Use and Property
- Chapter 13 – Noise and Vibration
- Chapter 14 – Visual and Aesthetic Impacts
- Chapter 15 – Cultural Resources
- Chapter 16 – Parks and Recreation
- Chapter 17 – Social and Economic Resources
- Chapter 18 – Safety and Security
- Chapter 19 – Public Health, Elderly, and Persons with Disabilities
- Chapter 20 – Environmental Justice
- Chapter 21 – Cumulative Impacts

Chapter 22 – Bike-Pedestrian Crossing

Chapter 22 describes the evaluation of the bike-pedestrian crossing proposed as mitigation for the Project. This chapter reviews the process for developing the bike-pedestrian crossing as mitigation for impacts to properties protected under Section 4(f) of the United States Department of Transportation Act of 1966,¹ and addresses the potential impacts of the bike-pedestrian crossing to the human and natural environment.

Chapter 23 – Commitment of Resources

Chapter 23 describes the irreversible or irretrievable commitment of resources resulting from implementation of either Action Alternative. This chapter also analyzes the relationship between the Project's potential short-term uses of the human and natural environment, as well as the maintenance and enhancement of long-term productivity throughout the life of the Project.

¹ 49 USC 303

Chapter 24 - Draft Section 4(f) Evaluation

Chapter 24 identifies uses of Section 4(f) of the United States Department of Transportation Act of 1966 (Section 4(f)) protected-properties for each Action Alternative based on the analyses presented in **Chapters 5 through 21**. This chapter also summarizes the planning efforts undertaken to identify avoidance alternatives, minimize harm to Section 4(f) resources, and the opportunities for agencies to consult on the Draft Section 4(f) Evaluation.

Chapter 25 – Public Involvement and Agency Coordination

Chapter 25 summarizes the efforts of FRA and DDOT to inform the public and agencies about the Project and to solicit input on the EIS.

Chapter 26 – Distribution of DEIS

Chapter 26 lists the entities and officials who received a copy of the EIS.

Chapter 27 – List of Preparers

Chapter 27 identifies persons involved in the analysis and development of the EIS.

Chapter 28 – References

Chapter 28 lists sources and references for the analysis and documentation presented.

Chapter 29 – Glossary

Chapter 29 explains terminology used throughout the EIS.

Appendices

The appendices provide the detailed technical documentation and relevant coordination materials that support the findings presented in the EIS chapters. The appendices contain supporting documentation to keep the EIS concise and no longer than absolutely necessary to comply with NEPA, as instructed by the Council on Environmental Quality Implementing Regulations for NEPA.²

² 40 CFR Part 1500-1508

Abbreviations and Acronyms

ACS	American Community Survey
ACZO	Arlington County Zoning Ordinance
ADA	Americans with Disabilities Act of 1990
Amtrak	National Railroad Passenger Corporation
ANC	Advisory Neighborhood Commission
APE	Area of Potential Effects
AQI	Air Quality Index
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASL	American Sign Language
BMP	Best Management Practice
CAA	Clean Air Act of 1970
CCTV	Closed-Circuit Television
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generator
CFA	United States Commission of Fine Arts
CFR	Code of Federal Regulations
CH ₄	Methane
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CSXT	CSX Transportation
CWA	Clean Water Act of 1972
CZMA	Coastal Zone Management Act of 1972
CZMP	Coastal Zone Management Program
dB	Decibels
dba	A-weighted decibel
dBV	Vibration levels express in decibel notation
DC	District of Columbia
DC FEMS	District of Columbia Fire and Emergency Medical Services Department
DC SHPO	District of Columbia State Historic Preservation Office
DC2RVA	Washington, DC to Richmond Southeast High Speed Rail
DCA	Ronald Reagan Washington National Airport
DCEPA	District of Columbia Environmental Policy Act
DCMR	District of Columbia Municipal Regulations
DCOP	District of Columbia Office of Planning
DCRA	District of Columbia Department of Consumer and Regulatory Affairs

