King and Commonwealth Railroad Bridges Project

Virtual Public Meeting

Wednesday November 2, 2022

WELCOME!

VIRGINIA PASSENGER RAIL AUTHORITY

Who Is the Virginia Passenger Rail Authority?

MISSION

To promote, sustain, and expand the availability of passenger and commuter rail service in the Commonwealth.

VISION

Deliver passenger rail service as an integrated, affordable, convenient travel option that benefits the Commonwealth.

VALUES

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What are we here to talk about?

1. The Virginia Passenger Rail Authority (VPRA) began a Feasibility Study (the "Study") in Spring 2022 to investigate the King Street railroad bridge and the Commonwealth Avenue railroad bridge in Alexandria, VA.
2. The King and Commonwealth Railroad Bridges are important links in the Virginia rail network.
3. The Study was performed to identify, screen, and establish a recommended design option to either rehabilitate or replace the existing rail bridges.
4. VPRA developed four (4) design options to modernize the existing rail bridges, reduce maintenance, and accommodate a future fourth railroad track.
5. VPRA is recommending a design option and soliciting public input via a comment survey open through December 2, 2022

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An Important Link in Virginia's Rail Network

PHASE 1 & 2 IMPROVEMENTS AND HIGHLIGHTS

RAIL CORRIDOR IMPROVEMENTS

Construct 37 Miles of New Track

1 PHASE 1
(Complete 2026) 23 miles of new track

2 PHASE 2
(Complete 2030) 14 miles of new track

RAILROAD RIGHT-OF-WAY (ROW) AND TRACK ACQUISITION

Purchase of 384 Miles of Railroad ROW and 223 Miles of Track

SEGMENT 1
Half of CSXT ROW between Washington, DC and Petersburg, VA (145 miles), and 44 miles of track

SEGMENT 2
All of CSXT ROW (abandoned rail line between Petersburg, VA and Ridgeway, NC [75 miles])

SEGMENT 3
Nearly all of CSXT ROW between Doswell, VA and Clifton Forge, VA (164 miles), and 179 miles of track

WASHINGTON, DC
UNION STATION
L'ENFANT
CRYSTAL CITY
ALEXANDRIA
FRANCONIA-SPRINGFIELD
LORTON
WOODBRIDGE
RIPPON
POTOMAC SHORES (FUTURE)
QUANTICO
BROOKE
LEELAND ROAD
FREDERICKSBURG
SPOTSYLVANIA
ASHLAND
STAPLES MILL
RICHMOND

PHASE 1 & 2 IMPROVEMENTS

- L'Enfant Fourth Track and Station Improvements — 2
- Long Bridge Project — 2
- Alexandria Fourth Track — 1
- **King and Commonwealth Railroad Bridges** — 1
- Franconia-Springfield Bypass — 1
- Franconia to Lorton Third Track — 1
- Neabsco Creek to Woodbridge Third Track (Siding D) — 2
- Aquia Creek Third Track South (Siding E) — 2
- Potomac Creek Third Track South (Siding A) — 1
- Crossroads Third Track (Siding F) — 2
- Woodford to Milford Third Track (Siding B) — 1
- Hanover Third Track (Siding C) — 1

LEGEND

1 PHASE 1
2 PHASE 2
STATIONS

RF&P RAILROAD TRACKS
Existing
Projects

N

Existing King Street Rail Bridge

Existing King Street Rail Bridge

- **Built in 1905**
- **Structure Overview:**
  - *Bridge Type(s):* Two open deck, steel through plate girder bridges
  - *Tracks:* The west structure carries two tracks; the east structure carries one existing track and has a reserved space for a fourth track

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Existing Commonwealth Avenue Rail Bridge

Existing Commonwealth Avenue Rail Bridge

- **Built in 1904**
- **Structure Overview:**
  - *Bridge Type:* One open deck, steel through plate girder bridge
  - *Tracks:* The structure carries three existing tracks and has a reserved space for a fourth track

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Why should we rebuild or replace the bridges?

- Allow for more efficient and reliable train travel to, from, and through the city of Alexandria
- To extend the life of the bridges and reduce maintenance needs
- To coordinate design and construction with the Alexandria Fourth Track project and minimize disruptions to the community from construction
- To improve the designs based on railroad and road design guidelines

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Study Process

- Define Purpose and Need of Project
- Concept Design Options Developed
- Design Option Screening Level 1
- Design Option Screening Level 2
- Select Recommended Design Option

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Study Approach

Need: Adjacent projects are proposed

Purpose:

- Improve regional rail system
- Minimize impacts to adjacent infrastructure and operations

Need: Bridges are beyond design life

Purpose:

- Achieve a state of good repair
- Extend the life of the Bridges
- Reduce maintenance needs

Need: Bridges do not meet current design standards

Purpose:

- Establish design based on railroad requirements
- Improve design based on roadway clearance requirements

