Welcome!

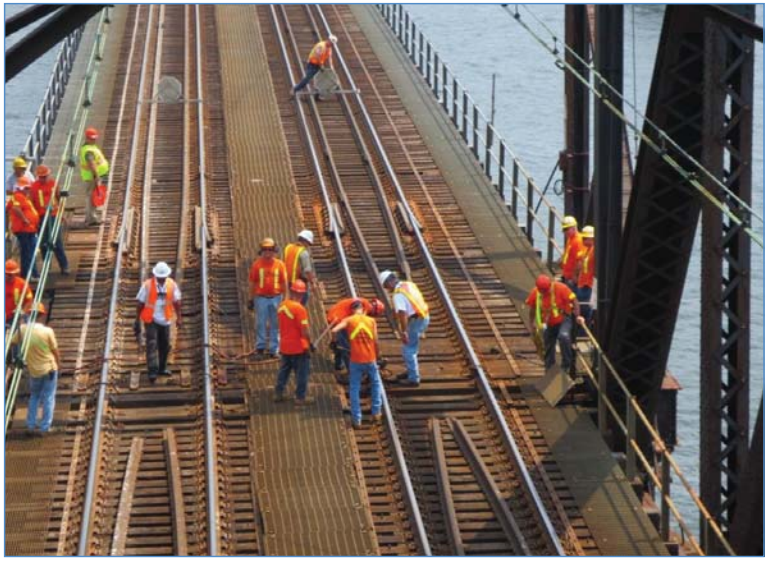
Susquehanna River Rail Bridge Project

Public Outreach Information Session
August 13, 2014

Project Purpose and Need

The problems posed by the existing Susquehanna River Rail Bridge include:

- Functionally obsolete and aging infrastructure
- Speed and capacity constraints
- Operational inflexibility
- Maintenance difficulties
- Conflicts with maritime uses



Amtrak crew manually opening the movable bridge span to accommodate marine traffic.

Project Purpose and Need

The primary purpose of the Susquehanna River Rail Bridge Project is to provide continued rail connectivity along the Northeast Corridor (NEC).

The project goals include:

- Improve rail service reliability and safety
- Improve operational flexibility and accommodate reduced trip times
- Optimize existing and planned infrastructure and accommodate future freight, commuter, intercity, and high-speed rail operations
- Maintain adequate navigation and improve safety along the Susquehanna River

The Northeast Corridor merges from four tracks to two tracks (heading south from Perryville to Havre de Grace).

Environmental Considerations
National Environmental Policy Act (NEPA)

Requires that we do everything possible to protect and enhance the natural, cultural and human environment. A complete study of all reasonable alternatives (including measures to avoid and minimize impacts) must be prepared, and the results must be made available to public officials and citizens before decisions are made.

Natural Environment

- Geology / Groundwater Resources
- Soils
- Surface Water
- Floodplains
- Wetlands
- Aquatic Life
- Wildlife







Socio-Economic Environment

- Demographics
- Community Facilities
- Economic Setting and Land Use
- Noise
- Air

Section 404 of the Clean Water Act, Nontidal Wetlands Protection Act
Regulates dredge and fill of Waters of the United States. Guidelines published by the Environmental Protection Agency for evaluating alternatives require that the Corps of Engineers evaluate the proposed project for environmental impacts (including historic and rare/threatened/endangered species impacts) and select the least environmentally damaging, practicable alternative.

Endangered Species Act
Ensures that actions are not taken to jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species.

Cultural Environment
- Historic Structures
- Archaeological Sites

Section 106 of the National Historic Preservation Act
Requires that agencies take into account the effects of a project on properties that are included in or eligible for the National Register of Historic Places.

Section 4(f) of the US Department of Transportation Act
Requires that special effort be made to preserve publicly owned public parks and recreation areas, wildlife / waterfowl refuges and historic sites. No project which requires land from these resources may be approved unless 1) there is no feasible and prudent alternative to the use of the land and 2) the action includes all possible planning to minimize harm to the property resulting from such use.

