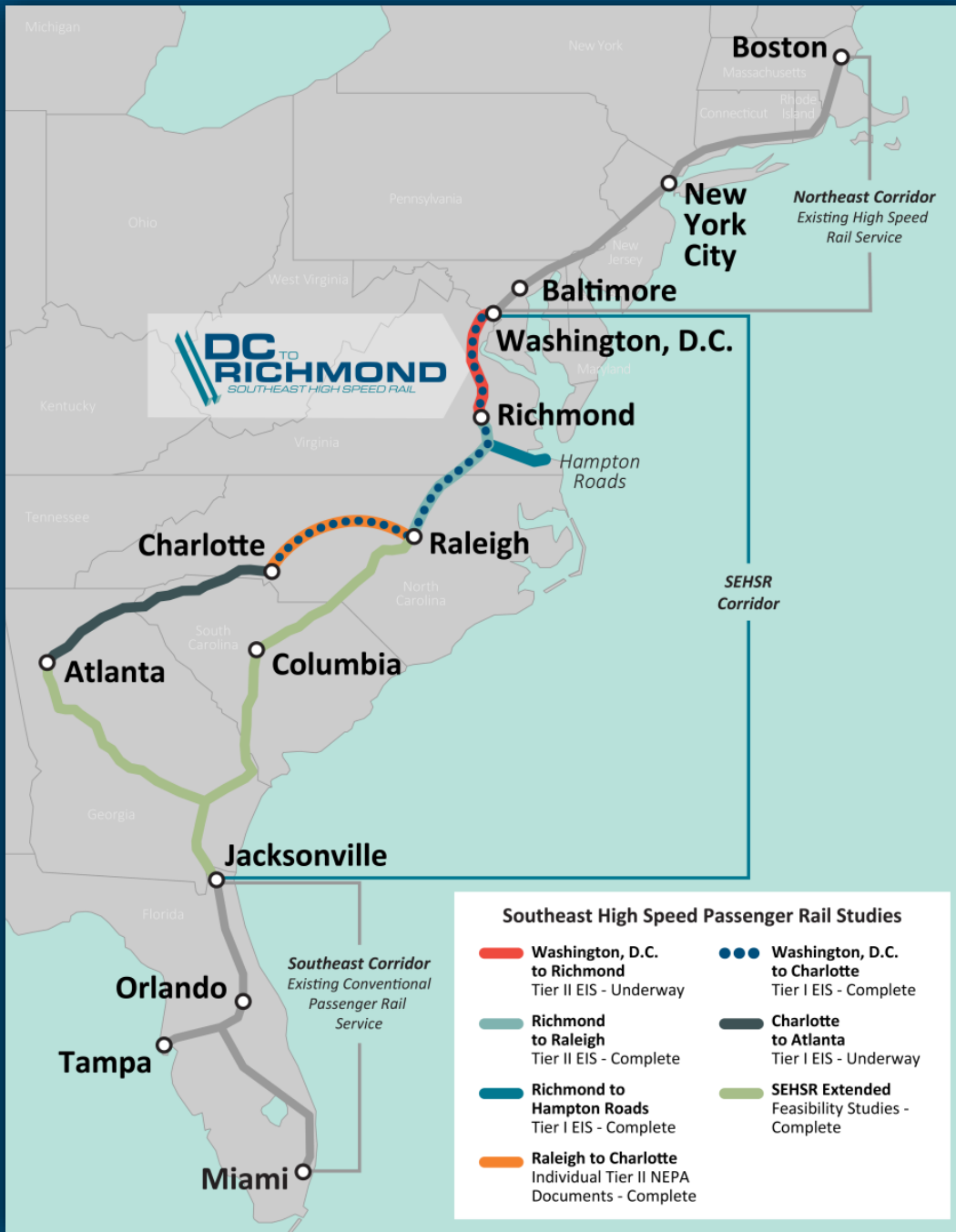




# Railway Environmental Analysis and Compliance through ArcGIS Online (AGOL)

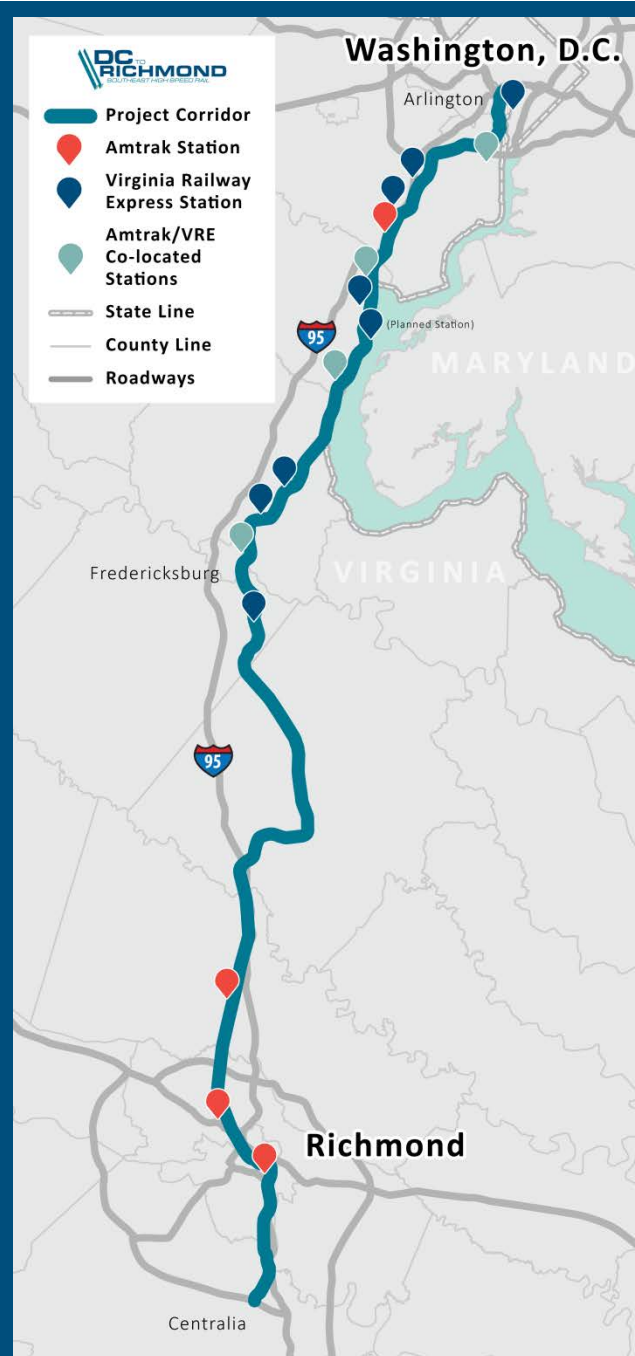


## What is Southeast High Speed Rail?

- **Washington, D.C.  
to  
Richmond  
Southeast High  
Speed Rail**

- **“DC2RVA”**

- <http://www.dc2rvarail.com>



## Corridor Overview

- 123-mile corridor
- Follows CSX's rail line
- Shared freight rail and passenger rail corridor
- Amtrak provides intercity passenger rail service
- Virginia Railway Express provides commuter rail service

# Project Purpose & Need

 Increase Reliability 

 Improve Frequency 

 Reduce Travel Time 

 Increase System Capacity 

# Tier II Environmental Impact Statement

## Tier II Environmental Impact Statement (EIS)



Summarize broader issues discussed in the Tier I Study.



Focus on site-specific impacts and mitigation for individual elements of the larger study.



Incorporate further public/agency input.

