Modernizing the NEPA process via a Virtual GIS-Based Platform

Lauren Molesworth, Environmental Manager

Kelly Lyles, Senior Advisor

Key Presentation Take-Aways

- The current NEPA process is **outdated**.

- **Three tools should be implemented** to modernize the NEPA process.

- The **Maryland Transit Administration Pilot Project** demonstrates the effectiveness of two of the three tools.
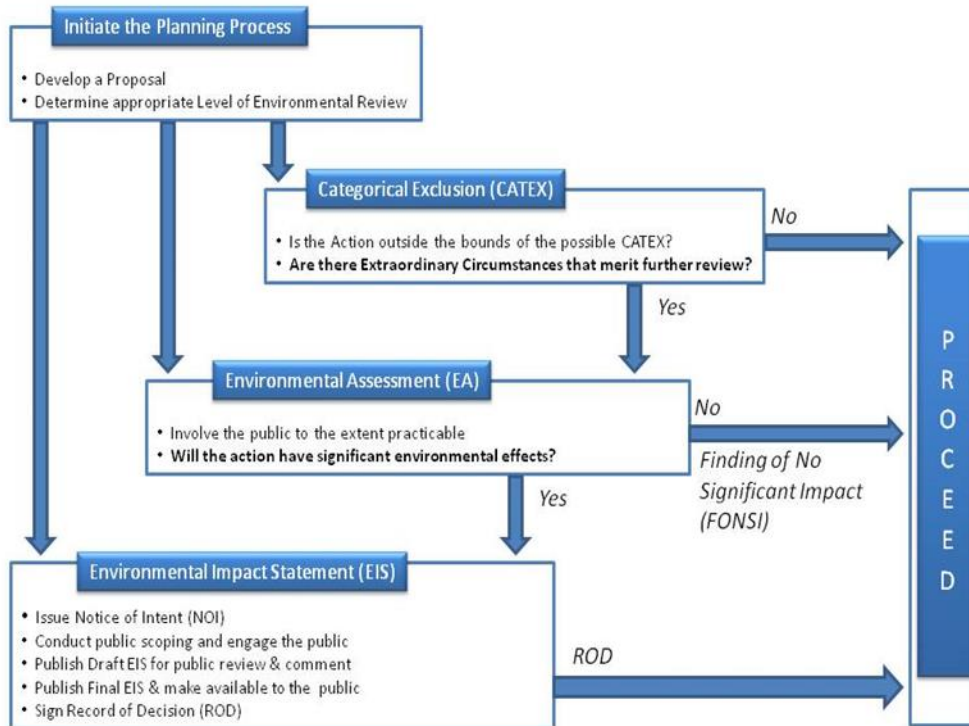
Current NEPA Process

- Outdated – approximately 50 years old!

- Lengthy review process

- Lacks transparency (agencies and the public)

- Results in a document that is 100's to 1000's of pages

Quick Review

The NEPA Process

Within the NEPA process there are "Concurrence Points" needing agency and public review:

EA Documents/Concurrence Points:
- Purpose and Need
- Environmental Assessment
- Preferred Alternative and Conceptual Mitigation
- Finding of No Significant Impact

EIS Documents/Concurrence Points:
- Purpose and Need
- Alternatives Retained for Detailed Study
- Preferred Alternative and Conceptual Mitigation
- Draft Environmental Impact Statement
- Final Environmental Impact Statement
- Record of Decision

Documents- Public Review

- Access via PDF on Project website and/or hard copy at the local library or community center
- Public comments are received via project email or snail mail

Documents – Public Meetings

- Typically follows the release of a document (ex. Purpose and Need)
- Sent a postcard in the mail (*if they actually get sent!*)
- Meetings includes static maps and boards with project information
- Comment on a card or email comments

This may have worked years ago but today people want to review documents/maps and comment on THEIR time and in THEIR house.

