

Susquehanna River Rail Bridge

Public Outreach Information Session



March 23, 2017

Goals for Today



- **Environmental Assessment**
- **Purpose and Need**
- **Preferred Alternative**
- **Mitigation**
- **Outreach**
- **Next steps**

Project Purpose and Need

Provide Rail Connectivity Along the NEC



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

Goals:

- ✓ Improve Rail Reliability, Safety
- ✓ Improve Operational Flexibility
- ✓ Optimize Existing/Planned Infrastructure
- ✓ Accommodate Future High-Speed, Inter-City, Commuter, Freight Rail
- ✓ Maintain Susquehanna Navigation

Study Area



Engineering & Operational Considerations

Criterion	Alternative 9A (Preferred)	Alternative 9B
Minimizes Operational Disruptions/Delays	Yes	Yes
Connects to NS Wye and Provides Grades Acceptable for Freight Operations	Yes	Yes
Eliminates Two-Track Section in this Portion of NEC	4 Tracks	4 Tracks
Meets Future Planned 160 mph Corridor Wide Improvement Without Future Speed Restrictions For Intercity Trains	Yes - 160 mph	No - 150 mph
Number of Bridge Structures	2	2
Provides Flexibility for Operational and Maintenance Work Windows	Very Good	Very Good
Ability to Provide for NS/MARC Operations During Construction	Excellent	Excellent
Impacts to Perry Electrical Substation	Minor	Minor
Allows Shared Corridor with Bike/Ped Path	Does Not Preclude	Does Not Preclude
Provides Suitable Vertical Clearance	Yes – 60 feet	Yes – 60 feet
Cost Estimate (2015 dollars)	\$930 million	\$890 million

