



Environmental Impact Statement (EIS)/ Section 106 Public Meeting Proposed Alternatives

December 14, 2017

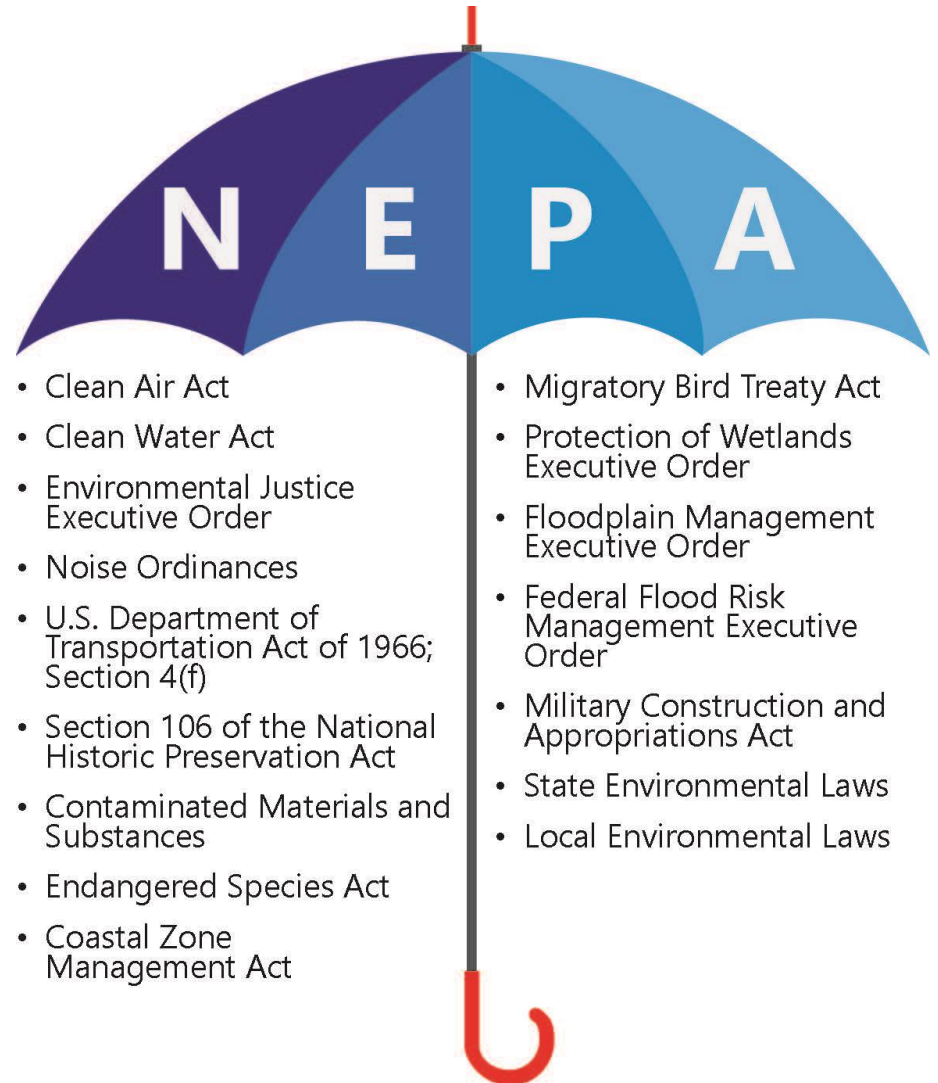


Today's Agenda

- Project Overview
- Project Schedule
- Purpose and Need
- Concept Screening Process
- Level 2 Concept Screening Results
- Proposed Action Alternatives for Draft EIS
- Bike-Pedestrian Crossing Options
- Next Steps

What is NEPA?

- The National Environmental Policy Act of 1969 (NEPA) requires Federal agencies to assess the environmental effects of their proposed actions prior to making decisions.
- NEPA encourages integrated compliance with other environmental laws so that a proposed project's impacts are comprehensively evaluated before implementation.
- To comply with NEPA, FRA and DDOT are preparing an EIS that will be made available for public review and comment.



What is Section 106?

- Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to:
 - Consider and determine the direct AND indirect effects of a proposed undertaking on historic properties
 - Consult with State Historic Preservation Offices, Tribes, and other consulting parties
 - Avoid, resolve or mitigate adverse effects to historic properties
 - See: 36 CFR Part 800 (Protection of Historic Properties)



The Long Bridge

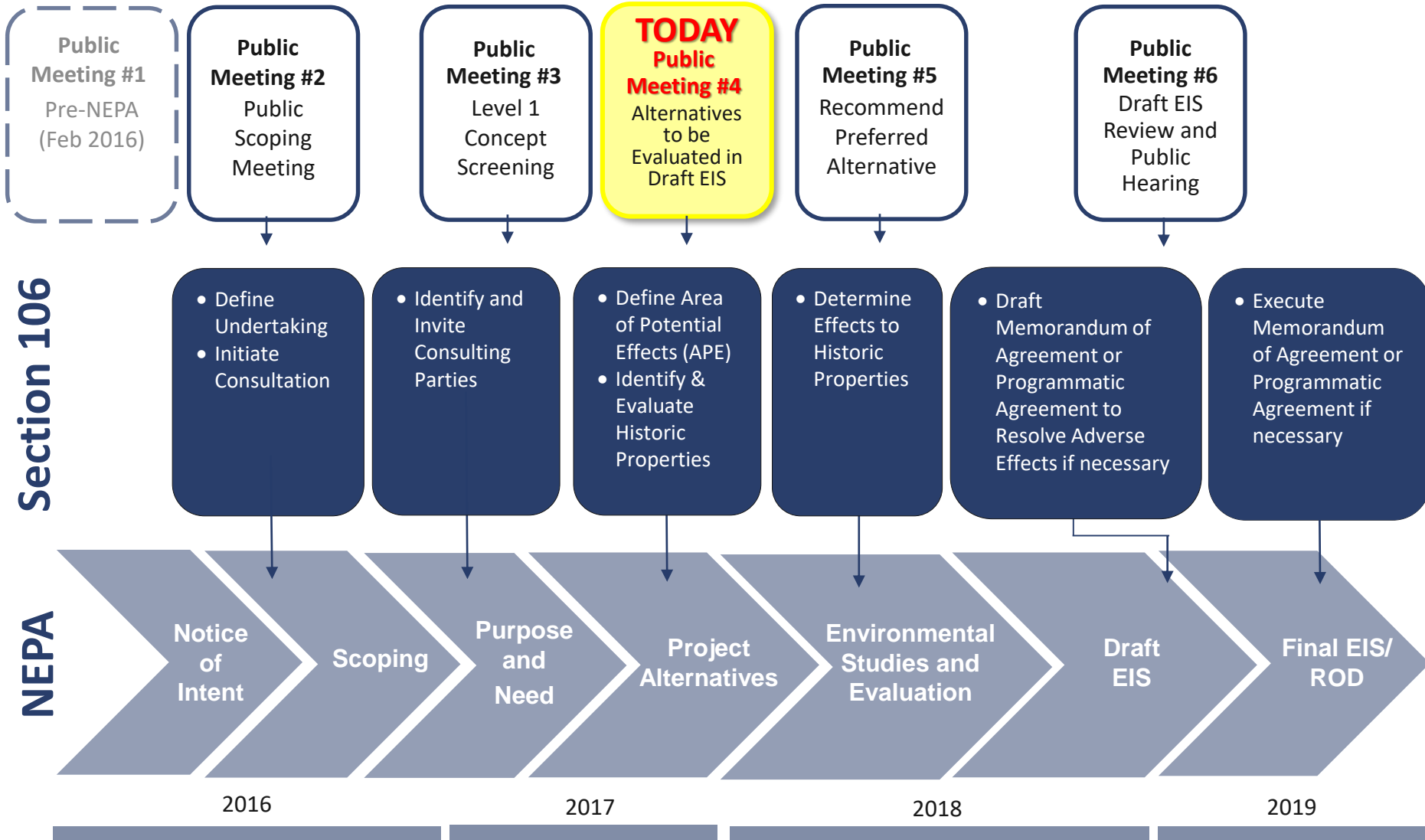
- Two-track steel truss railroad bridge constructed in 1904
- Owned by CSX Transportation (CSXT)
- Serves freight (CSXT), intercity passenger (Amtrak), and commuter rail (VRE)
- Only railroad bridge connecting Virginia to the District – next closest crossing is at Harpers Ferry, WV
- Typically serves 76 weekday trains
- Three tracks approaching the bridge from the north and south
- Contributing element to the East and West Potomac Parks Historic District