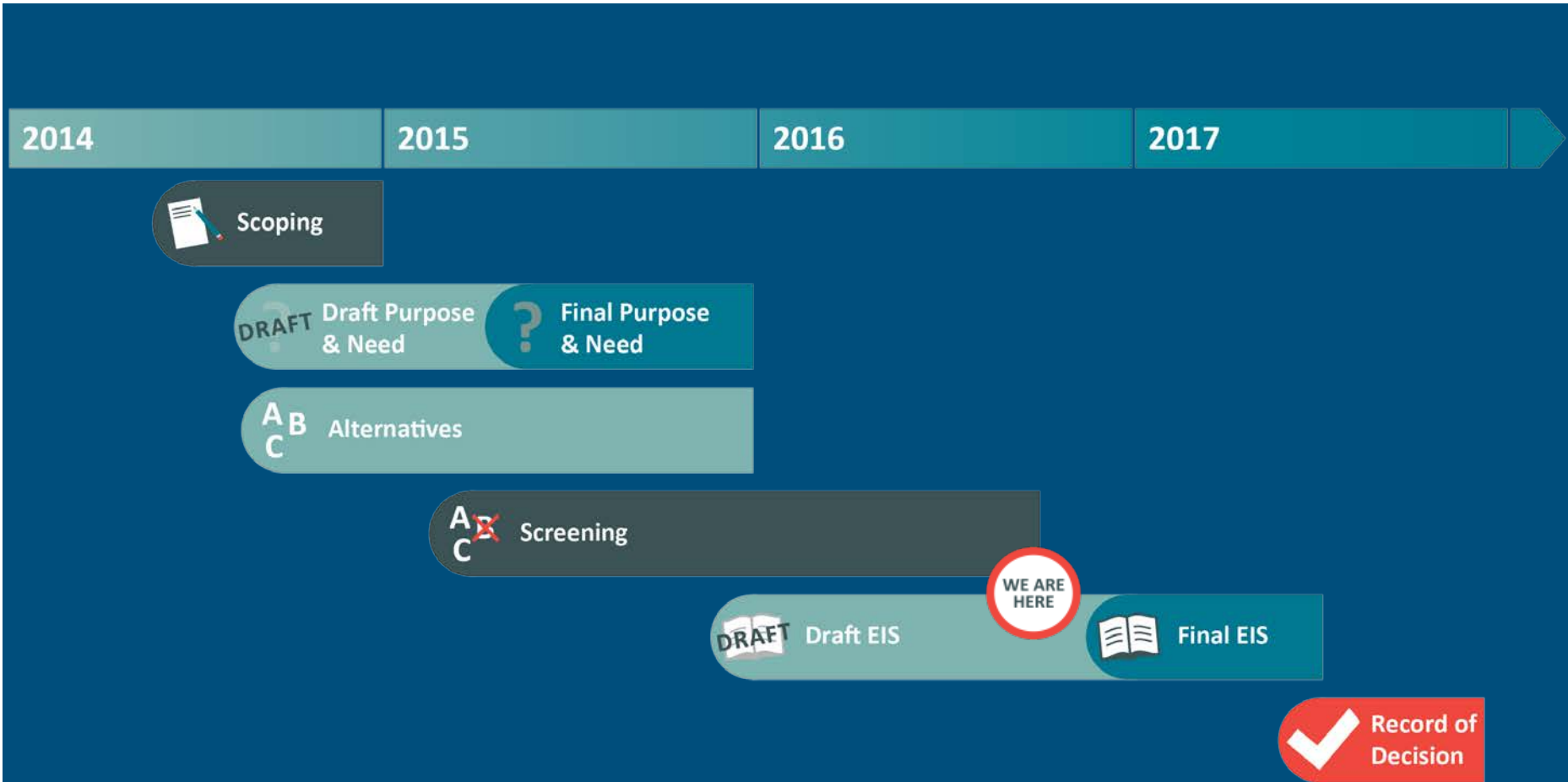


Quantify impacts and analyze potential mitigation measures.



