LONG BRIDGE PROJECT

Connecting North and South Through our Nation's Capital

Environmental Impact Statement (EIS)/ Section 106 Public Meeting

Level 1 Concept Screening

May 16, 2017

District Department of Transportation

U.S. Department of Transportation
Federal Railroad Administration

Today's Agenda

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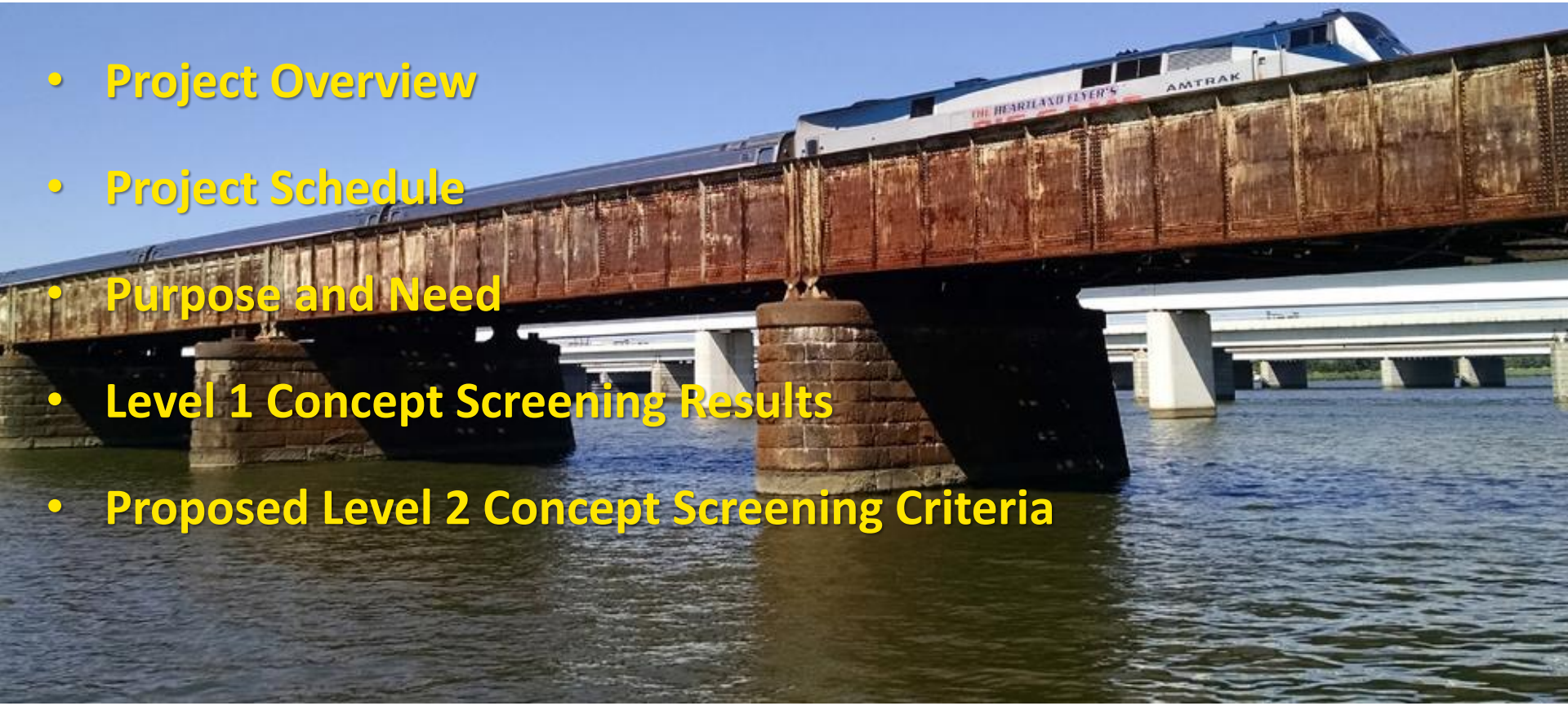

- Project Overview
- Project Schedule
- Purpose and Need
- Level 1 Concept Screening Results
- Proposed Level 2 Concept Screening Criteria

What is NEPA?