Antiquated NEPA Process

- Agency review of documentation is **time consuming** and **siloed**.

  - *Agencies rarely see other agency comments & distribution is difficult.*

- The public review process is **archaic and opaque**.

  - *Public meetings are inconvenient, static maps & boards, written comments.*

- In addition to the review process, the current **page numbers are absurd**:
  - *FTA/MTA's MARC Northeast Maintenance Facility EA = 506 pages*
  - *FRA/MTA EA BWI Rail Station Improvements and 4th Track = 802 pages*
  - *FTA/MTA Purple Line EIS/ROD = 9,131 pages*

- CEQ recommends ➡ 150 pages for an EIS

Why?

- Fear of litigation
- All resources vs resources having significant impacts
- No one has updated the public review process

Modernize the Process

- Improve the agency and public review processes
- Reduce document size
- Improve transparency

Three Key Tools:

1. **Project Website**

2. **Interactive GIS-Based Map**

3. **Document Management System (DMS)**

Tool #1: Project Website

www.bwmaglev.info

Home Page:
- ✓ Project description
- ✓ Project location
- ✓ Purpose and need
- ✓ Project funding
- ✓ Project status
- ✓ Key agencies

= 1/3 of an EA/EIS

Links to:
- ✓ Study area information
- ✓ Field methodology
- ✓ GIS-Interactive map
- ✓ Comment forms
- ✓ Document Management System (DMS)

= 2/3 of an EA/EIS

Tool #2: Interactive GIS-Based Map

VS

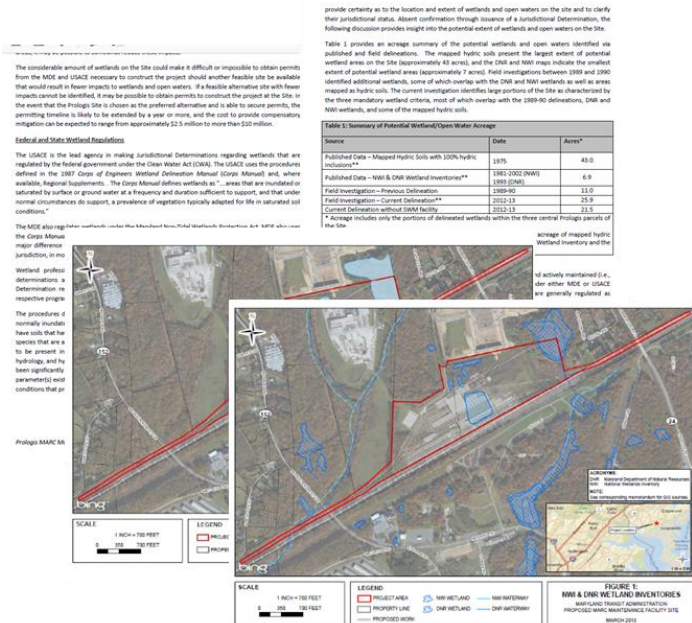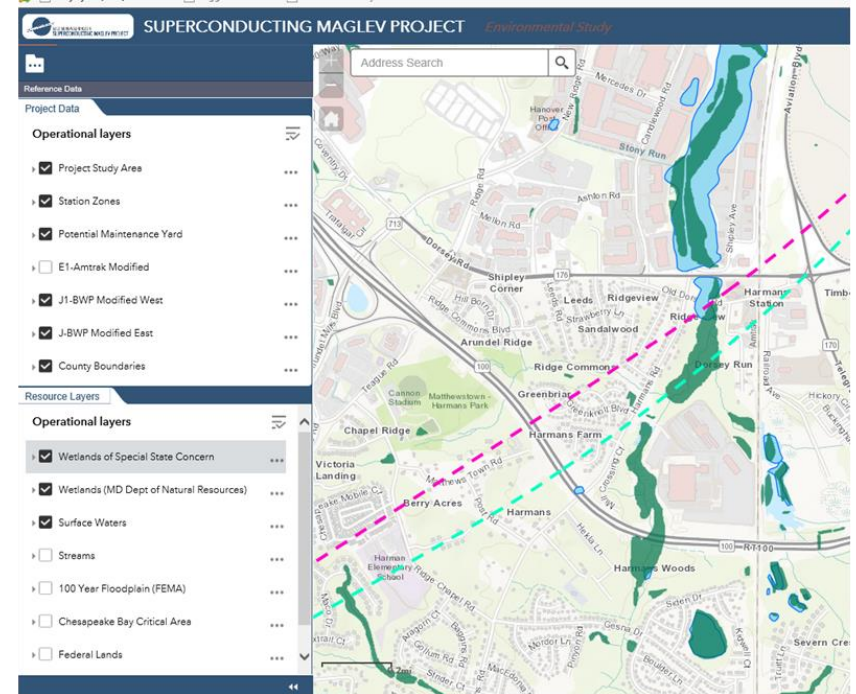MARC NE Maintenance Facility EA wetland methodology and mapping was **59 pages** of text, mapping and tables.