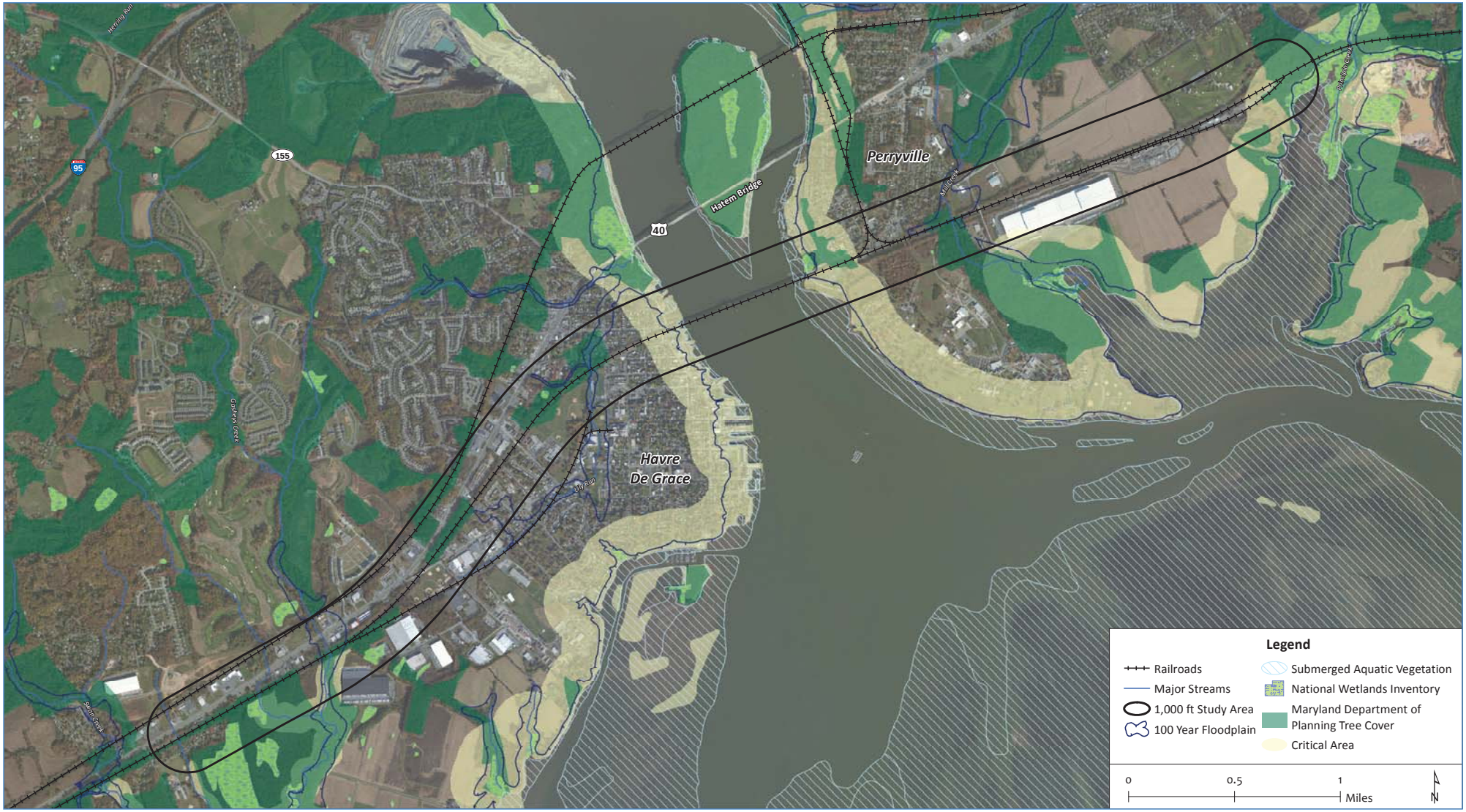
Clean Air Act and Clean Air Act Amendments
An air quality analysis must be performed to determine if there are violations of the State or National Ambient Air Quality Standards.

Farmland Protection Policy Act
Requires that federal programs minimize conversion of farmland to non-agricultural uses (does not apply to farmland that is zoned or committed (planned) for urban development).