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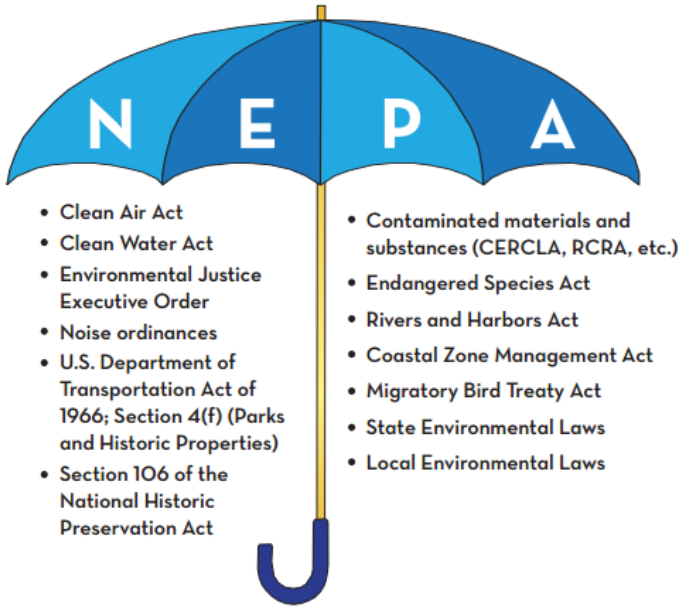
- The National Environmental Policy Act of 1969 (NEPA) requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.
- NEPA is an "umbrella" law that encourages integrated compliance with other environmental laws so that a proposed project's impacts are comprehensively evaluated before implementation.
- The Long Bridge Project's compliance with NEPA will include preparation of an Environmental Impact Statement (EIS) that will be made available for public review and comment.
- The Federal Railroad Administration (FRA) is the lead Federal agency for the EIS.
- The District Department of Transportation (DDOT) is the joint lead agency for the EIS.



What is Section 106?

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- Section 106 of the National Historic Preservation Act (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

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- 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 DC – 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 East and West Potomac Parks Historic District

Long Bridge Corridor

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Long Bridge Corridor Bridges and Infrastructure

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Long Bridge Project

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The Long Bridge Project consists of potential improvements to the Long Bridge and related railroad infrastructure located between the VRE Crystal City Station in Arlington, Virginia and the Virginia Interlocking near 3rd Street SW in Washington, DC.

Project Phases

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Phase I

Completed 2015

- Identified short-term and long-term multimodal opportunities
- Preliminary development of eight conceptual alternatives

Phase II

2015-2017

- Developed long-range service plan
- Initiated EIS process
- Developed Draft Purpose and Need Statement
- Initiated NHPA Section 106 consultation process

Phase III

2017 - 2019

- Screen concepts
- Develop alternatives
- Prepare EIS/Record of Decision (ROD)
- Complete NHPA Section 106 consultation process