One screen with wetland layers, alternatives, project boundaries and parcels.

Tool #3: DMS

Document Management System (DMS) Features:
- •**Version control, document search tool, eForms, approvals.**

Key benefits to DMS for NEPA:

- •**Allows agencies to access secure documents** via the project website.

- •Allows agencies to **review internally with staff**.

- •Allows agencies to **see other agency comments**.

- •**No email kickbacks** b/c file size.

- •**No email reminders** needing to be sent to agencies.

- •No "we didn't receive the email" comments from agencies. **No excuses!**

Register User

Register. Use the form below to create a new account.

Passwords are required to be a minimum of 6 characters in length.

User name

Email address

First Name   Last Name

Password

Confirm password

Q2 D4 R

Captcha

Register

© 2017 – My ASP.NET Application

Cooperating and Participating Agencies

Purpose and Need Document

Approve/Deny | All Comments | Users | User Profile | Map

All Comments

Select One

User	Date	Comment	Approval Status	
AJones	9/15/17	Alt A Line is Great	Approved	View
AJones	9/18/17	Alt B Line is too close to my house	Needs Approval	View
PSmith	10/1/17	Alt C	Needs Approval	View
GMiller	10/15/17	Alt A Line is too close to residential houses	Needs Approval	View
GMiller	10/20/17	Alt C	Needs Approval	View
KJohnson	10/15/17	This is #%#!@	Denied	View
KJohnson	10/20/17	Alt B	Needs Approval	View
KJohnson	10/25/17	Alt a line is better than Alt B or C	Needs Approval	View
MLee	10/02/17	Alt C Line too close to my house	Needs Approval	View

1 2 3

MTA Pilot Project - SCMaglev

- **MTA is currently managing the EIS** for a Superconducting Maglev (SCMaglev) train.

- **40 miles with three stations** between Washington DC and Baltimore City.

- **Travel time: 15- minutes** (311 mph) from DC to Baltimore.

- **33 Participating and Cooperating Agencies and thousands of residents** within the study area – *significant coordination!*

- **Numerous public meeting** throughout the corridor.

SCMaglev EIS is ideal for implementing the three tools!

MTA Pilot Project
(Tool #1: Project Website)

Information currently on the Project Website:
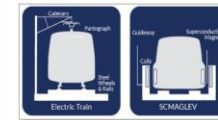
- ✓ Project Information
- ✓ NEPA Process
- ✓ What is SCMaglev
- ✓ Project Area
- ✓ Proposed Alignments

Reports uploaded:

- ✓ Coordination Plan
- ✓ Purpose and Need
- ✓ Scoping Report
- ✓ Notice of Intent

www.bwmaglev.info

MTA Pilot Project
(Tool #2: Interactive GIS-Based Map)

- **Interactive GIS-Based Map Phase 1 developed in September 2017**
- **Launched October 1, 2017** with little advertising for the SCMaglev public meetings.
- As of June 1, 2018 **total of 24,536 views** (average 130 views per day).
- **Kudos from FRA and the public**:

"Incredibly impactful tool."