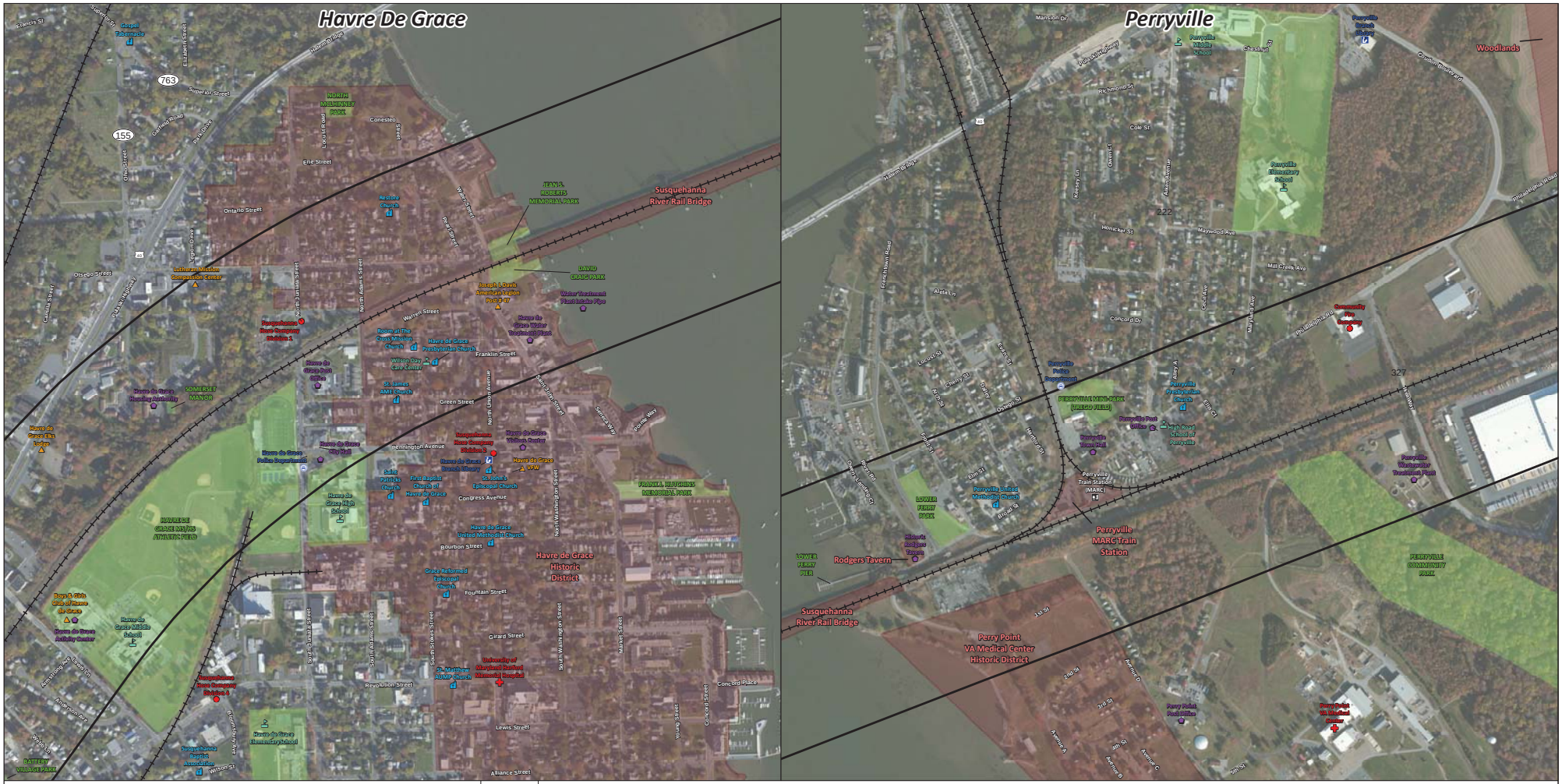
Executive Order 12898 (Environmental Justice)
Requires that agencies identify and address disproportionately high and adverse human health or environmental effects on minority or low-income populations.

Natural Resources

Coordinating with resource agencies to identify species or habitats of concern.



Parks, Historic Places, and Community Facilities



Conceptual Alternatives Development

Designing to Meet Project Purpose and Need

Rail Connectivity	• Must maintain rail connectivity along the NEC (during construction and operations). • Must provide sufficient capacity.
Navigational Requirements	• Must maintain navigation along the Susquehanna River (during construction and operations).
Logical Termini	• Must have rational end points and consider existing infrastructure. • USDOT grant defines project limits—NEC from MP 57.3 in Perryville to MP 63.5 in Havre de Grace.
Feasibility and Constructibility	• Must be feasible and practicable from a construction and engineering perspective.
Optimize Infrastructure	• Optimize existing infrastructure and accommodate planned infrastructure.

Conceptual Alternatives Development

Design Factors

Geometry	• Reduce curves to enable faster train speed. • Consider existing NEC and NS's Port Road Route.
Design Speed	• Consider 120 mph to 160 mph for intercity passenger trains. • 160 mph preferred speed for intercity passenger trains.
Bridge Spacing	• Minimize ROW impacts. • Consider existing swing span. • Consider constructibility.
Navigational Clearances	• Accommodate marine traffic with fixed bridge. • Horizontal clearance maintained or improved.
Grades	• Higher fixed bridge requires steeper grades. • Heavy freight trains require lower grades.
Relationships to other projects	• Freight rail improvements. • MARC Maintenance Facility and Penn Line extension. • NEC Future Tier I EIS. • Regional bicycle and pedestrian trails.