Section 106 and NEPA Coordination

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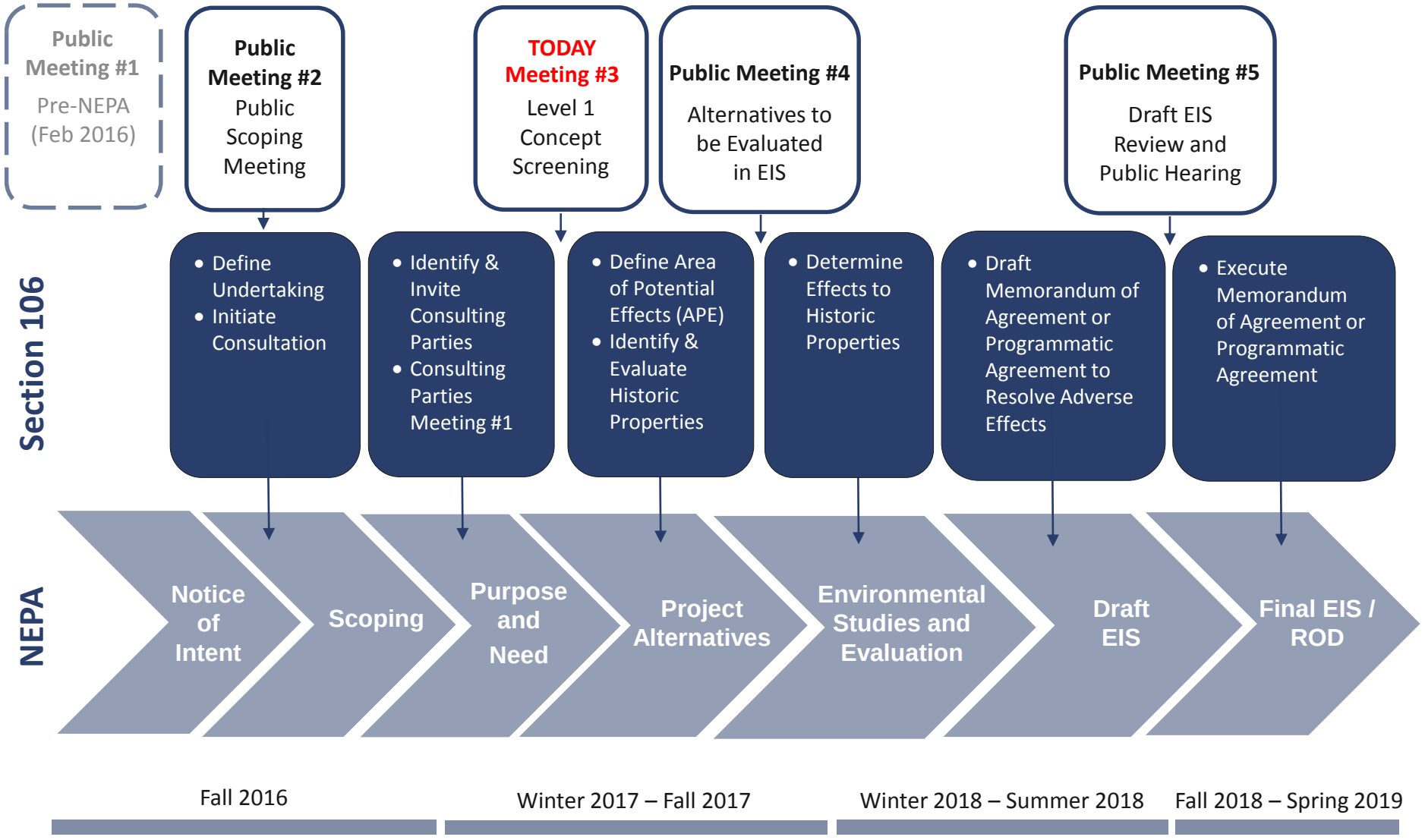

Purpose and Need

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The purpose of the Proposed Action is to provide **additional long-term railroad capacity** to improve the **reliability** of railroad service through the Long Bridge corridor.

Currently, there is **insufficient capacity, resiliency, and redundancy** to accommodate the projected demand in future railroad services. The Proposed Action is needed to address these issues and to ensure the Long Bridge corridor continues to serve as a **critical link connecting** the local, regional, and national transportation network.

Pedestrian/Bicycle Connectivity

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- 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.

Current and Future Operations

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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 Build (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 Build (2040) on-time performance has changed due to revisions in the model related to the tracks around L'Enfant Plaza Station.