Preferred Alternative 9A

■ Two Bridges

- 4 tracks
- Max speed: 160 mph
- Benefits broad NEC goals



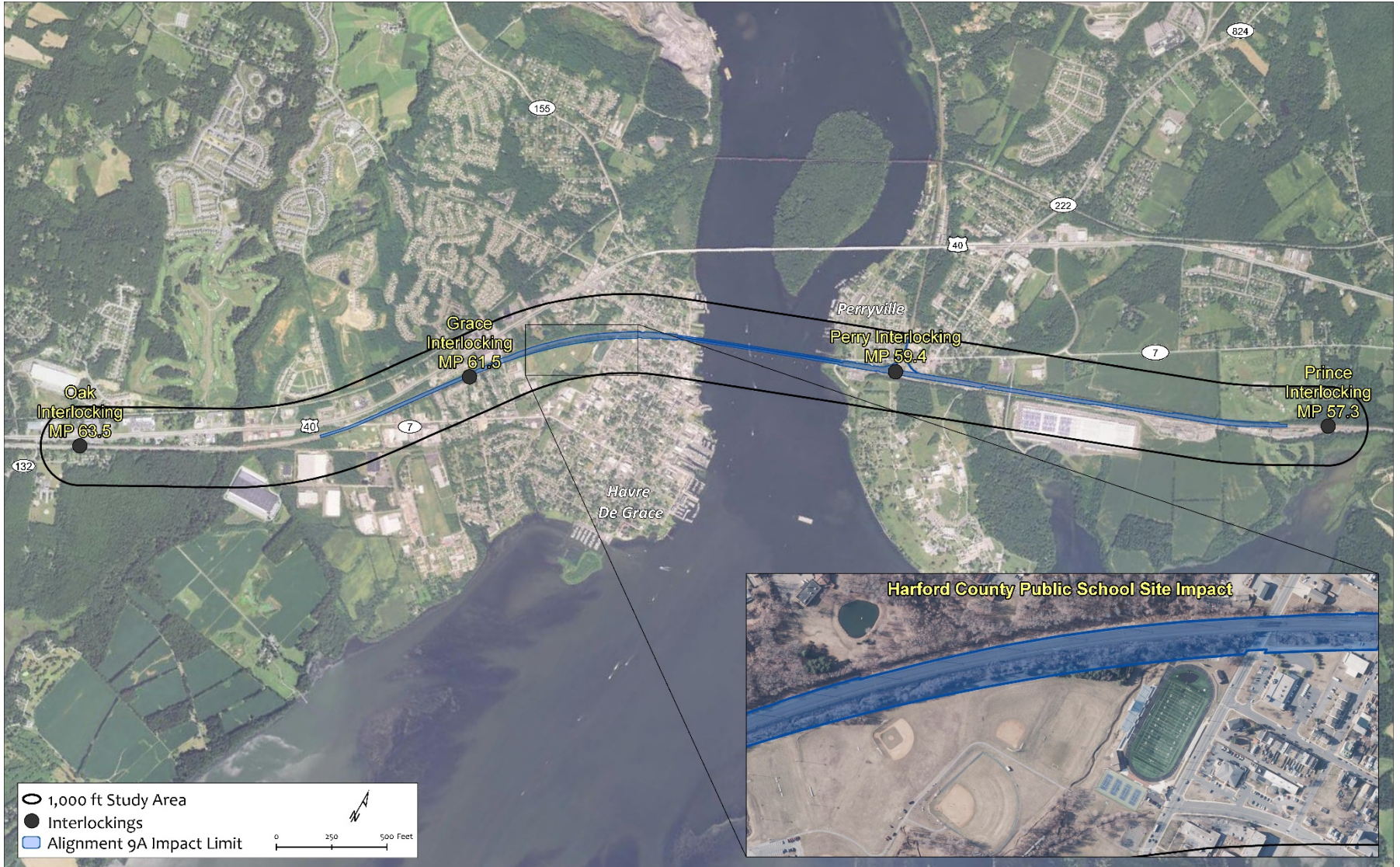
■ Environmental Impacts

- Similar to other alternatives
- Very similar alignments

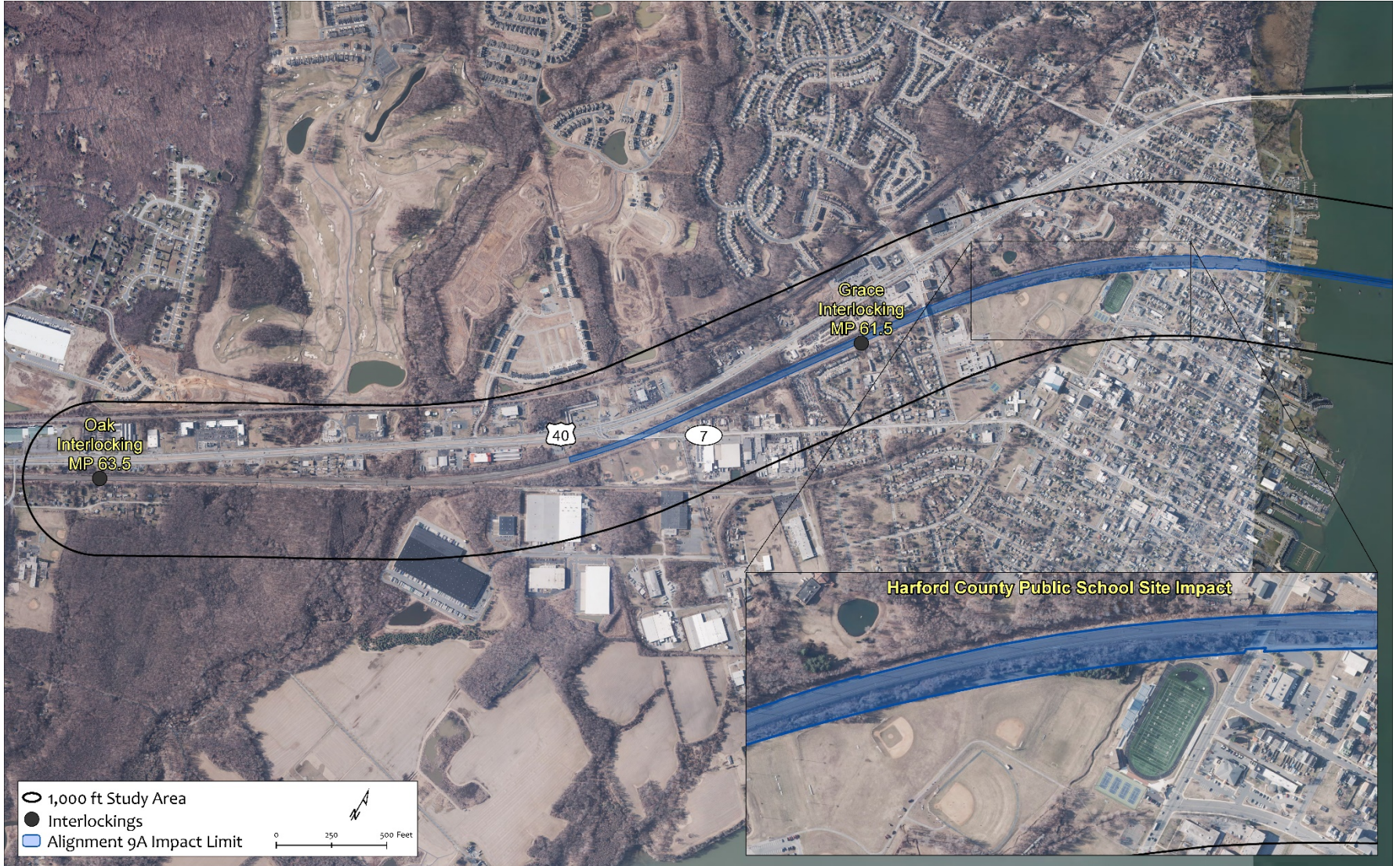
■ Avoid/Minimize/Mitigate

- Perry Interlocking Tower
- Havre de Grace MS/HS
- Natural resources

Preferred Alternative 9A



Preferred Alternative 9A – (Havre de Grace)



Preferred Alternative 9A – (Perryville)



Selected Bridge Type Design

Girder Approach/ Arch Main Span

**Preliminary Pier Design
Viewed from Havre de Grace**



**Preliminary Pier Design
Viewed from Perryville**



Environmental Assessment

- Published on March 6, 2017
- 30-Day Public Review Closing on **April 6, 2017**
- Available for Download: **susrailbridge.com**
- Available at Repositories
(Libraries, Havre de Grace, Perryville, Cecil County and Harford County)
- Analyzes Impacts/Benefits to Environment
- Identifies Measures to Avoid, Minimize, Mitigate

Transportation

■ Benefits of the Preferred Alternative

- Enhanced reliability of Susquehanna River Rail Bridge
- Benefits to commuters using Amtrak and MARC service, freight operations, and marine traffic

■ Mitigation Measures

- Construction access plan developed in coordination with community



Natural Environmental Resources

- **Potential Impacts of the Preferred Alternative**
 - **Minimal impacts to geology and soils**
 - **Waterfowl may be temporarily displaced from the active construction area**
 - **Impacts to other natural resources categories are summarized in the following table**



Natural Environmental Impacts

Resource Type	Resource Category	Alternative 9A (Preferred)	Alternative 9B
Effective 100-Year Floodplain Encroachment (acres)	100-Year	2.72	2.15
	500-Year	4.83	4.24
Wetlands (acres)	Tidal	0.06	0.06
	Nontidal	0.83	0.71
Streams (linear feet)	Relatively Permanent Waterways	3,190	2,943
	Ephemeral	19	19
Forest Resources (acres)	-----	2.92	2.08
Chesapeake Bay Critical Area (acres)	-----	6.4	6.1
Submerged Aquatic Vegetation (SAV) – (acres)	Permanent Impacts	0.61	0.61