Conceptual Alternatives Development

Considered many design permutations

Number of Bridges	New Bridge Alignment	Total Tracks	New Bridge Type	Bridge Traffic	Existing Traffic
One rehab bridge	East of existing bridge	Three tracks	Fixed	Separate structure for intercity trains	Rehab bridge
One new bridge	West of existing bridge	Four tracks	Movable	Commingled Traffic	Rehab piers + convert to lift span
One new + one rehab bridge	On existing bridge alignment				Decommission + remove
Two new bridges					

Two-Step Alternatives Screening Process

Step 1: Fatal Flaw Screening—criteria developed from Purpose & Need

➤ ***Pass/fail test—alternative must satisfy all criteria to advance***

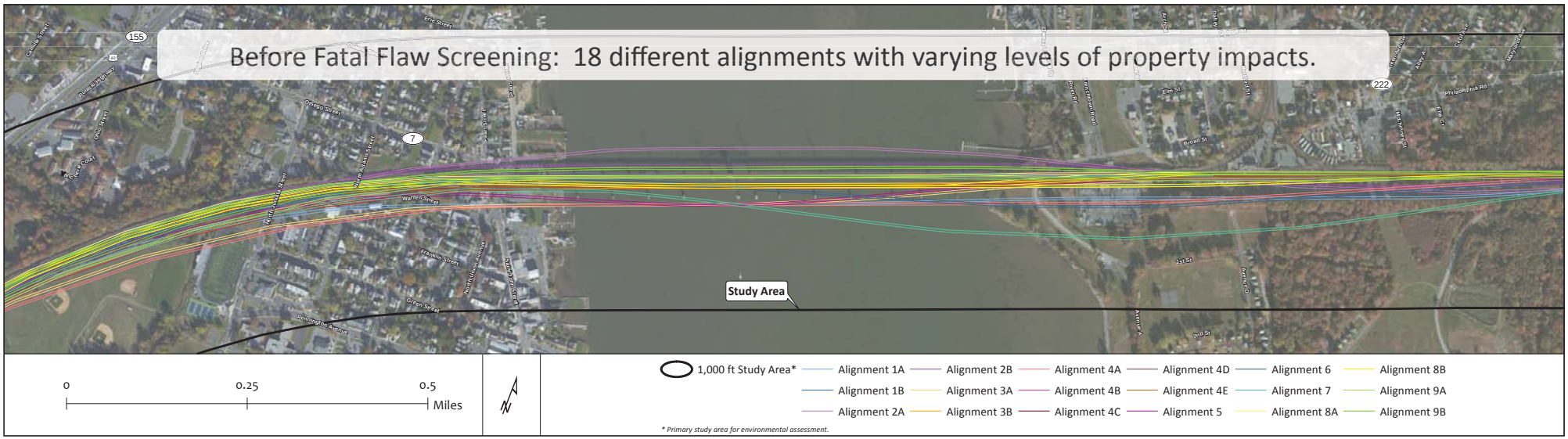
- Provides rail connectivity
- Meets navigation requirements
- Has logical termini
- Is feasible & constructible
- Avoids critical property impacts (developed from community input)

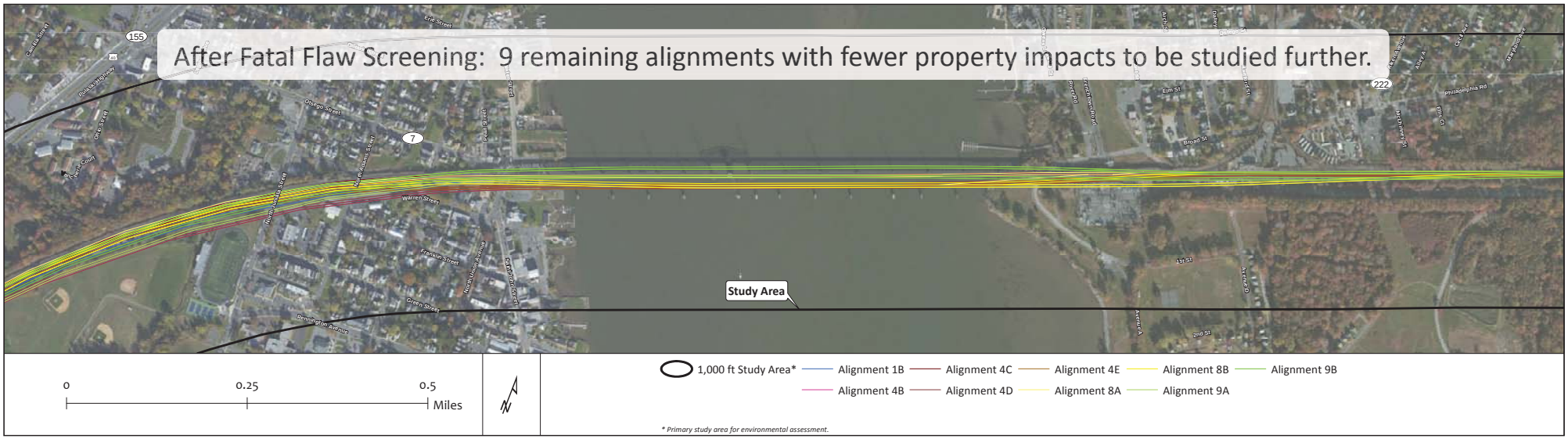
Step 2: Detailed Screening—based on specific project goals