Preliminary Concepts

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1	No Build
2	2-Track Bridge (Replace)
3	3-Track Crossing
3A	3-Track Crossing with Bike-Pedestrian Path
3B	3-Track Crossing with Streetcar
3C	3-Track Crossing with General Purpose Vehicle Lanes
4	3-Track Tunnel
5	4-Track Crossing
5A	4-Track Crossing with Bike-Pedestrian Path
5B	4-Track Crossing with Streetcar
5C	4-Track Crossing with General Purpose Vehicle Lanes

6	4-Track Tunnel
7	2-Track Crossing; 2-Track Tunnel
8	5+-Track Crossing or Tunnel
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path
8B	5+-Track Crossing or Tunnel with Streetcar
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes
9	New Corridor – Retain or Replace Existing*
10	New Corridor – Remove Existing*

** Added in response to Scoping comments*

Criterion 1: Railroad Capacity

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1 CAPACITY

Enhances ability to maintain schedules under normal operations and provides flexibility to recover during periods of higher demand and service delays by enabling trains to pass one another.

Criterion 2: Network Connectivity

2A: Maintains or improves connectivity to existing railroad stations; employment and residential nodes; freight railroad infrastructure; and other modes of transportation service.

2B: Consistent with adopted state, county, and regional transportation plans:

- Financially Constrained Long-Range Transportation Plan for the National Capital Region
- moveDC: Multimodal Long-Range Transportation Plan
- Arlington County Comprehensive Plan and Master Transportation Plan(s)
- TransAction 2040: Northern Virginia Regional Transportation Plan
- VRE System Plan 2040
- Southeast High Speed Rail
- Virginia Statewide Rail Plan
- Virginia Six-Year Improvement Plan

2C: Consistent with Long Bridge Corridor railroad operator and service development plans:

- CSXT National Gateway
- MARC Growth and Investment Plan

Criterion 3: Resiliency and Redundancy

Provides independently operable tracks and crossovers to facilitate continued operation of both passenger and freight trains during planned maintenance or emergency conditions along the Long Bridge corridor.

Provides ability to resume normal operations and minimize cascading delays following an unplanned event.

Criterion 1:

Enables Trains to Pass One Another

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- Adding at least one track in a two-track segment enhances ability for trains to pass one another during scheduled or delayed operations.

1	No Build	--
2	2-Track Bridge (Replace)	X
3	3-Track Crossing	√
3A	3-Track Crossing with Bike-Pedestrian Path	√
3B	3-Track Crossing with Streetcar	√
3C	3-Track Crossing with General Purpose Vehicle Lanes	√
4	3-Track Tunnel	√
5	4-Track Crossing	√
5A	4-Track Crossing with Bike-Pedestrian Path	√
5B	4-Track Crossing with Streetcar	√
5C	4-Track Crossing with General Purpose Vehicle Lanes	√
6	4-Track Tunnel	√
7	2-Track Crossing; 2-Track Tunnel	X
8	5+-Track Crossing or Tunnel	√
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path	√
8B	5+-Track Crossing or Tunnel with Streetcar	√
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes	√
9	New Corridor – Retain or Replace Existing	X
10	New Corridor – Remove Existing	√

Criterion 2A:

Facilitate Access to Existing Stations, Nodes, Freight Network, and Trains

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- A freight tunnel cannot feasibly connect to existing freight network.
- Streetcar tracks would not connect to existing infrastructure.
- New corridors would bypass existing facilities and infrastructure and would not connect to the existing transportation network or major residential and employment nodes.

1	No Build	--
2	2-Track Bridge (Replace)	√
3	3-Track Crossing	√
3A	3-Track Crossing with Bike-Pedestrian Path	√
3B	3-Track Crossing with Streetcar	X
3C	3-Track Crossing with General Purpose Vehicle Lanes	√
4	3-Track Tunnel	X
5	4-Track Crossing	√
5A	4-Track Crossing with Bike-Pedestrian Path	√
5B	4-Track Crossing with Streetcar	X
5C	4-Track Crossing with General Purpose Vehicle Lanes	√
6	4-Track Tunnel	X
7	2-Track Crossing; 2-Track Tunnel	√
8	5+-Track Crossing or Tunnel	√
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path	√
8B	5+-Track Crossing or Tunnel with Streetcar	X
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes	√
9	New Corridor – Retain or Replace Existing	X
10	New Corridor – Remove Existing	X

Criterion 2B:

Consistent with Adopted Regional, State, and County Transportation Plans

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- Adopted plans do not include a Streetcar line across the river or on either side of the river.
- Adopted plans do not call for another roadway over the Potomac River in this corridor.
- Adopted plans do not call for a new railroad corridor and assume continued operation of passenger railroad service through Alexandria, Arlington, and Southwest DC.