Project Area Limits Update



Section 106 and NEPA Coordination

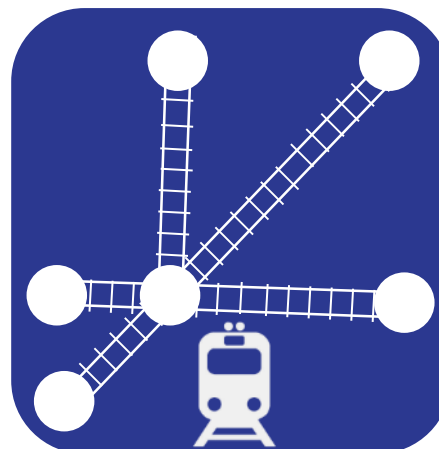


Purpose and Need

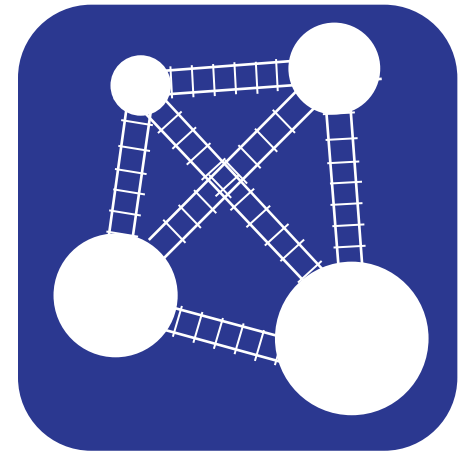
Railroad Capacity



Network Connectivity



Railroad Resiliency and Redundancy



Current and Future Operations

Train Operator	Current # Trains per Day	2040 # Trains per Day	Percent Increase
VRE	34*	92	171%
MARC	0	8	--
Amtrak/DC2RVA	24	44	83%
CSXT	18	42	133%
Norfolk Southern	0	6	--
TOTAL	76	192	

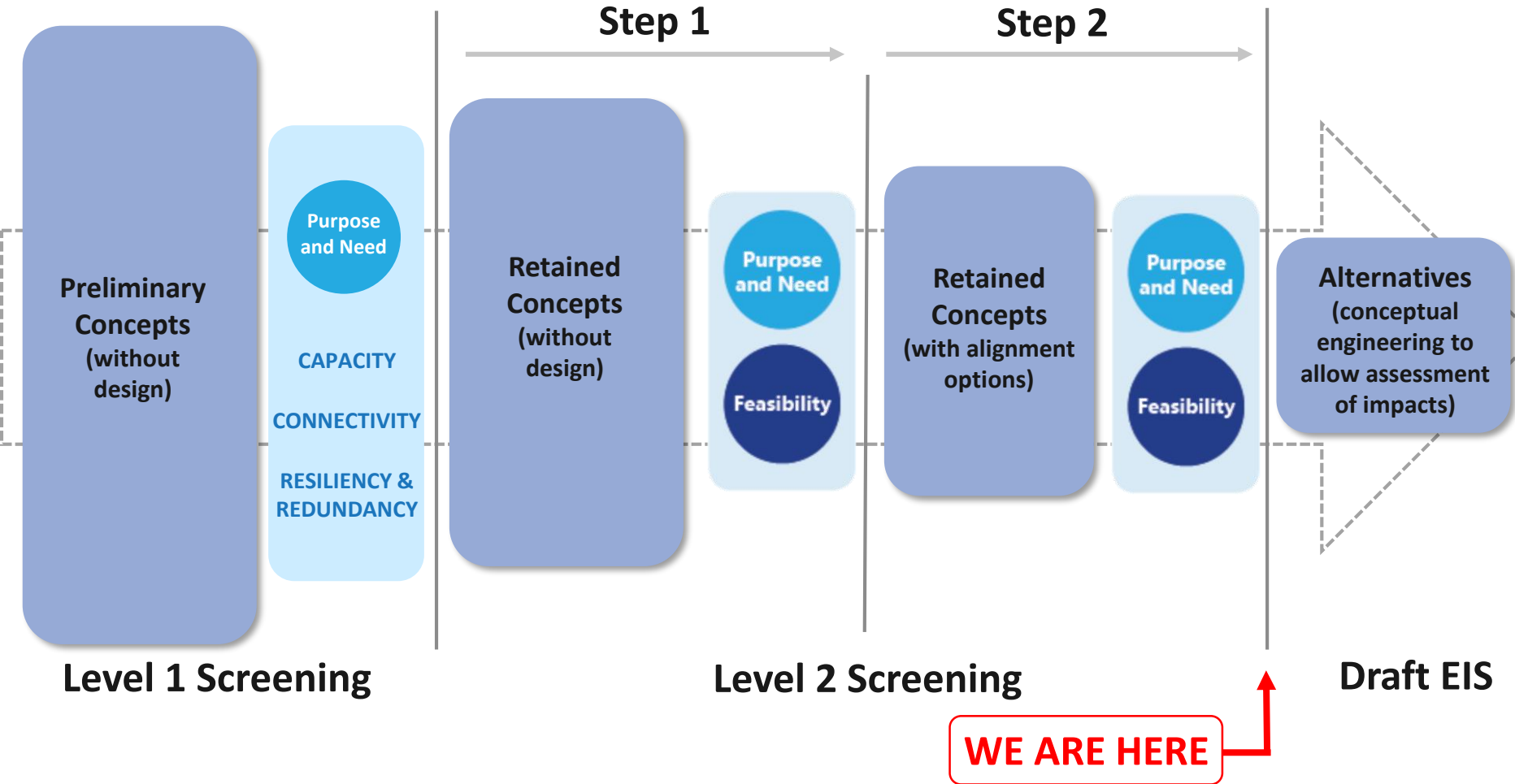
* The Fall 2016 public meeting materials stated that 32 VRE trains travel Long Bridge per day. This number did not account for one non-revenue round-trip, which brings the total to 34 trains per day.