➤ ***Relative test—compare/contrast each alternative's ability to meet goals & objectives***

- Optimizes existing and planned infrastructure
- Considers operational, design, construction requirements
- Minimizes environmental/cultural/socioeconomic/property impacts

Conceptual Alignments Considered

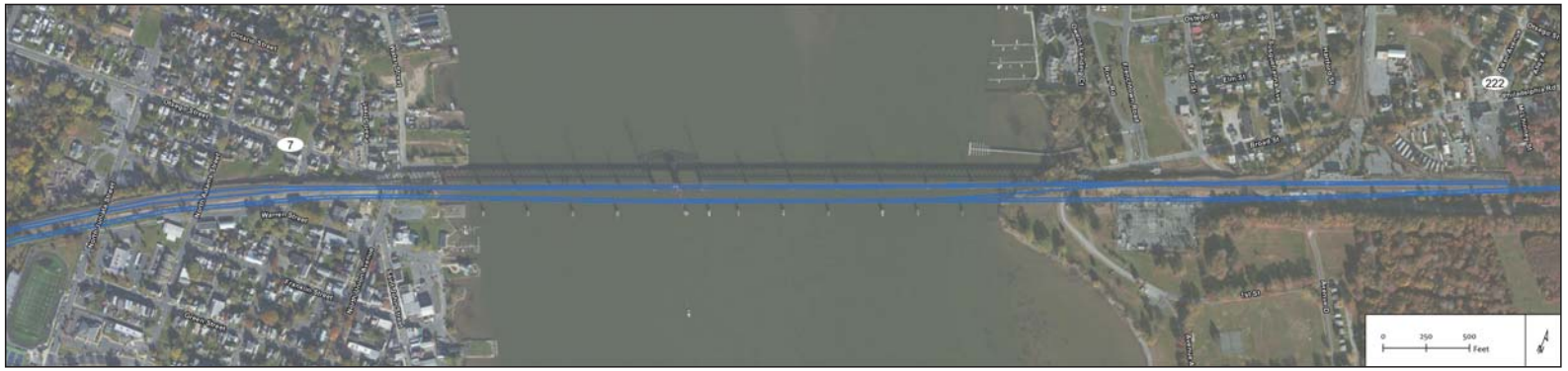




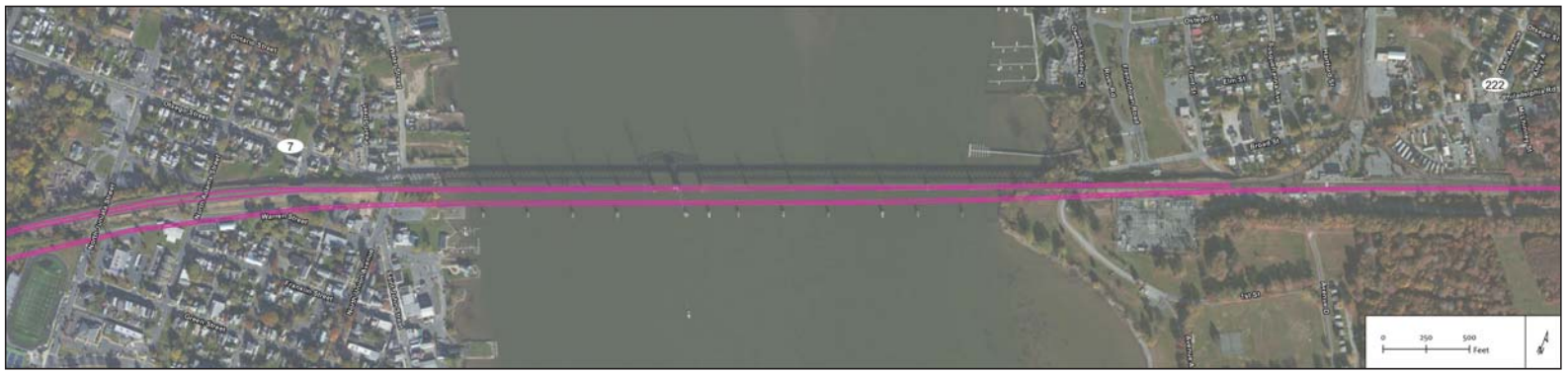
Two-Step Alternatives Screening Process

- Conceptual engineering identified 18 possible alignments, with different advantages and disadvantages and varying levels of property impacts.
- **Step 1 - Fatal flaw screening** eliminated alignments with the greatest property impacts and resulted in 9 alignments to proceed to detailed screening: Alignments 1B, 4B, 4C, 4D, 4E, 8A, 8B, 9A, 9B.
- **Step 2 - Detailed screening** will consider various bridge types and styles, environmental factors, operational/design considerations, and further evaluation of property impacts.
- Additional alternatives may be identified through Value Engineering and public and agency coordination.
- MDOT and Amtrak are investigating a bicycle-pedestrian path for all feasible alignments. Considerations include safety, vibration, property acquisition, connectivity, cost, and impacts to surrounding communities and environment.