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Design Options

Option 1: Repair Existing Bridges	**Option 2:** Comprehensive Repairs	**Option 3:** Bridge Replacement	**Option 4:** Raise Bridge
• Short-term rehabilitation • Raise bridge to remove low point in the track profile • Would not fully integrate with adjacent projects	• Long-term rehabilitation • Repair and Replace open deck with ballasted bridge deck • Increase vertical clearance under King St bridge • Would not preclude VPRA's Alexandria Fourth Track project	• Remove existing bridges and replace open bridge deck with ballasted bridge deck • Increase vertical clearance under King St bridge • Possible horizontal widening under both bridges • Would not preclude adjacent projects	• Replace or repair components for a short-term rehabilitation • Increase vertical clearance under King St bridge • Would not preclude VPRA's Alexandria Fourth Track project
10-Year life	**50+ Year life**	**100+Year life**	**10-Year life**

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Screening Results

Level 1 Screening Criterion	Option 1: Repair Existing Bridge	Option 2: Comprehensive Repairs	Option 3: Bridge Replacement	Option 4: Raise Bridge
Extend functional life of bridges by at least 50 years	X	✔	✔	X
Replace open bridge deck with ballasted bridge deck	X	✔	✔	X

Level 2 Screening Criterion	Option 2: Comprehensive Repairs	Option 3: Bridge Replacement
Would not preclude adjacent projects	✔	✔
Minimize rail operations interruptions and impacts	X	✔
Establish the design based on current railroad requirements and vertical roadway clearance requirements	X	✔

Note: A ✔ indicates that the option meets the screening criterion, and a X indicates that it does not.

VPRA Recommended Design Option

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VPRA Recommended Design Option: Option 3 Bridge Replacement (+100yr)

King Street Bridge

- Replaces the existing structure
- Increases bridge height and may increase the width under the bridge
- Reduces maintenance and minimizes rail service interruptions
- Modernizes the bridges to current bridge standards and improves the design

King Street looking east. The proposed recommended design option will **increase the vertical clearance** underneath the railroad bridge.

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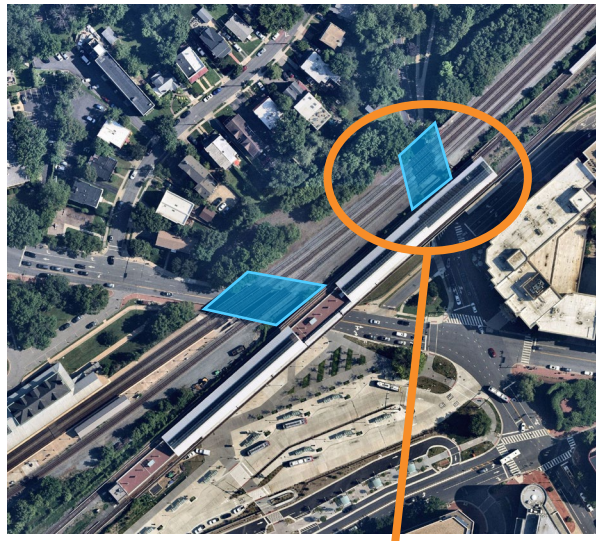
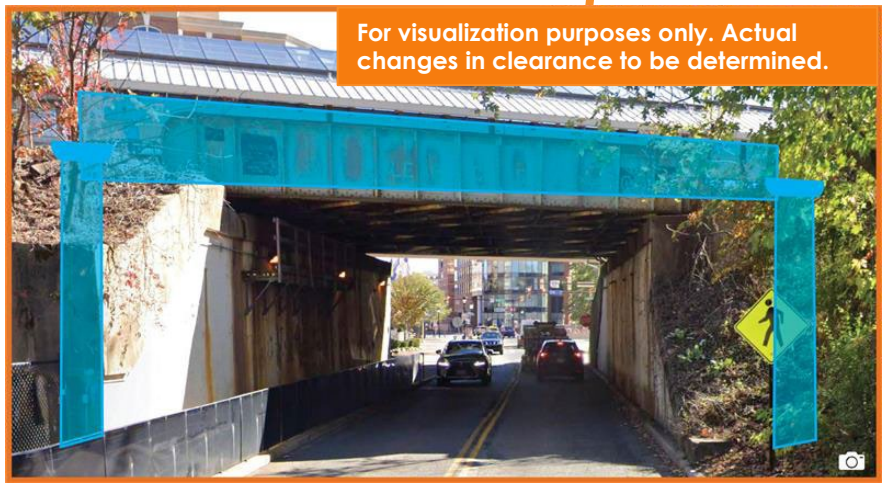
VPRA Recommended Design Option: Option 3 Bridge Replacement (+100yr)

Commonwealth Avenue Bridge

- Replaces the existing structure
- May increase the width under the bridge
- Reduces maintenance and minimizes rail service interruptions
- Modernizes the bridges to current bridge standards and improves the design





Commonwealth Avenue looking east. The proposed recommended design option **may increase the horizontal clearance** underneath the railroad bridge.