On-Time Performance*		
	Current (Observed)	No Action (2040)
Commuter	91%	25%
Intercity Long Distance	70%	12%
Intercity Regional		7%

* The Fall 2016 public meeting materials reported different on-time performance from what is reported here for two reasons:

- (1) The Current percentage is now based on observed performance, while previously the percentage was based on modeling results; and
- (2) The No Action (2040) on-time performance has changed due to revisions in the model related to the tracks around L'Enfant Plaza Station.

Screening Process



**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need.*

Level 2 Concept Screening Considerations

- All concepts could be implemented and allow for safe railroad operations
- Environmental issues were considered during Level 2 Concept Screening, however they did not substantially differentiate among the concepts because they all occur within the same corridor
 - For example: all concepts would have an impact to water resources and wildlife habitat (Potomac River, Roaches Run), 4(f) properties (NPS land, Roaches Run), traffic impacts (corridor crosses highways)
 - Engineering will progress on the DEIS Alternatives and help inform environmental impact analysis
 - Environmental impacts of the DEIS Alternatives will be documented in the Draft EIS which will be made available for public comment.

Level 2 Concept Screening Criteria

- **Purpose and Need**

- **Capacity:** Eliminates operational bottleneck and prevents development of future bottleneck
- **Network Connectivity and Resiliency & Redundancy:** Improves ability to maintain normal railroad operations and network connectivity during planned maintenance and unanticipated outages

- **Feasibility**

- Provides 25 feet clearance between bridges over the river
- Does not preclude future replacement or rehabilitation of existing bridge
- Does not require interlocking infrastructure over the river
- Avoids DoD Facility

Level 2, Step 1

Concept Screening Results

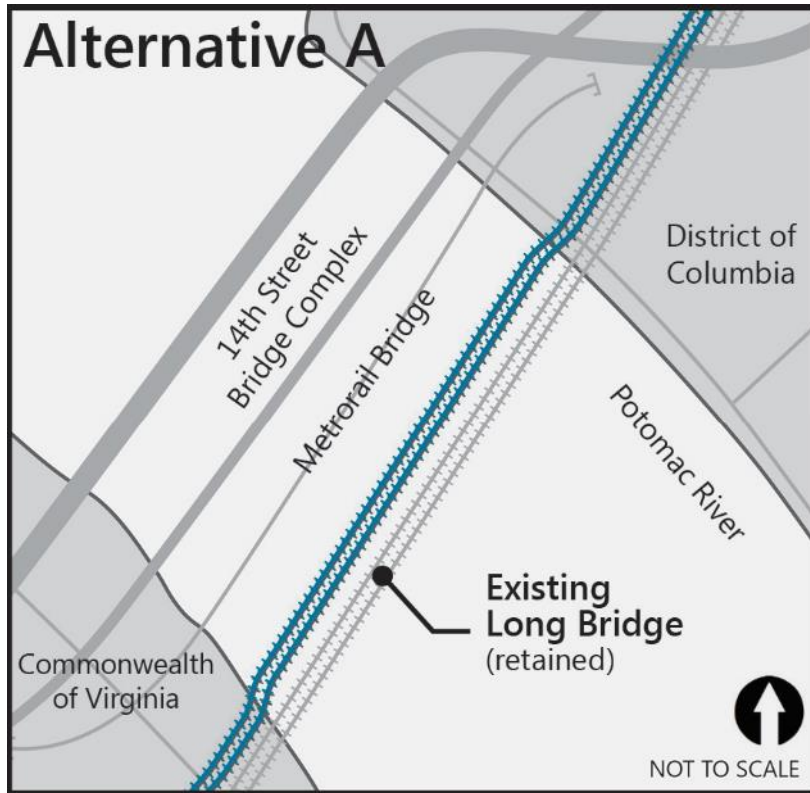
Concept	Concept 3	Concept 5	Concept 8
Number of Tracks	3 tracks	4 tracks	5 tracks
Purpose and Need			
Eliminates/prevents operational bottleneck	✗	✓	✗
Improves ability to maintain normal railroad operations and network connectivity during planned maintenance and unanticipated outages	✗	✓	✓
Feasibility			
Provides 25 feet clearance between bridges over the river	✓	✓	✓
Does not preclude future replacement or rehabilitation of existing bridge	✓	✓	✓
Does not require interlocking infrastructure over the river	✓	✓	✗
Avoids DoD Facility	✓	✓	✓