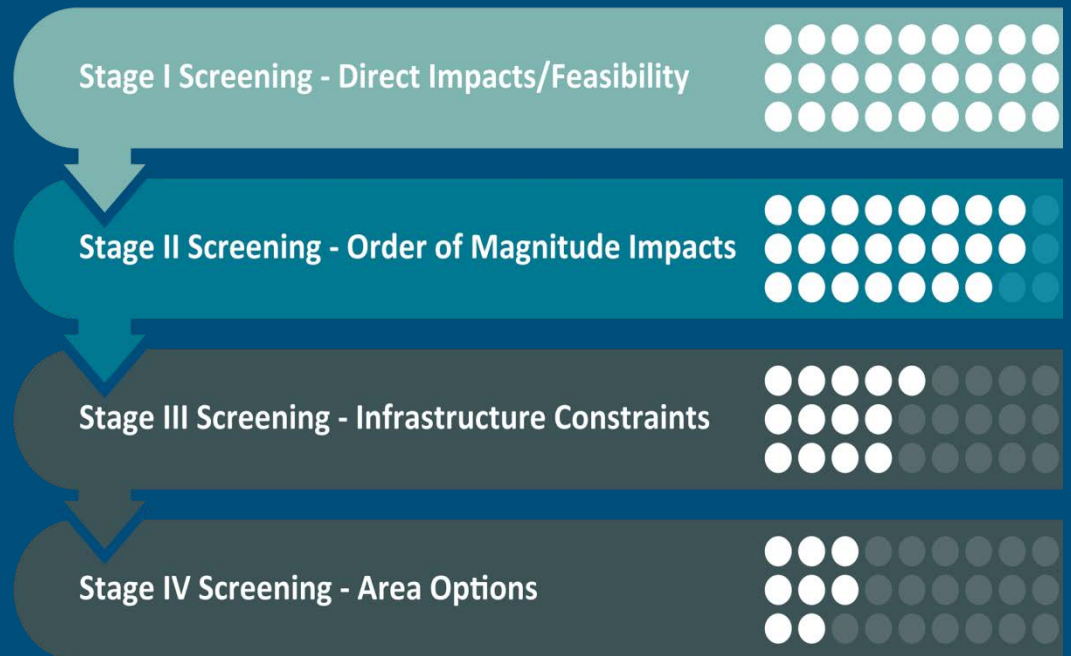
Documentation and decisions lead to permitting, final design, right-of-way acquisition, and construction.

# Accelerated Timeline



# Draft EIS Evaluation Criteria & Screening Process

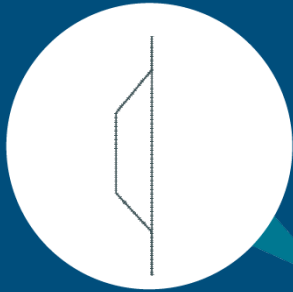
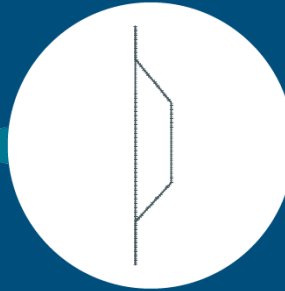
- Purpose and Need
- Natural/environmental
  - Wetlands
  - Air Quality
  - Noise
- Social
  - Cultural Resources
  - Environmental Justice
  - Title VI
  - Public Safety
- Economic
  - Annual O&M Costs
  - Infrastructure Costs
  - Ridership