1	No Build	--
2	2-Track Bridge (Replace)	√
3	3-Track Crossing	√
3A	3-Track Crossing with Bike-Pedestrian Path	√
3B	3-Track Crossing with Streetcar	X
3C	3-Track Crossing with General Purpose Vehicle Lanes	X
4	3-Track Tunnel	√
5	4-Track Crossing	√
5A	4-Track Crossing with Bike-Pedestrian Path	√
5B	4-Track Crossing with Streetcar	X
5C	4-Track Crossing with General Purpose Vehicle Lanes	X
6	4-Track Tunnel	√
7	2-Track Crossing; 2-Track Tunnel	√
8	5+-Track Crossing or Tunnel	√
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path	√
8B	5+-Track Crossing or Tunnel with Streetcar	X
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes	X
9	New Corridor – Retain or Replace Existing	X
10	New Corridor – Remove Existing	X

Criterion 2C:

Consistent with Railroad Operator and Service Development Plans

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- A freight tunnel cannot feasibly connect to existing or planned freight network.
- Railroad operator plans include reconstruction of the Virginia Avenue Tunnel (currently underway), which a new freight corridor would not connect to.
- A new corridor would preclude passenger railroad service in the existing corridor, conflicting with VRE and MARC plans.

1	No Build	--
2	2-Track Bridge (Replace)	√
3	3-Track Crossing	√
3A	3-Track Crossing with Bike-Pedestrian Path	√
3B	3-Track Crossing with Streetcar	√
3C	3-Track Crossing with General Purpose Vehicle Lanes	√
4	3-Track Tunnel	X
5	4-Track Crossing	√
5A	4-Track Crossing with Bike-Pedestrian Path	√
5B	4-Track Crossing with Streetcar	√
5C	4-Track Crossing with General Purpose Vehicle Lanes	√
6	4-Track Tunnel	X
7	2-Track Crossing; 2-Track Tunnel	√
8	5+-Track Crossing or Tunnel	√
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path	√
8B	5+-Track Crossing or Tunnel with Streetcar	√
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes	√
9	New Corridor – Retain or Replace Existing	X
10	New Corridor – Remove Existing	X

Criterion 3:

Facilitates Continued Operation During Maintenance or Emergency and Minimizes Cascading Delays

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- Any concept that adds an additional track in a two-track segment of the corridor is consistent.
- Any concept where tracks cannot accommodate both freight and passenger railroad service (such as a passenger railroad-only tunnel) is considered inconsistent.

1	No Build	--
2	2-Track Bridge (Replace)	X
3	3-Track Crossing	√
3A	3-Track Crossing with Bike-Pedestrian Path	√
3B	3-Track Crossing with Streetcar	√
3C	3-Track Crossing with General Purpose Vehicle Lanes	√
4	3-Track Tunnel	X
5	4-Track Crossing	√
5A	4-Track Crossing with Bike-Pedestrian Path	√
5B	4-Track Crossing with Streetcar	√
5C	4-Track Crossing with General Purpose Vehicle Lanes	√
6	4-Track Tunnel	X
7	2-Track Crossing; 2-Track Tunnel	X
8	5+-Track Crossing or Tunnel*	√
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path*	√
8B	5+-Track Crossing or Tunnel with Streetcar*	√
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes*	√
9	New Corridor – Retain or Replace Existing	X
10	New Corridor – Remove Existing	√

* The tunnel options are eliminated for these concepts, but aboveground (bridge) crossings would remain.