**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need.*

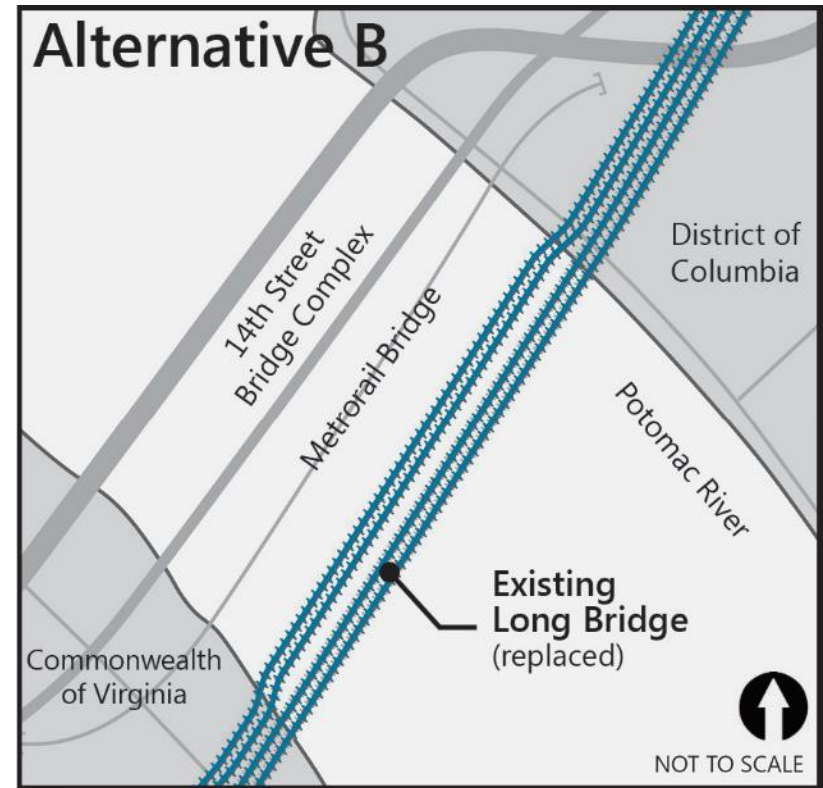
 **Indicates fatal flaw**

Retained for further analysis

Proposed Action Alternatives for Draft EIS

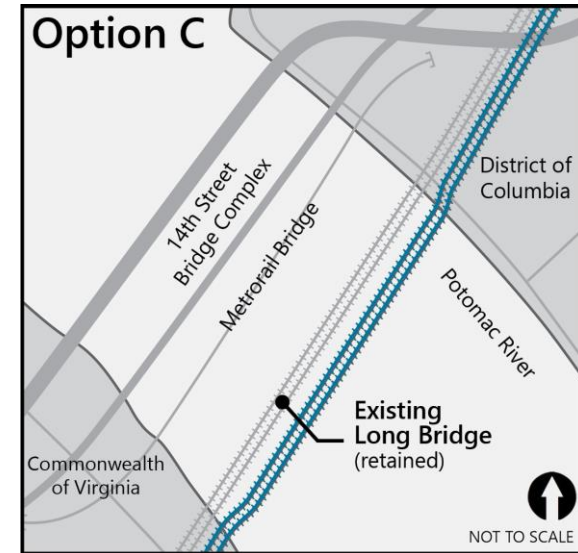
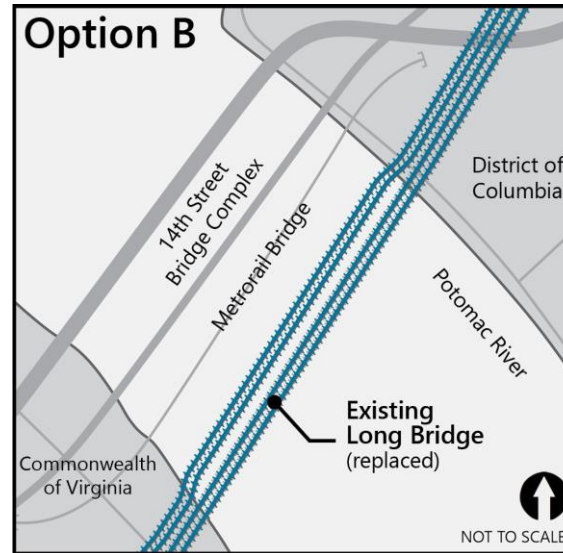
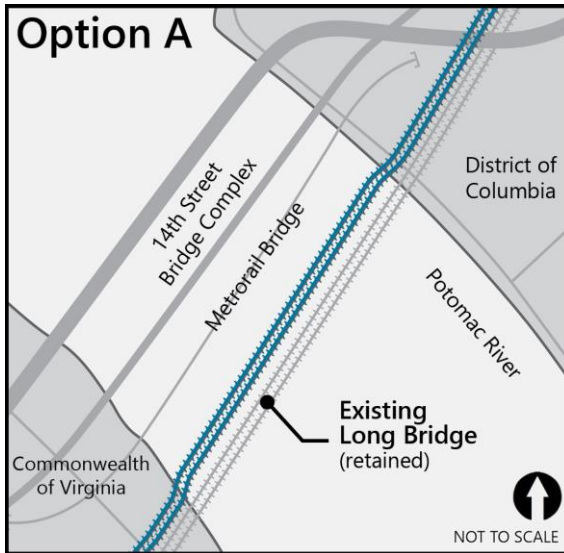


- New 2-track bridge upstream of existing bridge
- Retain existing bridge
- Allows for safe railroad operations



- New 2-track bridge upstream of existing bridge
- Replace existing bridge
- Allows for safe railroad operations

4-Track Alignment Options A - C

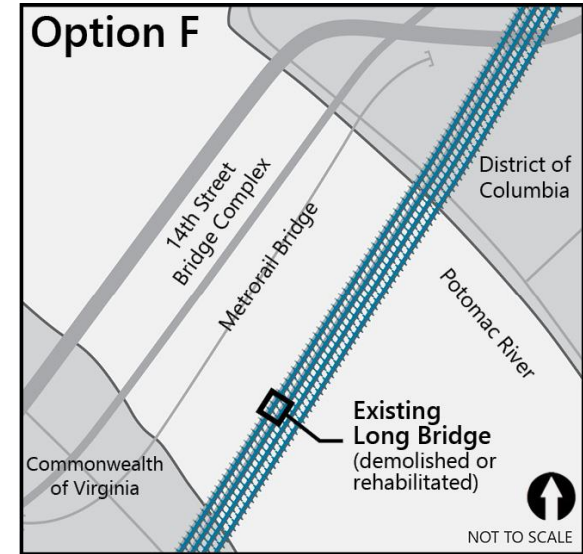
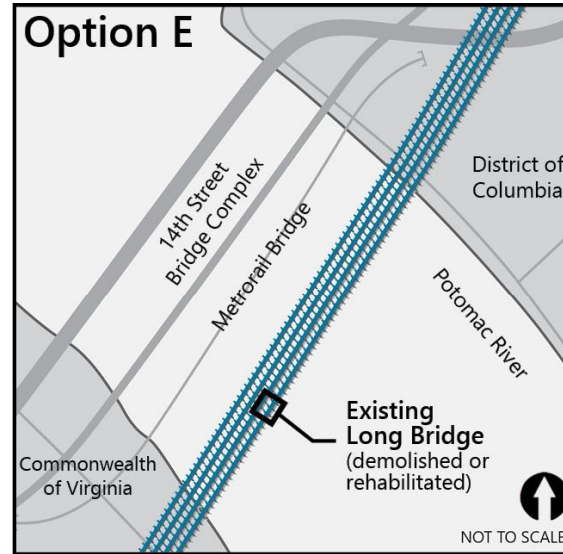
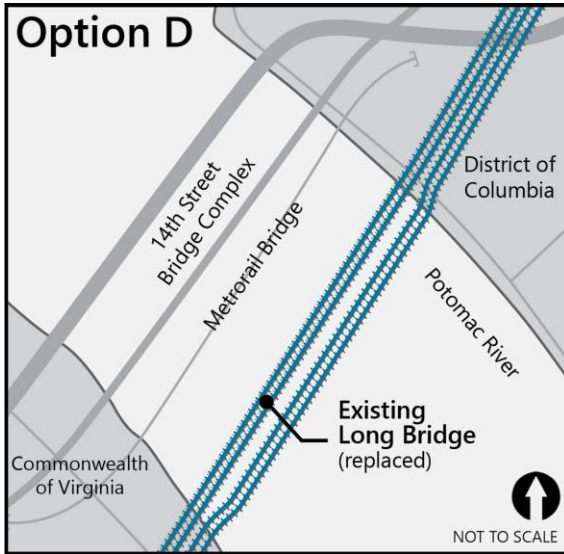