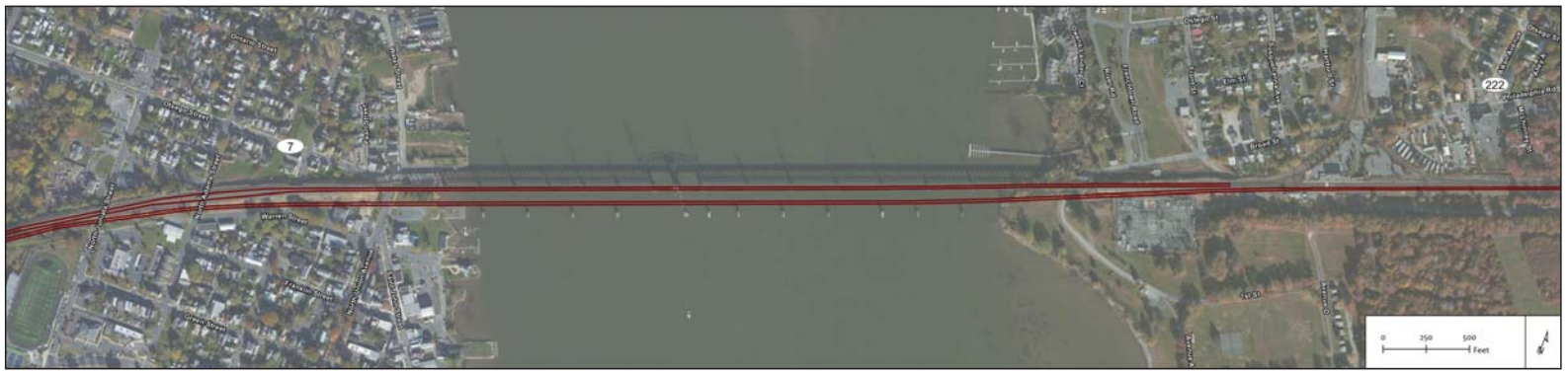
Alternatives Development and Screening



Alignment 1B



Alignment 4B

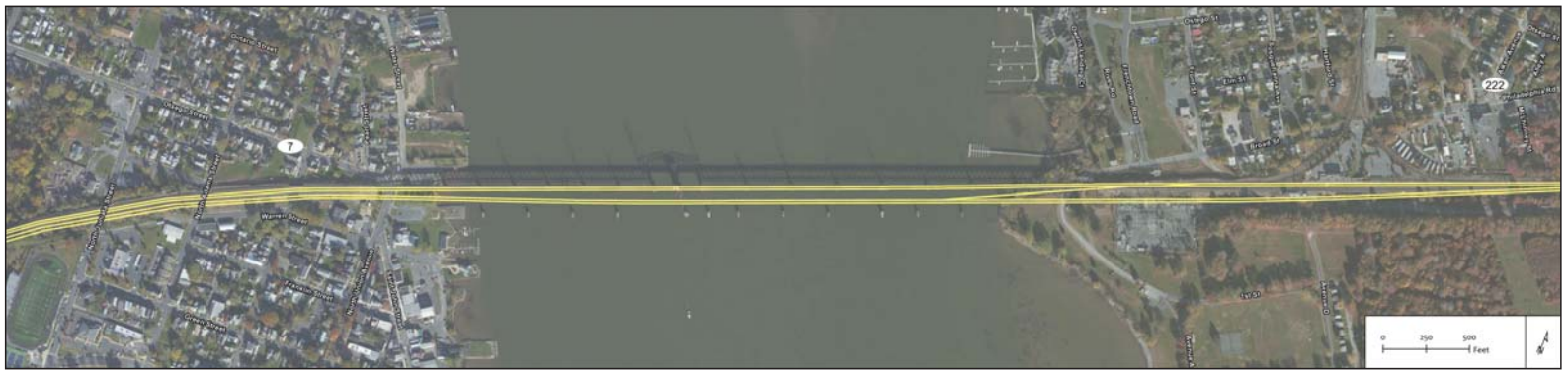


Alignment 4C

Alternatives Development and Screening

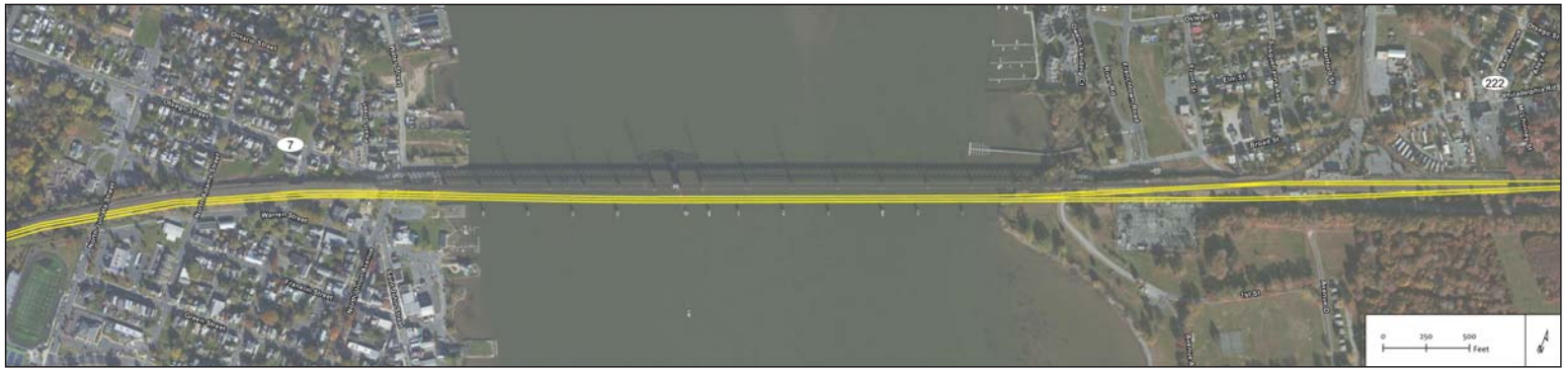
Alignment 4D

Alignment 4E

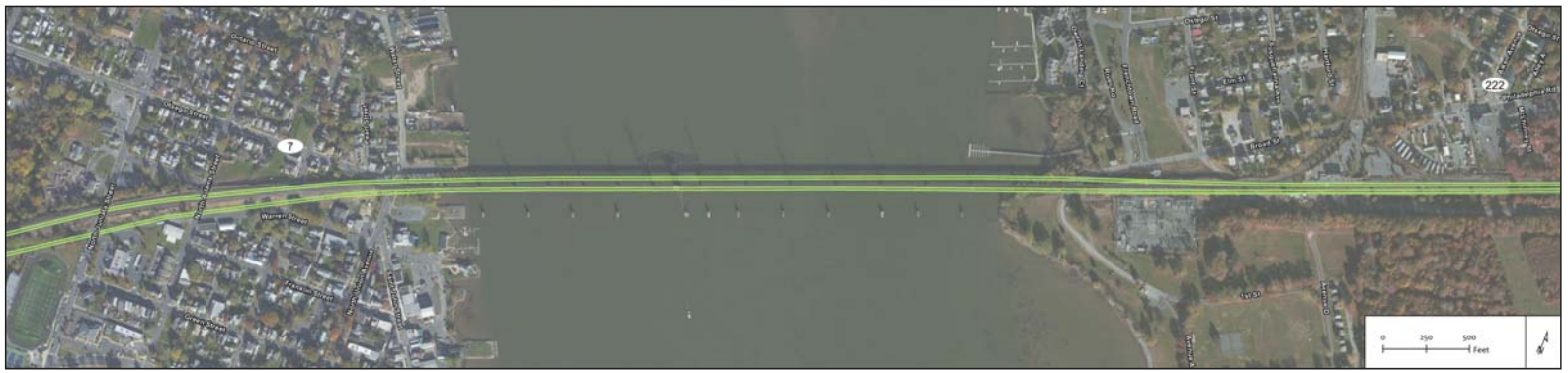


Alignment 8A

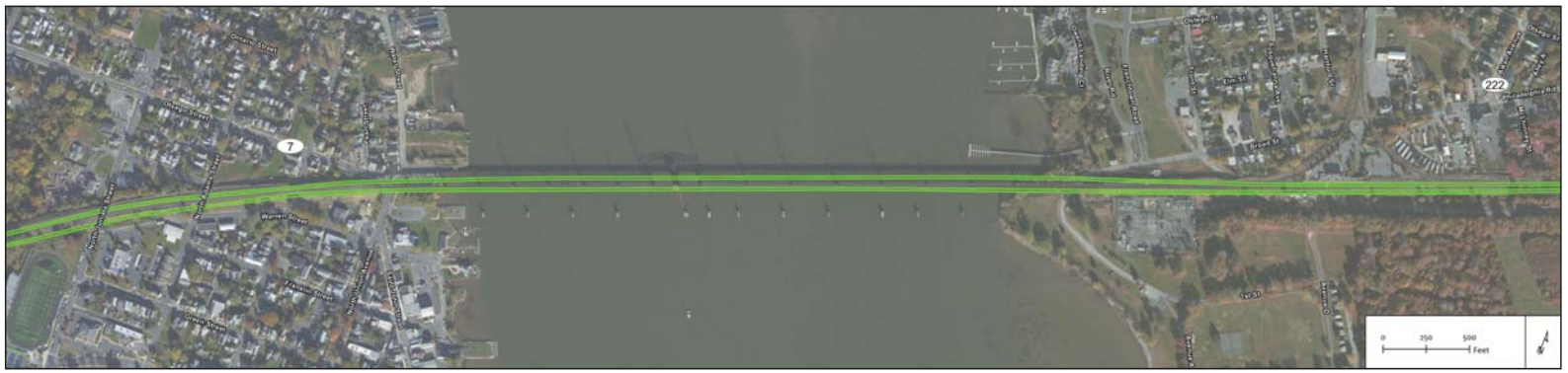
Alternatives Development and Screening



Alignment 8B



Alignment 9A



Alignment 9B

Anticipated Project Schedule

Summer 2013

Early Coordination
- Agency Coordination Meeting
- Met with Havre de Grace and Perryville Officials

Winter 2014

Agency Coordination Meeting
- Project Introduction
- Present Project's Purpose & Need

Spring 2014

Agency Coordination Meeting