# Washington, D.C.



Fredericksburg



Ashland

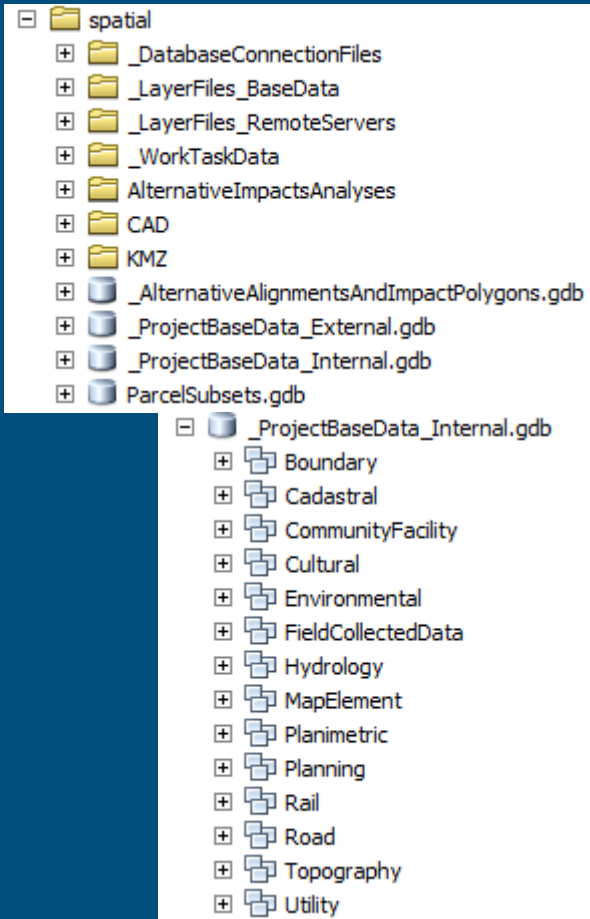
Richmond



## Summary of Alternatives Carried Forward



# Data: Creation, Acquisition, Organization



- 12 Counties
- 22 Project Segments
- Alternative Iterations
- Internal Data
- External Data
- Nomenclature, Archiving

# Online Mapping Solution

Home ▾ Build Alt Components

Details Add Edit Basemap Analysis

About Content Legend

**BuildAltComponents - ROEW Track Alignment**

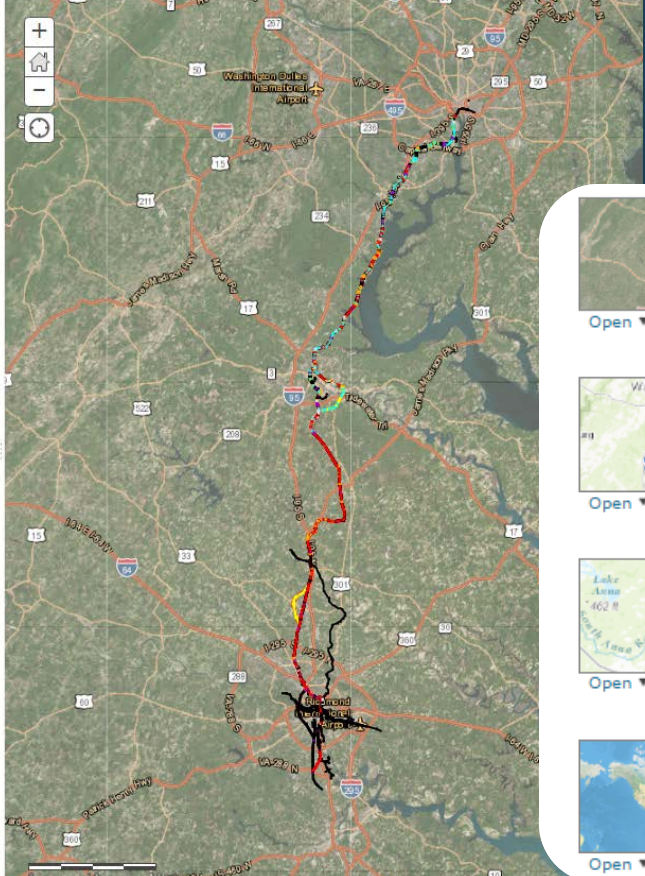
- Track - Existing
- Track - Shift
- Track - Proposed
- Crossover/Turnout - Proposed
- Crossover/Turnout - Remove
- Walls


**BuildAltComponents - NOV Track Alignment Polyline**

- Track - Existing
- Track - Shift
- Track - Proposed
- Track - Proposed by others
- Track - Remove
- Crossover/Turnout - Proposed
- Crossover/Turnout - Proposed by others
- Crossover/Turnout - Remove
- Walls
- Walls - Proposed by others
- Edge of Pavement

**BuildAltComponents - NOVFBP Track Alignment Polyline**


- Track - Existing
- Track - Shift
- Track - Proposed
- Track - Proposed by others
- Track - Remove
- Crossover/Turnout - Proposed
- Crossover/Turnout - Proposed by others






**Build Alt Components**  
 Web Map by Andrew.Zimba@hdrinc.com\_HDR  
 Last Modified: May 17, 2016  
 (0 ratings, 0 comments, 297 views)

[Open](#) ▾ [Details](#)