"…allows for transparency!"

"Details what is important to constituents…"

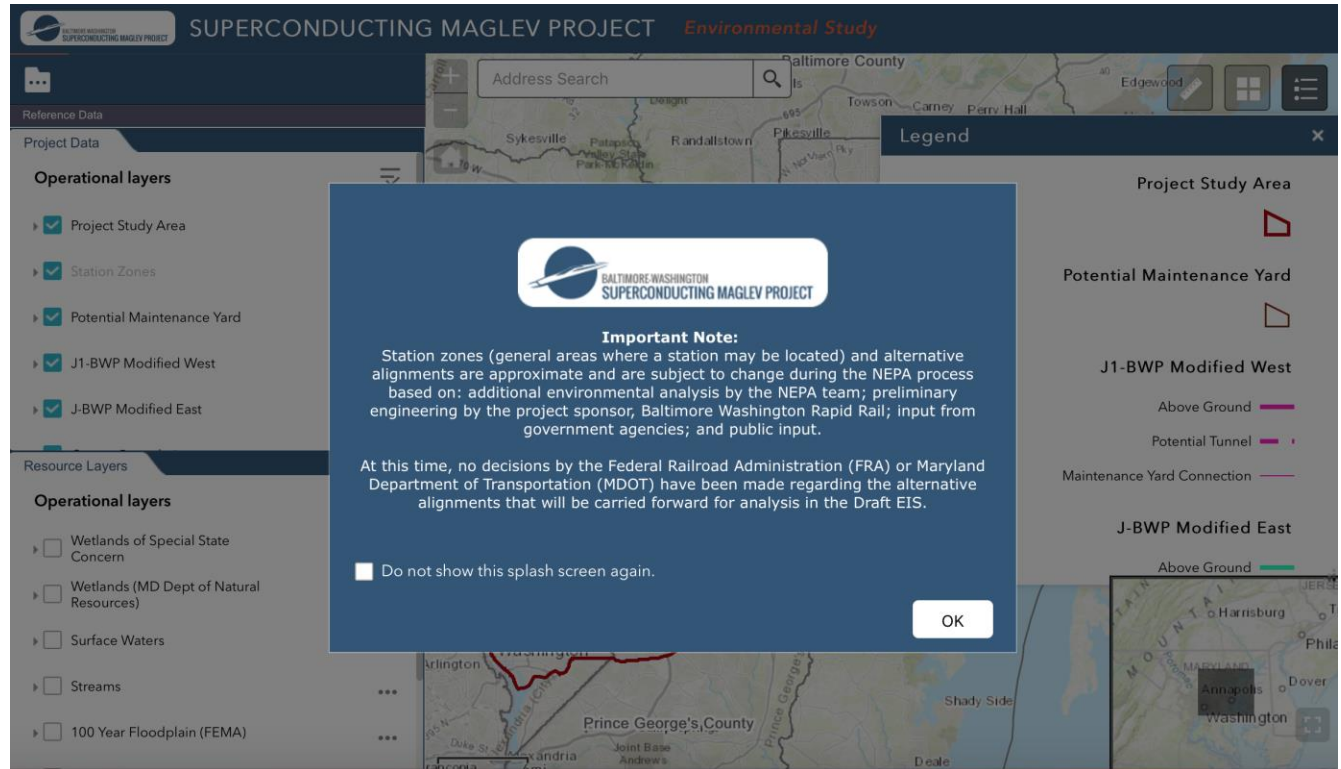