



# **RARITAN RIVER BRIDGE REPLACEMENT**

Resilience Program • Building Stronger

---

## Raritan River Bridge Replacement

Public Information Session

September 2016

# Welcome



## AT THIS MEETING YOU CAN:

- Learn about the Raritan River Bridge Replacement Project
- Understand how the project will be evaluated in an Environmental Assessment prepared in accordance with the:
  - National Environmental Policy Act of 1969 (NEPA)
  - Section 106 of the National Historic Preservation Act
  - Section 4(f) of the U.S. DOT Act
- Ask questions and provide comments

# Why is it Needed?



- The bridge is a critical link on the North Jersey Coast Line, NJ TRANSIT's third most heavily used rail line
- Raritan River Drawbridge was significantly damaged during Sandy in 2012
- The bridge was closed for three weeks after the storm for repairs. Today it operates at reduced train speeds and is safe, but vulnerable to future storms
- Current maintenance activities will not address the long-term needs

# Project Goals and Objectives

- Improve resilience of the Raritan River Bridge to severe storms
  - Improve bridge's resistance to ocean surges
  - Raise tracks and electrical and mechanical systems above Design Flood Elevation to the extent practical
  - Design vulnerable components to better withstand saltwater and ocean surge
  - Provide adequate structural capacity to comply with current code
  - Minimize loss of service on the North Jersey Coast Line during and following storm events

# Project Goals and Objectives

- Provide rail improvements that minimize service disruption and optimize operations
  - Optimize design speeds for trains on the bridge, up to 60 mph
  - Avoid substantial compromises to existing North Jersey Coast Line timetables
  - Accommodate heavier freight trains of 286,000 pounds and potentially up to 315,000 pounds
  - Minimize capital and operating and maintenance costs
  - Implement within a reasonable timeframe
  - Minimize impacts to NJ TRANSIT and Conrail operations during Construction

# Project Goals and Objectives

- Maintain and improve marine navigation beneath the bridge
  - Minimize delays to marine traffic due to bridge malfunctions
  - Widen channel to minimize the risk of collisions with marine vessels
  - Enable the safer and faster passage of boats beneath the structure
  - Avoid impacts to marine traffic during construction

# Project Goals and Objectives

- Minimize adverse impacts on the built and natural environment
  - Avoid property acquisition to the maximum extent feasible
  - Avoid, minimize, or mitigate adverse impacts on historic resources
  - Avoid impacts on parklands, open space, natural features, and coastal waters
  - Maintain access to nearby residences and businesses during construction
  - Minimize construction impacts to the extent feasible

# Alternatives Considered

- No Action Alternative
- Rehabilitation Alternative
- Replacement Bridge Alternatives
  - Fixed span alignment
  - Movable bridge alignment within existing bridge footprint or to the east or west of existing bridge. Movable bridge types include:
    - Swing bridge (similar to the existing bridge)
    - Vertical lift bridge
    - Bascule bridge (single or double-leaf bascules)

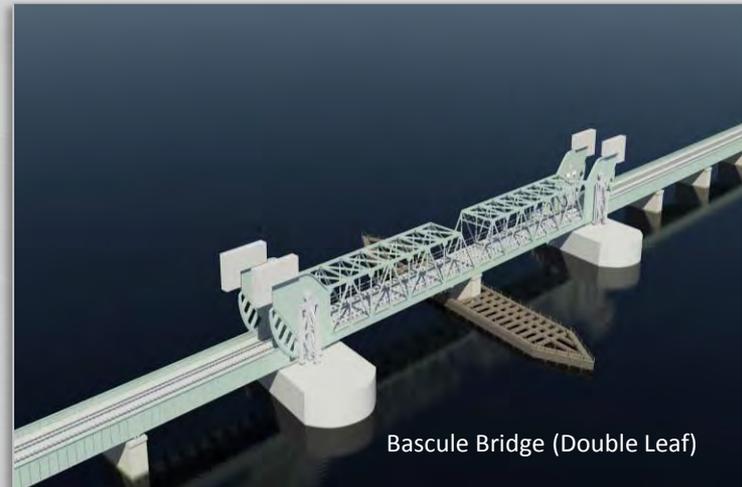
# Moveable Span Options



Swing Bridge (similar to existing bridge)



Vertical Lift Bridge



Bascule Bridge (Double Leaf)

# Bridge Rehabilitation Alternative is Not Feasible

- Inadequate clearance beneath the existing bridge to drive additional support piles
- North Jersey Coast Line service would need to be suspended for prolonged periods of time
- Extensive retrofitting of the main span piers would require narrowing the navigation channel
- Top of rail could not be raised to meet Design Flood Elevation
- Marine navigation beneath the bridge would not be improved