Natural Environmental Resources

■ Mitigation Measures

- **Wetlands:** optimize use of existing ROW, bank credits, in-lieu fees, or creation/enhancement/preservation
- **Minimum 2:1 slopes** for berms, retaining walls
- **Plant trees**
- **SAV:** timing restrictions, planting areas or determine out-of-kind compensation
- **Bottomless culverts**
- **Reduced # of in-water piers, best practices, and timing restrictions**



Human Environmental Impacts

RESOURCE TYPES	Alternative 9A (Preferred)	Alternative 9B
Land Use and Community Facilities (Where structure demolition is required, a full parcel acquisition is assumed)	6 Parcels	4 Parcels
	2.84 Acres	0.35 Acres
	1 Commercial Relocation	No Residential or Commercial Relocations
Parks and Recreational Resources (Parks avoided include Lower Ferry Park & Pier, Trego Field/Mini-Park, Perryville Community Park, and existing bike/ped trails)	2 Parks Affected	1 Park Affected
	1.77 Acres	0.27 Acre
Cultural Resources	4 Impacted Historic Resources	4 Impacted Historic Resources
	Potentially Sensitive Archaeological Areas	Potentially Sensitive Archaeological Areas
Section 4(f) Resources	3 Resources + 2 <i>De Minimis</i>	3 Resources + 1 <i>De Minimis</i>

Land Use, Socioeconomics & Environmental Justice

- **Potential Impacts of the Preferred Alternative**
 - No significant impacts to land use
 - 2.84 acres of property acquisition
 - No disproportionately high or adverse impacts to environmental justice populations
- **Mitigation Measures**
 - Property owners would be fully compensated for the land acquired
 - Project will comply with requirements of Uniform Act

Parks, Trails & Recreational Resources

■ Potential Impacts of the Preferred Alternative

- Small areas of park / recreation to be acquired:
 - 0.27-acre of Jean S. Roberts Park (including city-owned .01 acre)
 - 1.5 acres of Havre de Grace Middle/High School property



■ Mitigation Measures

- Ongoing consultation
- Replacement boat ramp in suitable location
- Coordination regarding National Historic Trails

Affected Cultural Resources

- Susquehanna River Rail Bridge (NR-Eligible)
- 8 out of 9 Historic Undergrade Bridges (NR-Eligible)
- Havre de Grace Historic District (NR-Listed)
- Rodgers Tavern (NR-Listed)
- Perryville Railroad Station Complex (NR-Eligible)



Cultural Resources

Susquehanna River Rail Bridge

- Adverse Effect due to Demolition
- Mitigation Measures
 - Draft Programmatic Agreement included in EA
 - Ongoing coordination (MHT, Consulting Parties)
 - Educational
 - Document bridge
 - Develop historic interpretive material
 - Salvage key parts



Cultural Resources Undergrade Bridges

- Adverse Effect
(8 of 9 Historic Bridges)
- Mitigation Measures
 - Use a form liner that emulates stone
 - Prepare HAER documentation
 - Design of new walls in accordance with *Secretary of the Interior's Standards*



Cultural Resources Havre de Grace Historic District

- Visual Adverse Effect Due to Widening
- Mitigation Measures
 - Locate bridge abutment further south
 - Construct retaining walls, in accordance with *Secretary of the Interior's Standards*
- Possible Adverse Effect from Construction
- Avoidance Measure
 - Construction Protection Plan



Cultural Resources Rodgers Tavern



- Visual Effect from Widening and New Retaining Wall
- Mitigation Measures
 - Aesthetic treatment for wall
 - Landscaping, if possible
- Possible Adverse Effect from Construction
- Avoidance Measure
 - Construction Protection Plan