**Second Level Screening Results - NOV/FBP (HDR)**  
 Web Map by Andrew.Zimba@hdrinc.com\_HDR  
 Last Modified: May 16, 2016  
 (0 ratings, 0 comments, 131 views)

[Open](#) ▾ [Details](#)



**Second Level Screening Results - CEN/ABP (Parsons)**  
 Web Map by Andrew.Zimba@hdrinc.com\_HDR  
 Last Modified: May 16, 2016  
 (0 ratings, 0 comments, 99 views)

[Open](#) ▾ [Details](#)



**Other CEDAR Layers**  
 Web Map by Andrew.Zimba@hdrinc.com\_HDR  
 Last Modified: May 16, 2016  
 (0 ratings, 0 comments, 62 views)

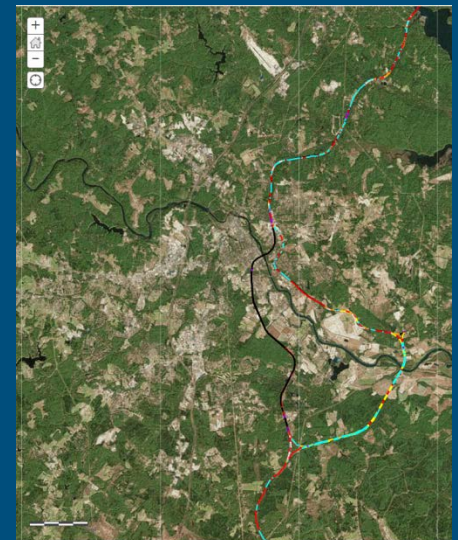
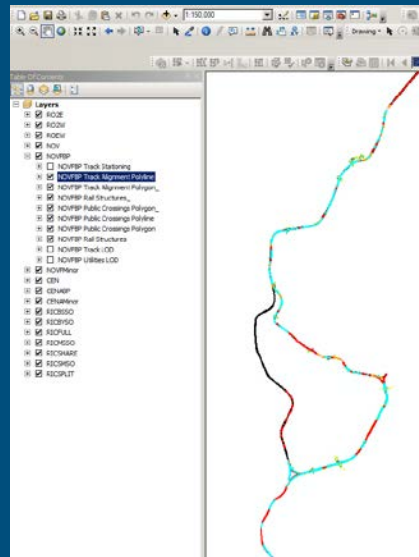
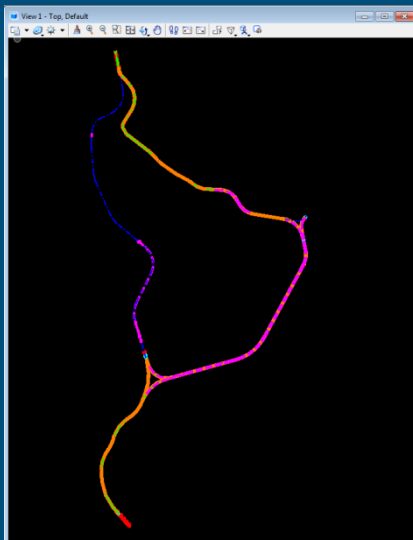
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# Online Adaptability