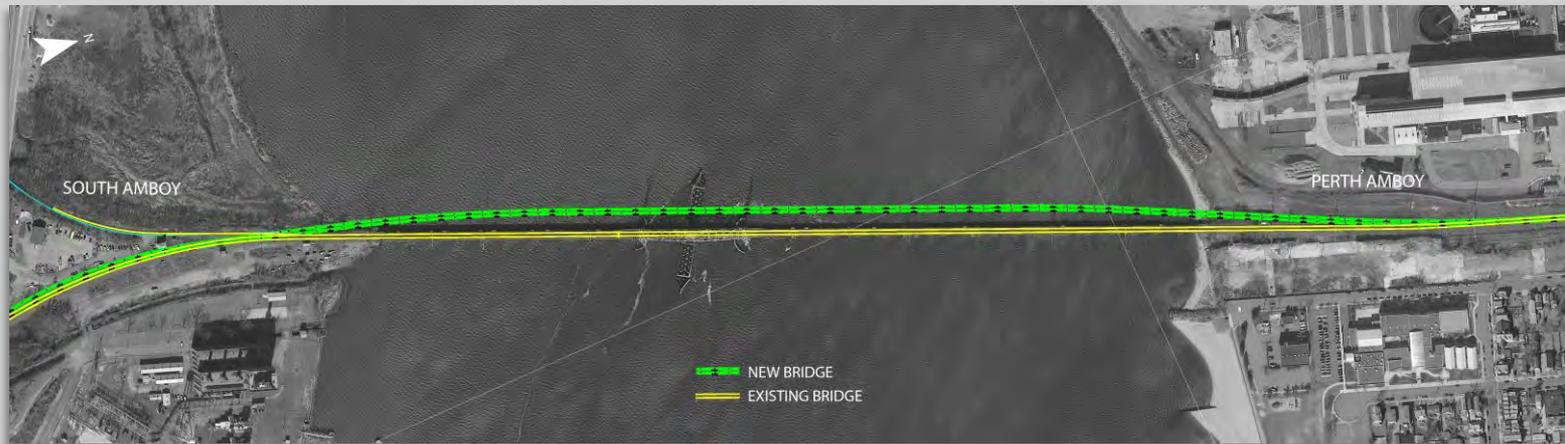
# Project Site



**Project Site**

*Note: Maintenance-type track work may extend beyond project site boundaries to New Brunswick Avenue in Perth Amboy and the South Amboy Station in South Amboy.*

# Preferred Alternative Vertical Lift Bridge to the West



# Benefits of Preferred Alternative

## ○ Western Alignment

- Can be designed to meet NJ TRANSIT's Design Flood Elevation criteria and operating requirements (e.g., 60 mph design speed)
- Avoids impacts to parklands and minimizes property acquisition requirements
- Minimizes impacts to railroad operations and marine traffic during construction

# Benefits of Preferred Alternative

- Vertical lift Span
  - Eliminates center pier and provides unimpeded navigation channel (300 feet wide)
  - Operating machinery located well above flood levels
  - Allows the replacement bridge to be built near existing bridge while maintaining navigation channel and railroad operations
  - Avoids need to close half the channel during construction

# What is NEPA?

## NEPA Process



- NEPA stands for the National Environmental Policy Act of 1969
- Helps decision-makers and the public understand how a proposed project will affect the environment
- Requires the identification and analysis of potential environmental impacts associated with construction and operation of a proposed project
- An Environmental Assessment for the project is being prepared in accordance with NEPA

# Section 106 of the National Historic Preservation Act

- FTA and NJ TRANSIT are also evaluating the project in accordance with Section 106 of the National Historic Preservation Act
- Section 106 requires consultation with interested parties and the public on the project's effects on historic properties, additional input is welcome
- The project will require the removal of railroad properties including: Raritan River Drawbridge, Essay Tower, a substation and signal bridge, and railroad catenary, which are contributing resources to several historic districts
- The proposed project will likely impact the remnants of two small boats that are buried within the sandy beach at the river's edge and require construction in areas of archaeological sensitivity for marine resources
- FTA and NJ TRANSIT are working with the New Jersey State Historic Preservation Office and other consulting parties to minimize impacts to historic resources and develop appropriate mitigation measures

# Section 4(f) Evaluation

- Section 4(f) of the U.S. Department of Transportation Act of 1966 requires that a special effort should be made to preserve Park and recreation land or Historic resources
- This project is anticipated to effect some historic resources and no effect on park & recreation land.
- A Section 4(f) Evaluation will be circulated for public review in conjunction with the Environmental Assessment
- The evaluation must demonstrate that there are no feasible and prudent alternatives to using Section 4(f) resources and that all possible planning has been done to minimize harm to the resources
- FTA will make a Section 4(f) determination, which will be submitted to the U.S Department of the Interior for concurrence



# How to Comment

## WE WELCOME YOUR FEEDBACK. TO COMMENT THIS EVENING:

- Hand write comments on forms provided at the front desk

## TO COMMENT OUTSIDE OF THIS PUBLIC MEETING:

- Visit the Project's website: [www.NJTRANSITResilienceProgram.com/contact-us](http://www.NJTRANSITResilienceProgram.com/contact-us)
- Send written comments to:

Mr. RJ Palladino, Senior Program Manager  
NJ TRANSIT Planning & Programs Department  
One Penn Plaza East, 8th Floor  
Newark, NJ 07105

# Thank You!

[www.NJTRANSITResilienceProgram.com](http://www.NJTRANSITResilienceProgram.com)

NJ TRANSIT Resilience Program - Capital Planning & Programs Department  
One Penn Plaza East, 8th Floor, Newark, NJ 07105