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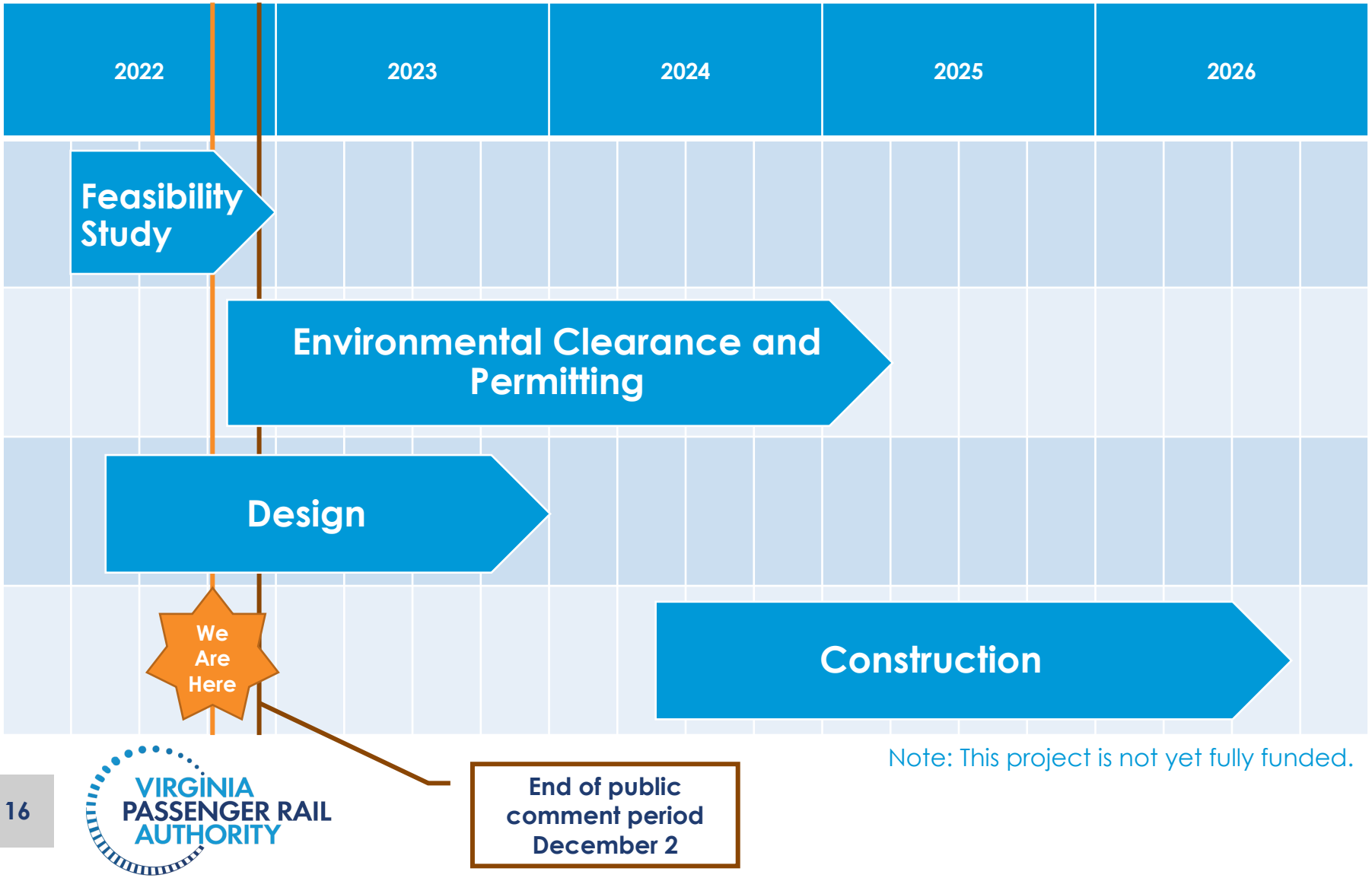
Anticipated Project Schedule



Note: This project is not yet fully funded.

Current Status:

- The Study is scheduled to be completed at the end of 2022.
- Funding was approved for the completion of the environmental, permitting and design tasks.

Next Steps:

- VPRA will review public feedback and complete the environmental clearance process before progressing a preferred design option
- VPRA will continue to seek funding for the project to complete construction.

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We Want Your Feedback

Recommendation:

VPRA is recommending
Design Option 3
Replacement of both bridges

We are soliciting public comment now through December 2, 2022.

Scan to take the survey

Scan to visit the website

Submit your comments via a digital survey form

You can also email contactus@vpra.virginia.gov

A recording of this meeting and the Draft Feasibility Study will be published online on VPRA's project website

Public comments will be used to finalize the Feasibility Study. The final study will be published online by Early 2023.

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