- Obtain Input on Project's Purpose & Need
- Existing Environmental Conditions
- Conceptual Alternatives

Public Outreach Information Session
- Obtain Input on Project's Purpose & Need
- Existing Environmental Conditions
- Conceptual Alternatives

Summer 2014

We are Here

Agency Coordination Meeting
- Summarize Public Input
- Present Feasible Alternatives

Public Outreach Information Session
- Meet with Local Officials and Stakeholders
- Present Feasible Alternatives

Fall 2014

Agency Coordination Meeting
- Present Alternatives Retained for Detailed Study

Fall 2014

Public Outreach Information Session
- Present Alternatives Retained for Detailed Study

Winter / Spring 2015

Agency Coordination Meeting
- Present Preferred Alternative

Public Outreach
- Distribute Project Newsletter

Summer 2015

Publish Environmental Assessment (EA)

Agency Coordination Meeting
- NEPA Document Findings
- Preferred Alternative / Conceptual Mitigation

Public Outreach Information Session
- NEPA Document Findings
- Preferred Alternative / Conceptual Mitigation

Fall 2015 - Winter 2016

Complete Preliminary Engineering and NEPA Process

2017

Complete Federal Railroad Administration Grant Requirements

Stay Connected

- Visit the project website at **www.susrailbridge.com** to get project updates, learn more about the project, submit a comment, or join the project mailing list.
- Send a letter to:
  Susquehanna River Rail Bridge
  PO Box 68
  Elkton, MD 21922