Cultural Resources

Perryville Railroad Station Complex

- Possible Adverse Effect from Demolition of Interlocking Tower
- Mitigation Measures
 - Avoid impact by shifting the Interlocking Tower within ROW
 - HAER recordation
 - Interpretive signage and/or museum improvements



Visual and Aesthetic Conditions

■ Altered Views

- Havre de Grace Historic District, including “Gateway” entrance
- Rodgers Tavern
- Perryville Railroad Station Complex
- Waterfront along Perry Point VA Medical Center Historic District



■ Mitigation Measures

- Follow measures for cultural resources

Noise & Vibration

■ Potential Impacts of the Proposed Project

- Moderate noise impact at six receptors (≤ 70 dBA)
- 70 dBA comparable to highway traffic at 25-50 feet

■ Mitigation Measures

- Low-noise equipment and procedures to limit equipment noise levels
- Construction Protection Plan to protect historic resources



Coordination to Date

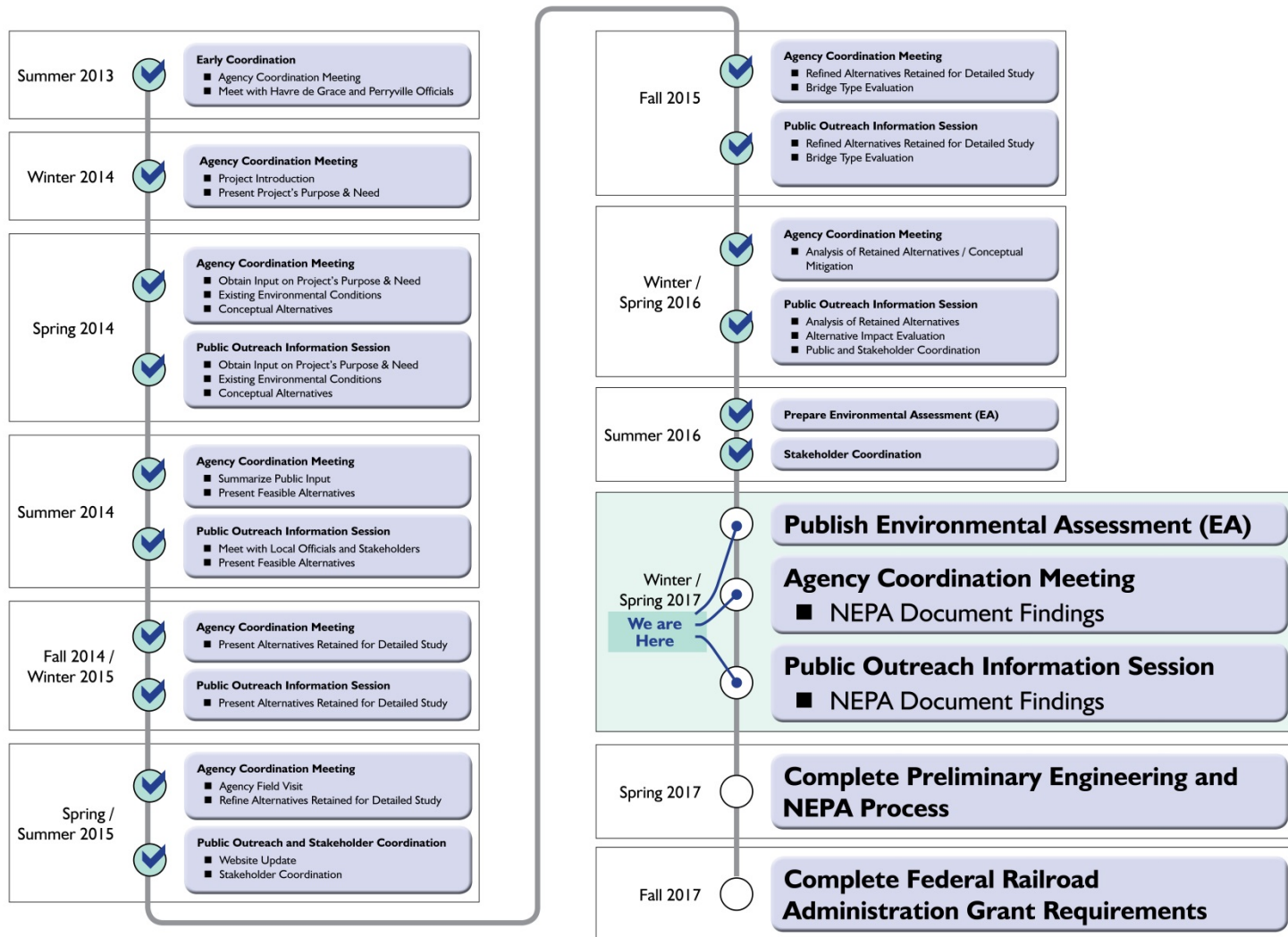
- Public Outreach Information Sessions (6)
- Section 106 Consultation Meetings (3)
- Local Officials (Perryville, Havre de Grace, Cecil County) Meetings (6)
- SRRBP Advisory Board Meetings (3)
- Bicycle/Pedestrian Stakeholder Meetings (2)
- Railroad Coordination (NS, CSX, MTA) Meeting (1)
- Interagency Review Meetings (10)
- Maritime Community
- Congressional Offices