DEIS	Draft Environmental Impact Statement
DDOT	District Department of Transportation
DHS	United States Department of Homeland Security
District	District of Columbia
DOD	Department of Defense
DOE	Determination of Eligibility
DOEE	District Department of Energy and Environment
DOI	United States Department of the Interior
DRPT	Virginia Department of Rail and Public Transportation
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EJ	Environmental Justice
EO	Executive Order
EPA	United States Environmental Protection Agency
ERNS	Emergency Release Notification System
ESA	Endangered Species Act of 1973
FAA	Federal Aviation Administration
FAST Act	Fixing America's Surface Transportation Act of 2015
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FINDS	Facility Index System
FR	Federal Register
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FWIS	Fish and Wildlife Information Service
FY	Fiscal Year
GHG	Greenhouse Gas
GIS	Geographic Information System
GLUP	General Land Use Plan
GSA	United States General Services Administration
GWMP	George Washington Memorial Parkway
HCS	Highway Capacity Software
HHS	United States Department of Health and Human Services
HOV	High Occupancy Vehicle
HSEMA	Homeland Security and Emergency Management Agency
HSP	Health and Safety Plan
IPaC	Information, Planning and Conservation
LCT	Loudoun County Transit

Ldn	A-weighted average day-night sound level
LE Interlocking	L'Enfant Interlocking
Leq(h)	A-weighted hourly equivalent sound level
LOD	Limits of Disturbance
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MARC	Maryland Area Regional Commuter
MMBtu	Million British Thermal Units
MOA	Memorandum of Agreement
MOT	Maintenance of Traffic
MOU	Memorandum of Understanding
MPD	Metropolitan Police Department
MSAT	Mobile Source Air Toxics
MVMH	Mount Vernon Memorial Highway
MVT	Mount Vernon Trail
MWCOG	Metropolitan Washington Council of Governments
N2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAMA	National Mall and Memorial Parks
NCHRP	National Cooperative Highway Research Program
NCPC	National Capital Planning Commission
NCR	National Capital Region
NEC	Northeast Corridor
NEPA	National Environmental Policy Act of 1969
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHL	National Historic Landmark
NHPA	National Historic Preservation Act of 1966
NMFS	National Marine Fisheries Service
NO	Nitrous Oxide
NO ₂	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NS	Norfolk Southern
O ₃	Ozone

OHM	Oil and/or Hazardous Materials
OSHA	Occupational Safety and Health Administration
OWJ	Official with Jurisdiction
PA	Programmatic Agreement
PAH	Polycyclic Aromatic Hydrocarbons
Pb	Lead
PCBs	Polychlorinated Biphenyls
PE	Preliminary engineering
PFO	Palustrine Forested
PM	Particulate Matter
PM10	Particulate Matter Sized 10 Micrometers or Less
PM2.5	Particulate Matter Sized 2.5 Micrometers or Less
Portals V	The Portals Residential Tower
PPB	Parts Per Billion
PPM	Parts Per Million
PSS	Palustrine Scrub-Shrub
RCRA	Resource Conservation and Recovery Act of 1976
RF&P	Richmond, Fredericksburg and Potomac
ROD	Record of Decision
RPA	Resource Protection Area
RTE	Rare, Threatened, and Endangered
SAV	Submerged Aquatic Vegetation
SCC	State Cororation Commission – Commonwealth of Virginia
SDWA	Safe Drinking Water Act of 1974
SFHAs	Special Flood Hazard Areas
SHPO	State Historic Preservation Office
SMP	Soil Management Plan
SO ₂	Sulfur Dioxide
SO _x	Sulfur Oxides
SWPPP	Stormwater Pollution Prevention Plan
SWRv	Stormwater Retention Volume
TAC	Technical Advisory Committee
TMDL	Total Maximum Daily Load
TMP	Traffic Management Plan
TSA	Transportation Security Agency
ULSD	Ultra Low Sulfer Diesel
USACE	United States Army Corps of Engineers
USC	United States Code
USCG	United States Coast Guard
USCP	United States Capitol Police

USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USPP	United States Park Police
VA Interlocking	Virginia Interlocking
VAC	Virginia Administrative Code
VdB	Vibration Decibels
VDCR	Virginia Department of Conservation and Recreation
VDEQ	Virginia Department of Environmental Quality
VDGIF	Virginia Department of Game and Inland Fisheries
VDHR	Virginia Department of Historic Resources
VDOT	Virginia Department of Transportation
VIMS	Virginia Institute of Marine Science
VLR	Virginia Landmarks Register
VMS	Variable Message Signs
VRE	Virginia Railway Express
VRP	Voluntary Remediation Program
WMATA	Washington Metropolitan Area Transit Authority
WQS	Water Quality Standards
WUS	Washington Union Station