Level 1 Concept Screening

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Concepts		Railroad Capacity	Network Connectivity			Resiliency/ Redundancy
		1	2A	2B	2C	3
1	No Build	--	--	--	--	--
2	2-Track Bridge (Replace)	X	√	√	√	X
3	3-Track Crossing	√	√	√	√	√
3A	3-Track Crossing with Bike-Pedestrian Path	√	√	√	√	√
3B	3-Track Crossing with Streetcar	√	X	X	√	√
3C	3-Track Crossing with General Purpose Vehicle Lanes	√	√	X	√	√
4	3-Track Tunnel	√	X	√	X	X
5	4-Track Crossing	√	√	√	√	√
5A	4-Track Crossing with Bike-Pedestrian Path	√	√	√	√	√
5B	4-Track Crossing with Streetcar	√	X	X	√	√
5C	4-Track Crossing with General Purpose Vehicle Lanes	√	√	X	√	√
6	4-Track Tunnel	√	X	√	X	X
7	2-Track Crossing; 2-Track Tunnel	X	√	√	√	X
8	5+-Track Crossing or Tunnel*	√	√	√	√	√
8A	5+-Track Crossing or Tunnel With Bike-Pedestrian Path*	√	√	√	√	√
8B	5+-Track Crossing or Tunnel with Streetcar	√	X	X	√	√
8C	5+-Track Crossing or Tunnel with General Purpose Vehicular Lanes	√	√	X	√	√
9	New Corridor – Retain or Replace Existing	X	X	X	X	X
10	New Corridor – Remove Existing	√	X	X	X	√

* The tunnel options are eliminated for these concepts, but aboveground (bridge) crossings would remain.

= Retained Concepts

Level 1 Concept Screening Process

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1	No Build
2	2-Track Bridge (Replace)
3	3-Track Crossing
3A	3-Track Crossing with Bike-Ped Path
3B	3-Track Crossing with Streetcar
3C	3-Track Crossing with Vehicle Lanes
4	3-Track Tunnel
5	4-Track Crossing
5A	4-Track Crossing with Bike-Ped Path
5B	4-Track Crossing with Streetcar
5C	4-Track Crossing with Vehicle Lanes
6	4-Track Tunnel
7	2-Track Crossing; 2-Track Tunnel
8	5+-Track Crossing or Tunnel
8A	5+-Track Crossing or Tunnel With Bike-Ped Path
8B	5+-Track Crossing or Tunnel with Streetcar
8C	5+-Track Crossing or Tunnel with Vehicle Lanes
9	New Corridor – Retain or Replace Existing
10	New Corridor – Remove Existing

1 CAPACITY

2 CONNECTIVITY

3 RESILIENCY & REDUNDANCY

1	No Build
3	3-Track Crossing
3A	3-Track Crossing with Bike-Ped Path
5	4-Track Crossing
5A	4-Track Crossing with Bike-Ped Path
8	5+- Track Crossing
8A	5+-Track Crossing with Bike-Ped Path

Preliminary Concepts **Level 1 Screening** **Retained Concepts**

Level 2 Concept Screening

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- Retained concepts (1, 3, 3A, 5, 5A, 8, 8A) will undergo:
  - Level 2 Concept Screening evaluation
  - Conceptual engineering to provide additional information
  - Concepts that make it through Level 2 Concept Screening will be refined and developed as alternatives for evaluation in the EIS
  - Results will be presented at a public meeting in Fall 2017

Proposed Level 2 Concept Screening Criteria

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- Evaluation will use a more detailed set of quantitative and qualitative criteria to assess which concepts best meet Purpose and Need.
- Level 2 evaluation will also look at:
  - Constructability
  - Railroad operations efficiency and effectiveness
  - Cost (order of magnitude)
  - Preliminary environmental effects considerations
  - Safety

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Thank You

For more information visit:

longbridgeproject.com

or contact us at:

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