- New 2-track bridge upstream of existing bridge
- Retain existing bridge

- New 2-track bridge upstream of existing bridge
- Replace existing bridge

- New 2-track bridge downstream of existing bridge
- Retain existing bridge

4-Track Alignment Options D - F

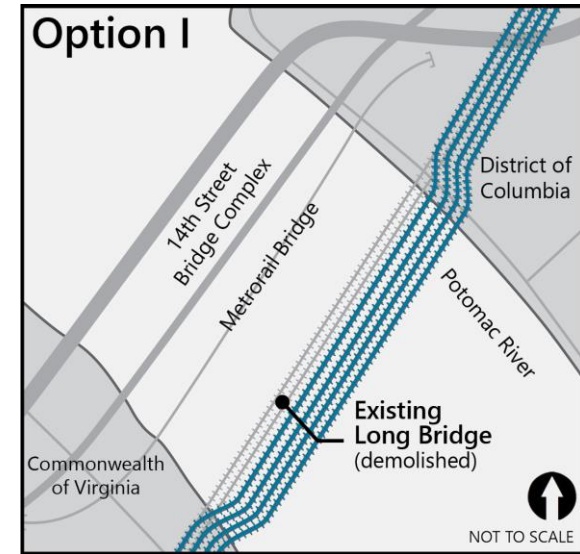
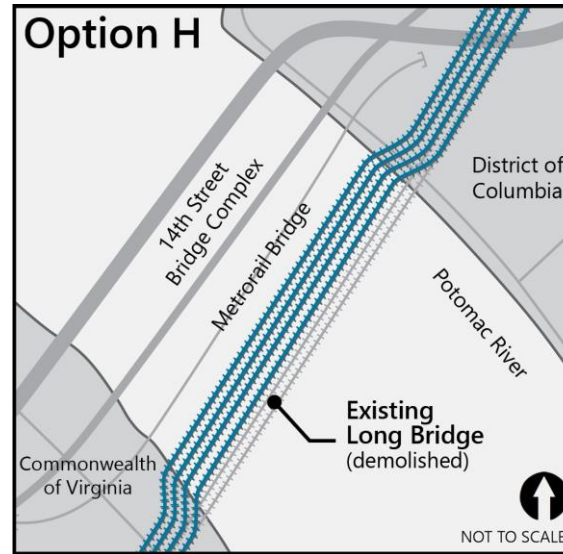
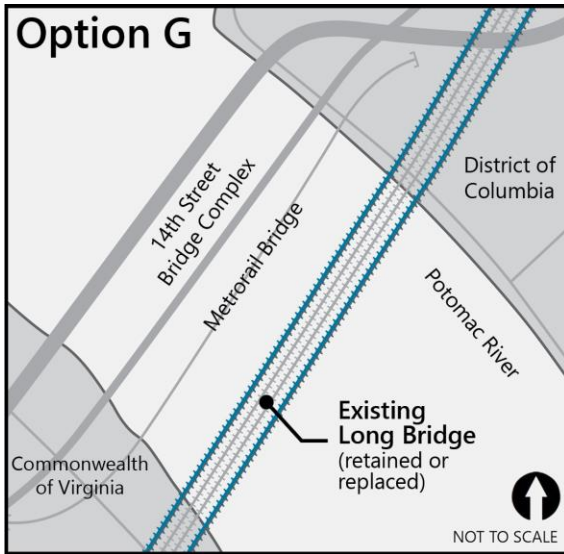


- New 2-track bridge downstream of existing bridge
- Replace existing bridge

- New 2-track bridge upstream of existing bridge
- Demolish or rehabilitate existing bridge
- Expand new bridge to 4 tracks, overlapping footprint of previous bridge

- New 2-track bridge downstream of existing bridge
- Demolish or rehabilitate existing bridge
- Expand new bridge to 4 tracks, overlapping footprint of previous bridge

4-Track Alignment Options G - I



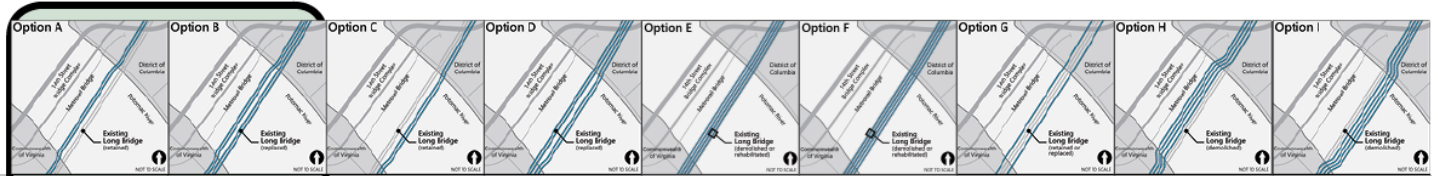
- New 1-track bridge on either side of existing bridge
- Retain or replace existing bridge