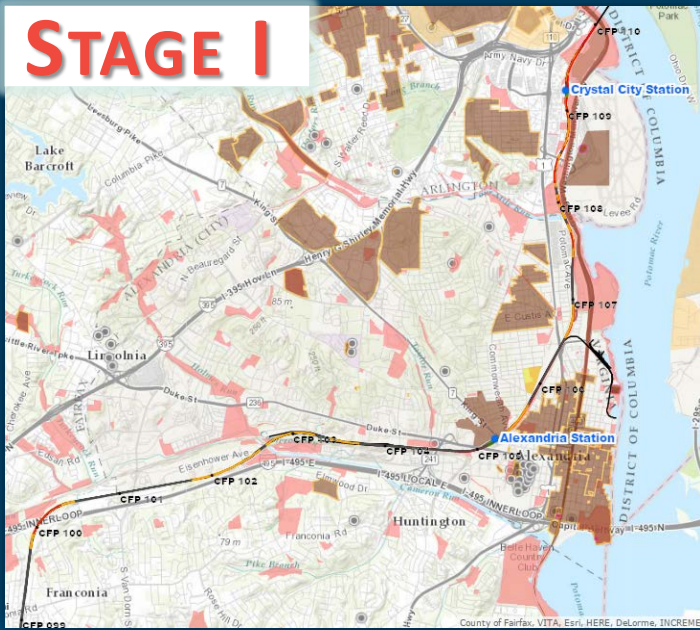
- Engineering Team



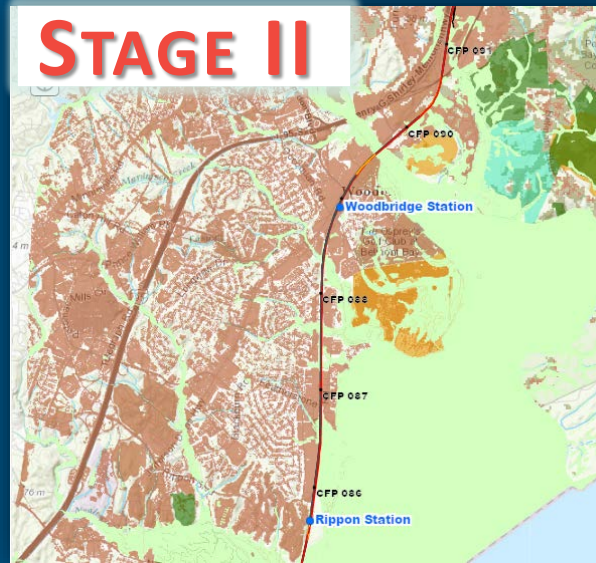
- Review conceptual alternatives
- Review impact analyses
- Modify alignments