Revisions Based on Your Input

- **Reduced Number of Bridge Piers, Increased Spans Pier with Open Modern Look (Advisory Board Suggestions)**
- **Improved Horizontal Clearance**
- **Bottomless Culverts / Bridges, Where Possible**
- **Adjusted Perryville Abutment to Improve Rodgers Tavern View**
- **Form Liner with Stone for Perryville Retaining Wall**
- **Adjusted Havre de Grace Abutment for “Gateway”**
- **Relocating / Preserving Perryville Tower**
- **Harford County Public Schools Compensation**
- **Aesthetic Fencing**

Schedule



What's Next?

- **Funding Sources Need to be Identified to Complete the Final Design and Construction.**
- **At the Conclusion of NEPA/Preliminary Engineering, Amtrak Has Limited Funding for Engineering Beyond Fall 2017.**



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Thank You!

Questions?

SUSQUEHANNA RIVER RAIL BRIDGE PROJECT



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EA Technical Analyses

- Transportation
- Land Use & Community Facilities
- Socioeconomics & Environmental Justice
- Parks, Trails, & Recreational Resources
- Visual & Aesthetic Resources
- Cultural Resources
- Draft Section 4(f) Evaluation
- Section 6(f) Evaluation
- Natural Resources
- Air Quality
- Greenhouse Gas Emissions & Climate Change
- Noise and Vibration
- Contaminated & Hazardous Materials
- Public Health, Safety, & Security
- Construction
- Indirect & Cumulative Effects

Cultural Resources

- **Areas to be Tested for Archaeological Resources (Phase 1B)**
 - **Havre de Grace train station**
 - **Havre de Grace – Susquehanna riverfront**
 - **Susquehanna River (underwater survey)**
 - **Perry Point & Rodgers Tavern site**
 - **Wye track realignment area**

Air Quality, Greenhouse Gases & Climate Change

- **Potential Impacts of the Preferred Alternatives**
 - **Minor increase of 1-hour NO₂ standard exceedance (less than 9%)**
 - **Efficient travel consistent with HSIPR goals, long-term GHG reductions**

- **Mitigation Measures**
 - **Best practices to reduce construction emissions**
 - **Cement replacements (e.g. slag, fly-ash)**
 - **Recycled steel**
 - **Design for reasonably foreseeable future conditions**

Section 6(f) Resources

- **Potential Impacts of the Preferred Alternative**
 - **Havre de Grace MS/HS athletic fields**