- New 4-track bridge upstream of existing bridge
- Demolish existing bridge

- New 4-track bridge downstream of existing bridge
- Demolish existing bridge

Level 2, Step 2

Concept Screening Results



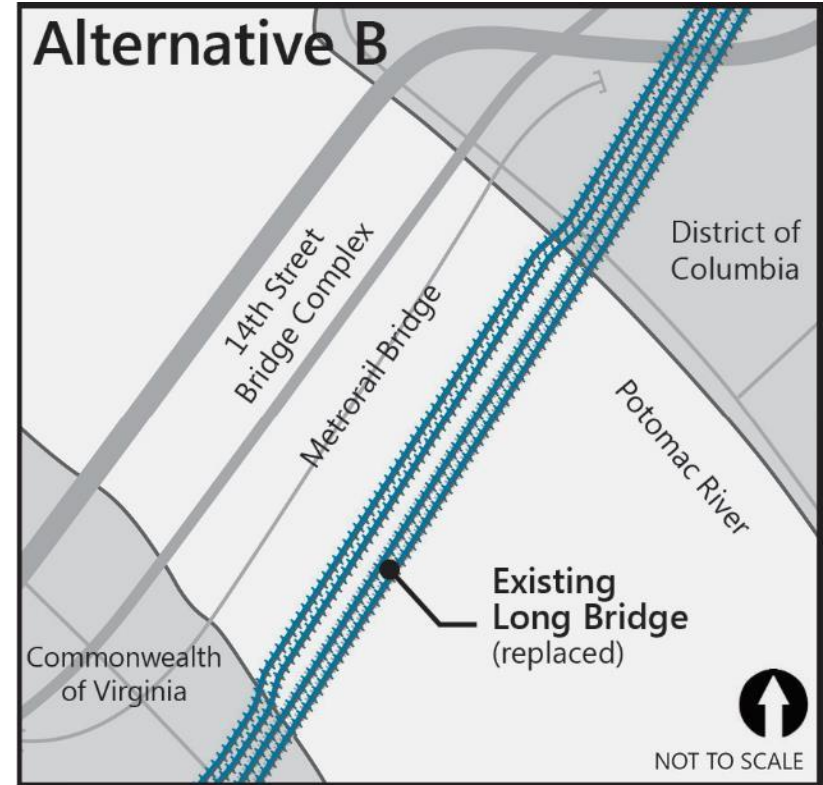
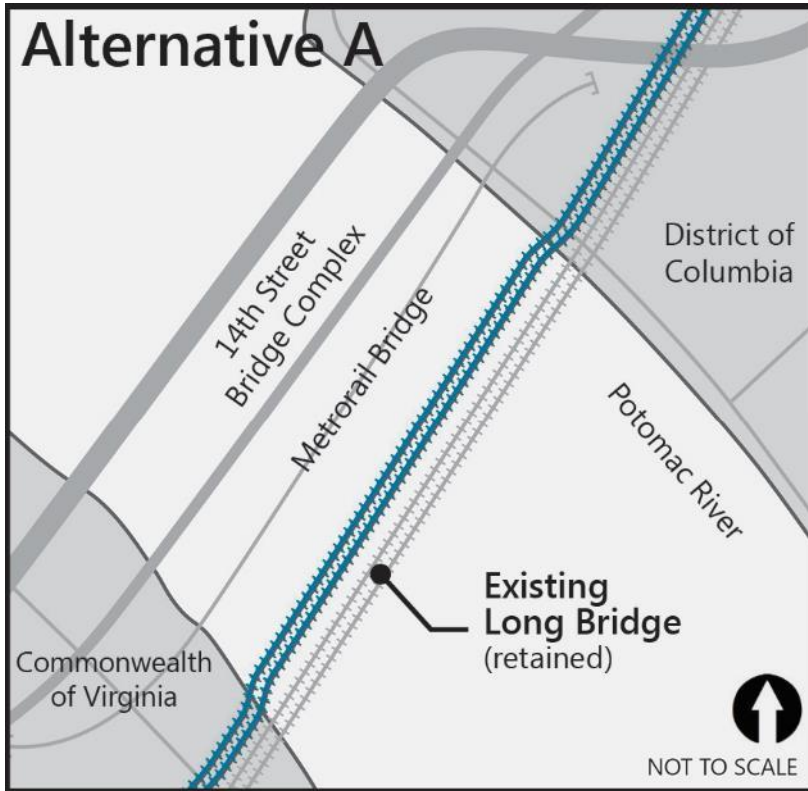
Option	A	B	C	D	E	F	G	H	I
Purpose and Need									
Eliminates/prevents operational bottleneck	✓	✓	✓	✓	✓	✓	✓	✓	✓
Improves ability to maintain normal railroad operations and network connectivity during planned maintenance and unanticipated outages	✓	✓	✓	✓	✗	✗	✓	✗	✗
Feasibility									
Provides 25 feet clearance between bridges over the river	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not preclude future replacement or rehabilitation of existing bridge	✓	✓	✓	✓	✓	✓	✗	✓	✓
Does not require interlocking infrastructure over the river	✓	✓	✓	✓	✓	✓	✓	✓	✓
Avoids DoD Facility	✓	✓	✗	✗	✓	✗	✓	✓	✗

Options advanced for evaluation as
Proposed Action Alternatives for Draft EIS

 **Indicates fatal flaw**

**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need.*

Proposed Action Alternatives for Draft EIS



- New 2-track bridge upstream of existing bridge
- Retain existing bridge

- New 2-track bridge upstream of existing bridge
- Replace existing bridge

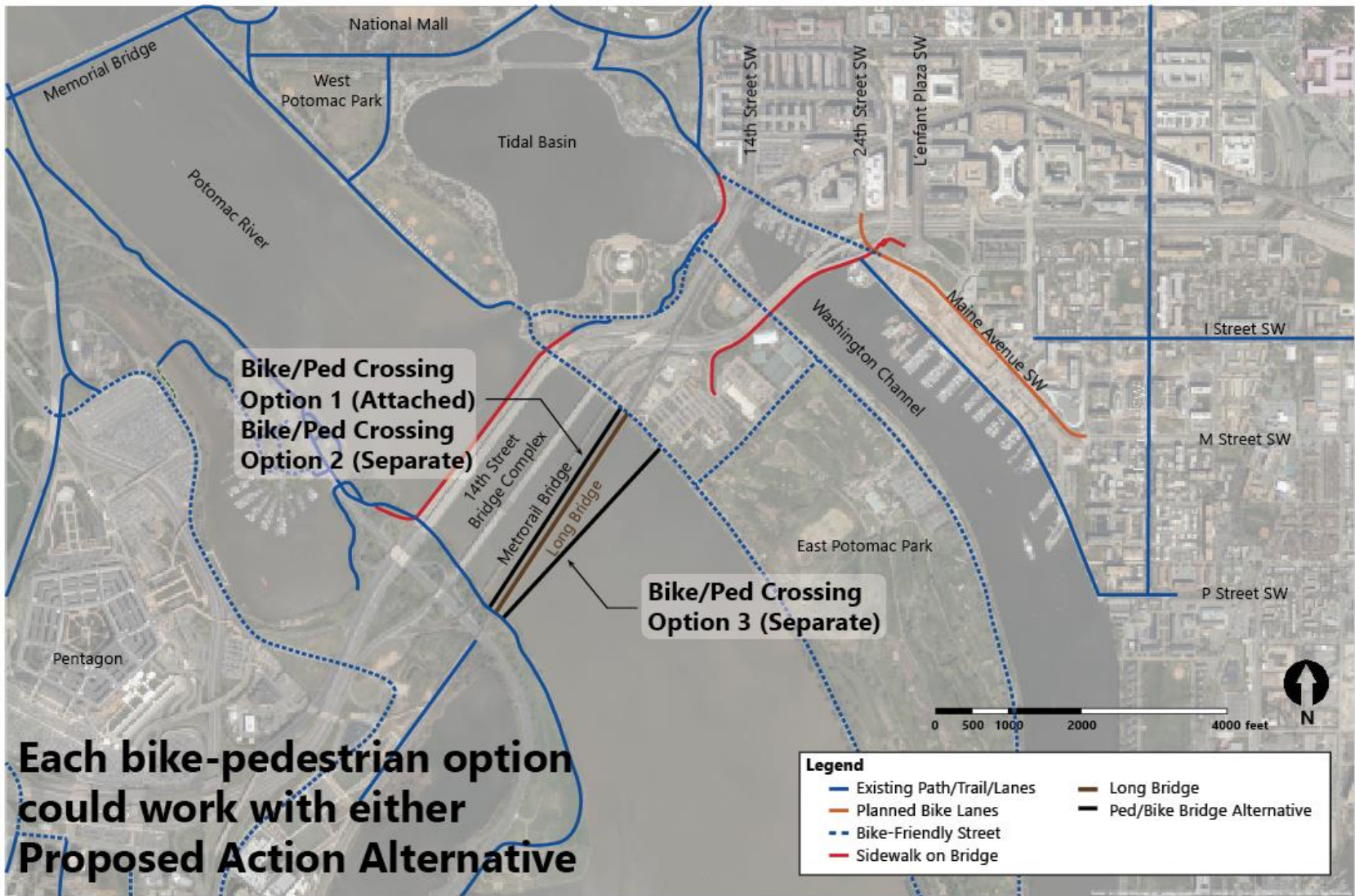
Pedestrian/Bicycle Connectivity

- Although not part of the Proposed Action Purpose and Need, the Project will explore the potential opportunity to accommodate connections that follow the trajectory of the Long Bridge Corridor to the pedestrian and bicycle network.
 - The feasibility of this opportunity will be assessed as the Project progresses, and will consider whether a path can be designed to be consistent with railroad operator plans and pursuant to railroad safety practices.
 - Future efforts to accommodate connections to the pedestrian and bicycle network may be advanced as part of the Project, or as part of a separate project(s) sponsored by independent entities.