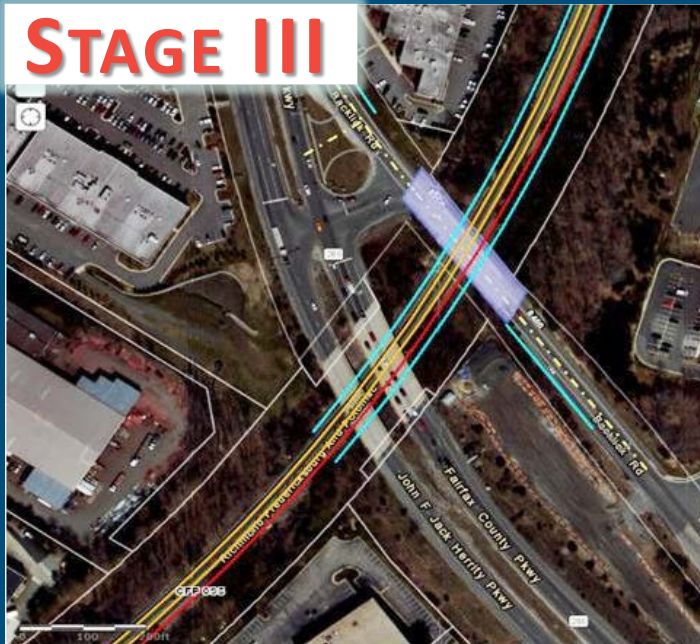
# STAGE I



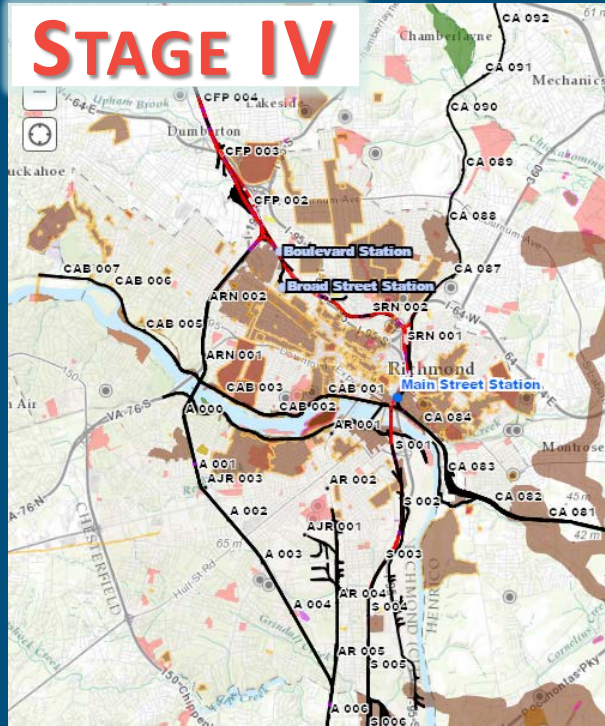
# STAGE II



# STAGE III



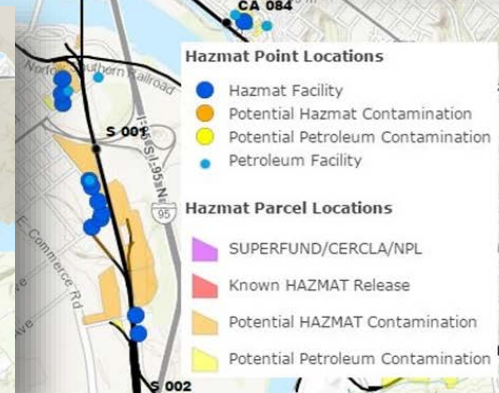
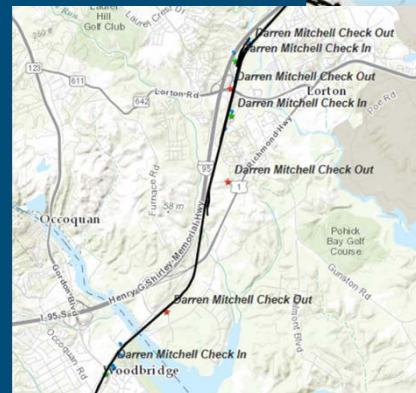
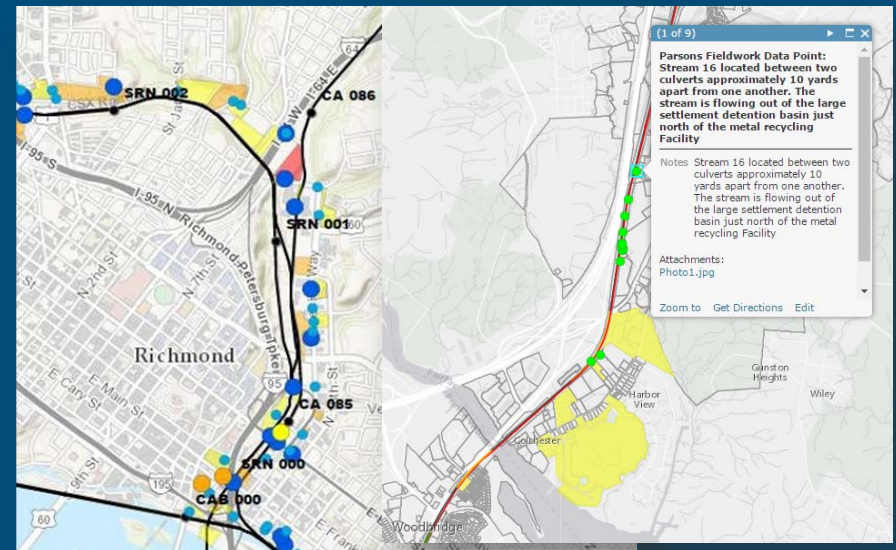
# STAGE IV



Staged  
Screening  
Impacts

# Continued Environmental Project Support

- Resources Review
- Technical Memos
- Fieldwork
- Stakeholder Presentations
- Draft Environmental Impact Statement (DEIS)



# Conclusion: Benefits Realized

- Data Review
  - Collaborative
  - Dynamic
  - Interactive
  - Accessible



✓ **Versatility**

✓ **Mobility**

✓ **User Interface/  
User Experience**

# Thank you!



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- [Leandra.Cleveland@hdrinc.com](mailto:Leandra.Cleveland@hdrinc.com)