- **Mitigation, Commitments and Minimization**
 - **Identify potential replacement sites**
 - **Further evaluation**
 - **Ongoing consultation and coordination**

Contaminated & Hazardous Materials

- **Potential Impacts of the Preferred Project**
 - **With mitigation, no adverse impacts expected**
- **Mitigation Measures**
 - **Adopt health and safety and investigative/remedial measures**
 - **Follow regulatory requirements for pre-construction removal of asbestos and management of lead-based paint and PCB-containing equipment**
 - **Implement an environmental Construction Health and Safety Plan (CHASP)**

Railroad and Maritime Coordination

- **Rail**
 - CSX uses separate bridge
 - NS uses Susquehanna River Rail Bridge
 - MTA operates MARC Penn Line on Susquehanna River Rail Bridge
- **Navigation Survey Stakeholders**
 - Marina owners / operators
 - Shippers
 - Dock managers
 - U.S. Coast Guard
 - Recreational boaters
- **Result**
 - 60-ft minimum vertical clearance
 - Improved horizontal clearance

Advisory Board Coordination

■ Advisory Board Bulletins (20)

- 2 cases for a longer span, 1 pier design recommendation

■ SRRBP Advisory Board Top Six Priorities (2014):

- Bridge architecture
- Rail commuter station
- Bridge abutment area and roadway realignment
- Request for a special briefing
- Westerly right-of-way and alignments
- Street and lane underpasses

Project Team evaluated the feasibility of the suggestions, and has incorporated them into the design when practicable

Public Outreach Information Sessions (POIS)

Meeting Date	Meeting Topic
April 28, 2014	Purpose & Need/ Project Introduction
August 13, 2014	Feasible Alternatives
December 10, 2014	Alternatives Retained for Detailed Study
November 10, 2015	Alternatives Retained for Detailed Study and Bridge Types
April 14, 2016	Preliminary EA Results & Conceptual Mitigation
March 23, 2017	EA Results & Conceptual Mitigation

Stakeholders Meetings

Meeting Date	Meeting Topic
June 6, 2014	Bicycle-Pedestrian stakeholders meeting
June 17, 2014	Presentation to the Town of Perryville
July 1, 2014	Presentation to Cecil County
November 6, 2014	Meeting with Susquehanna River Rail Bridge Project Advisory Board
December 2, 2014	Bicycle-Pedestrian Coordination Meeting
March 9, 2015	Section 106 Consulting Parties
March 26, 2015	Meeting with Susquehanna River Rail Bridge Project Advisory Board
July 8, 2015	Meeting with Harford County Public Schools
July 28, 2015	Baltimore Metropolitan Council (BMC) Meeting
August 17, 2015	Meeting with Harford County Public Schools
August 18, 2015	Section 106 Consulting Parties
January 20, 2016	Meeting with Harford County Public Schools
March 17, 2016	Meeting with Susquehanna River Rail Bridge Project Advisory Board
October 11, 2016	Section 106 Consulting Parties

Agency Coordination Meetings

Meeting Date	Meeting Topic
July 17, 2013	IRM Project Introduction
February 19, 2014	IRM Purpose & Need Meeting
March 19, 2014	Project Coordination Meeting with NS/FRA/MDOT/Amtrak
April 16, 2014	IRM Purpose & Need/ Conceptual Alternative
June 18, 2014	IRM Feasible Alternatives
February 18, 2015	IRM Preliminary Alternatives Retained for Detailed Study
March 12, 2015	IRM Agency Field Visit
April 15, 2015	IRM ARDS Field Visit Recap
June 17, 2015	IRM Refined Alternatives Retained for Detailed Study
September 16, 2015	IRM Revised ARDS Report
December 9, 2015	IRM Bridge Types
December 14, 2015	WILMAPCO Presentation
March 9, 2016	Smart Growth Coordinating Committee Presentation
March 17, 2016	WILMAPCO Presentation
April 20, 2016	IRM Detailed Presentation of NETR