Feasibility of Bike-Pedestrian Crossings

- Feasibility of bike-pedestrian crossing opportunities continues to be evaluated
- Criteria for initial identification of opportunities for bike-pedestrian crossings:
 - Provides 25 feet clearance between bridges over the river
 - Avoids DoD Facility
 - Connects to existing bike-pedestrian network
 - Ramps from crossing to existing connections cannot have more than a 5 percent slope (required by Americans with Disabilities Act regulations)
- The opportunity for a bike-pedestrian crossing could potentially be feasible with either of the Proposed Action Alternatives

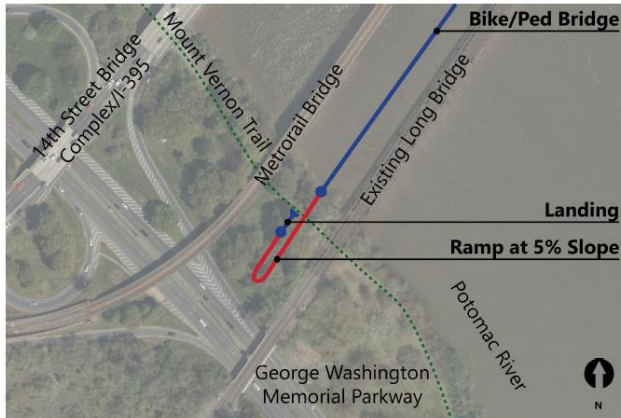
Bike-Pedestrian Crossing Opportunities



Bike-Pedestrian Crossing Ramps

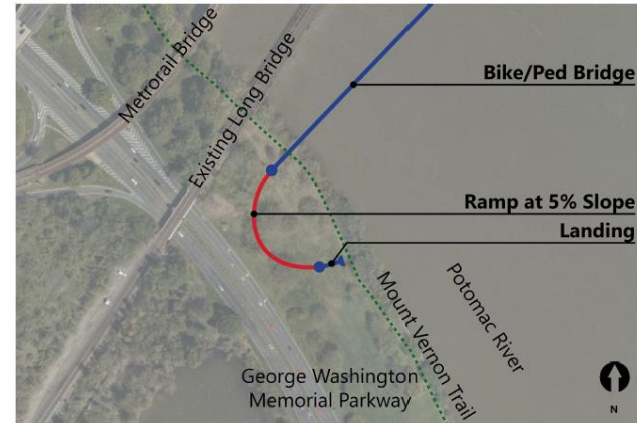
Potential Landings in Virginia

Upstream of Railroad Bridges

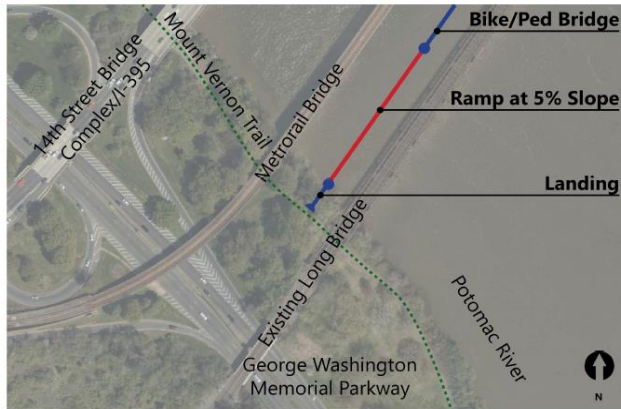


Landing with ramp over land

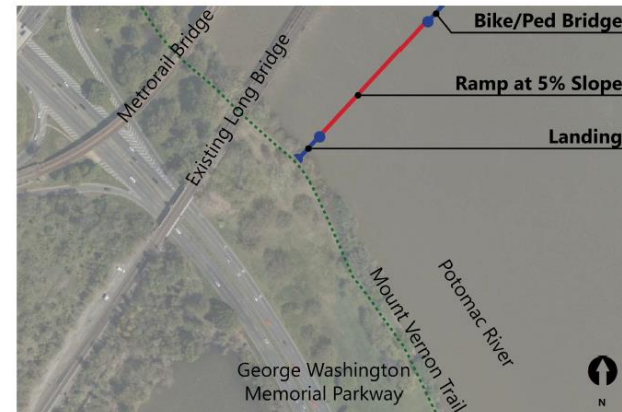
Downstream of Railroad Bridges



Landing with ramp over land



Landing with ramp over water



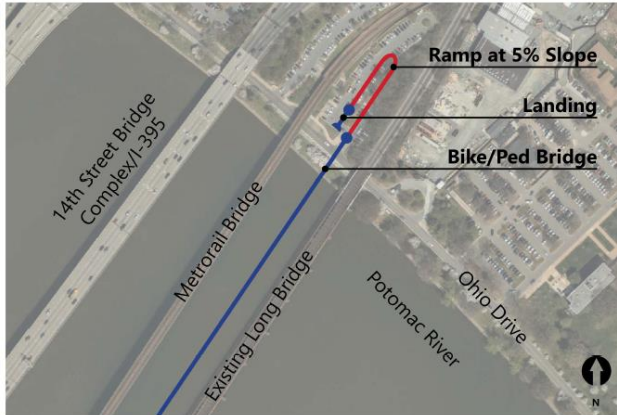
Landing with ramp over water

* Maximum 5 percent slope required by Americans with Disabilities Act regulations

Bike-Pedestrian Crossing Ramps

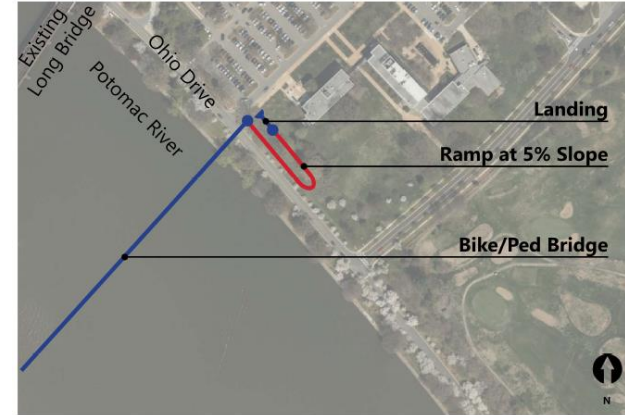
Potential Landings in the District

Upstream of Railroad Bridges

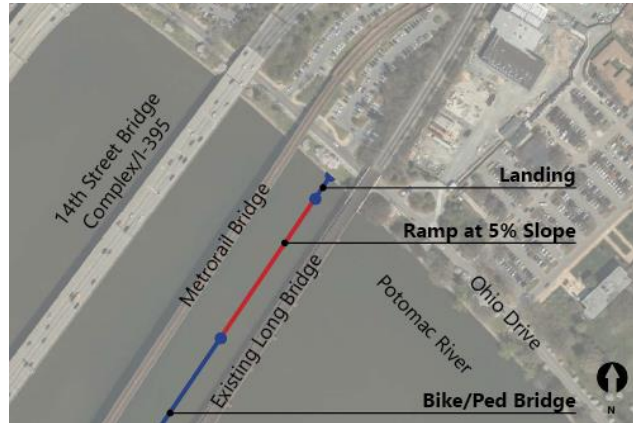


Landing with ramp over land

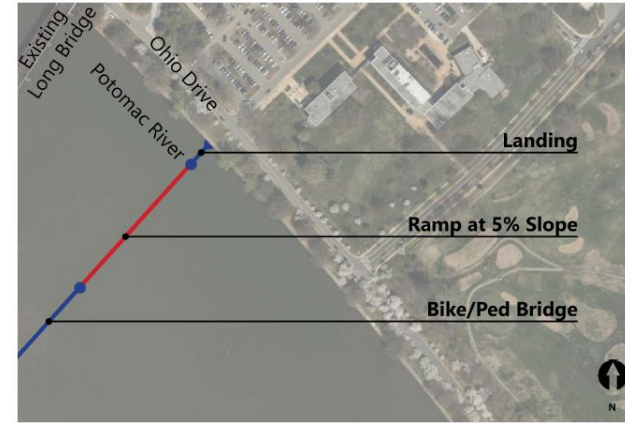
Downstream of Railroad Bridges



Landing with ramp over land



Landing with ramp over water



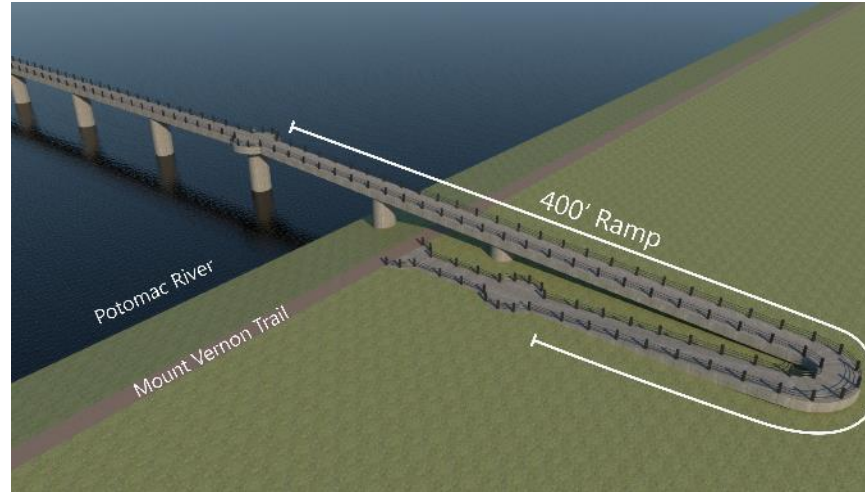
Landing with ramp over water

* Maximum 5 percent slope required by Americans with Disabilities Act regulations

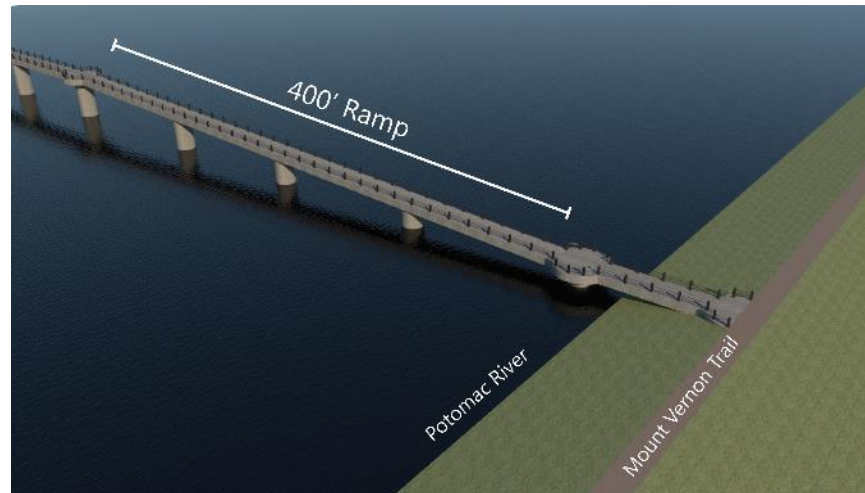
Bike-Pedestrian Crossing Ramps

Potential Ramp Types

Landing with Ramp over Land



Landing with Ramp over Water



** Length of ramp dictated by maximum 5 percent slope required by Americans with Disabilities Act regulations*

No Action Alternative

Project	Planned Completion Year
L'Enfant North and South Storage Tracks	2017
Virginia Avenue Tunnel (under construction)	2019
I-395 HOT Lanes	2020
Fourth Track Virginia (VA) to L'Enfant (LE) Interlocking	2021
Crystal City-Potomac Yard Transitway Extension	2021
Project Journey (new commuter concourse and security checkpoint at the Ronald Reagan Washington National Airport)	2021
Boundary Channel Drive Interchange	2021
Crystal City Metro Station East Entrance	2022
VRE Crystal City Station Improvements	2023
L'Enfant Station Improvements	2024
Fourth Track RO to AF Interlocking	2025
Arlington Complete Streets (Army Navy Drive, Crystal Drive, Clark Bell Street, 12 th Street South, 18 th Street South, 23 rd Street South, and 27 th Street South)	2037
Reconfigure Crystal City Street Network and Circulation Patterns	2040

Next Steps

- **Accept comments on alternatives through January 16, 2018**
- Publish *Alternatives Development and Analysis Report* (Spring 2018)
- Document affected environment
- Develop engineering design for alternatives
- Evaluate environmental consequences of alternatives
- Determine effects to historic properties
- Recommend and select preferred alternative (Spring 2018)
- Develop Draft Memorandum of Agreement or Programmatic Agreement to resolve adverse effects to historic properties, if necessary (Fall 2018)
- Publish Draft EIS for public review and comment (Early 2019)
- Public Hearing on Draft EIS (Early 2019)

Thank You

For more information visit:
longbridgeproject.com

or contact us at:
info@longbridgeproject.com