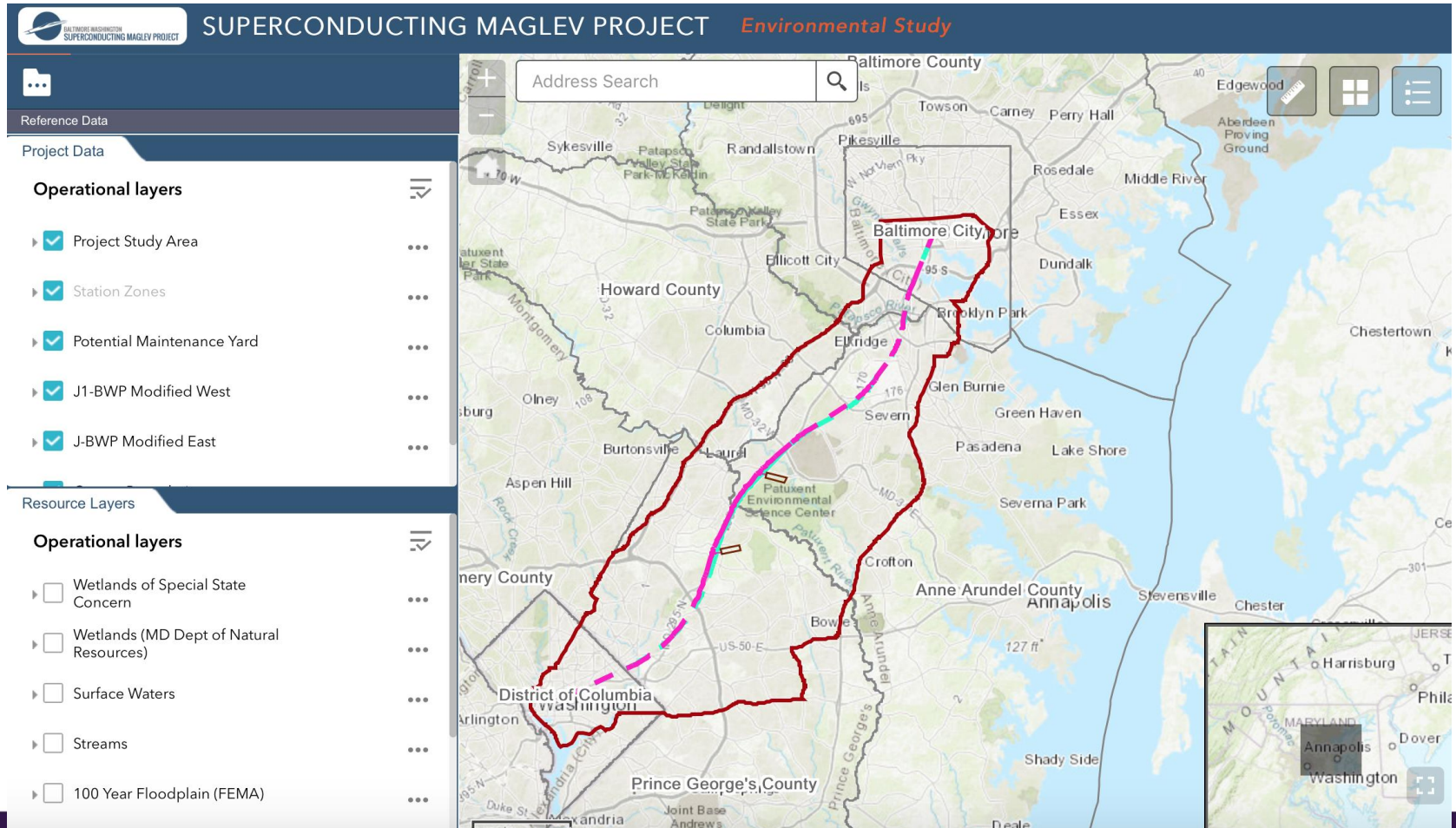# Interactive GIS-Based Map Phase I

- Access from project website.
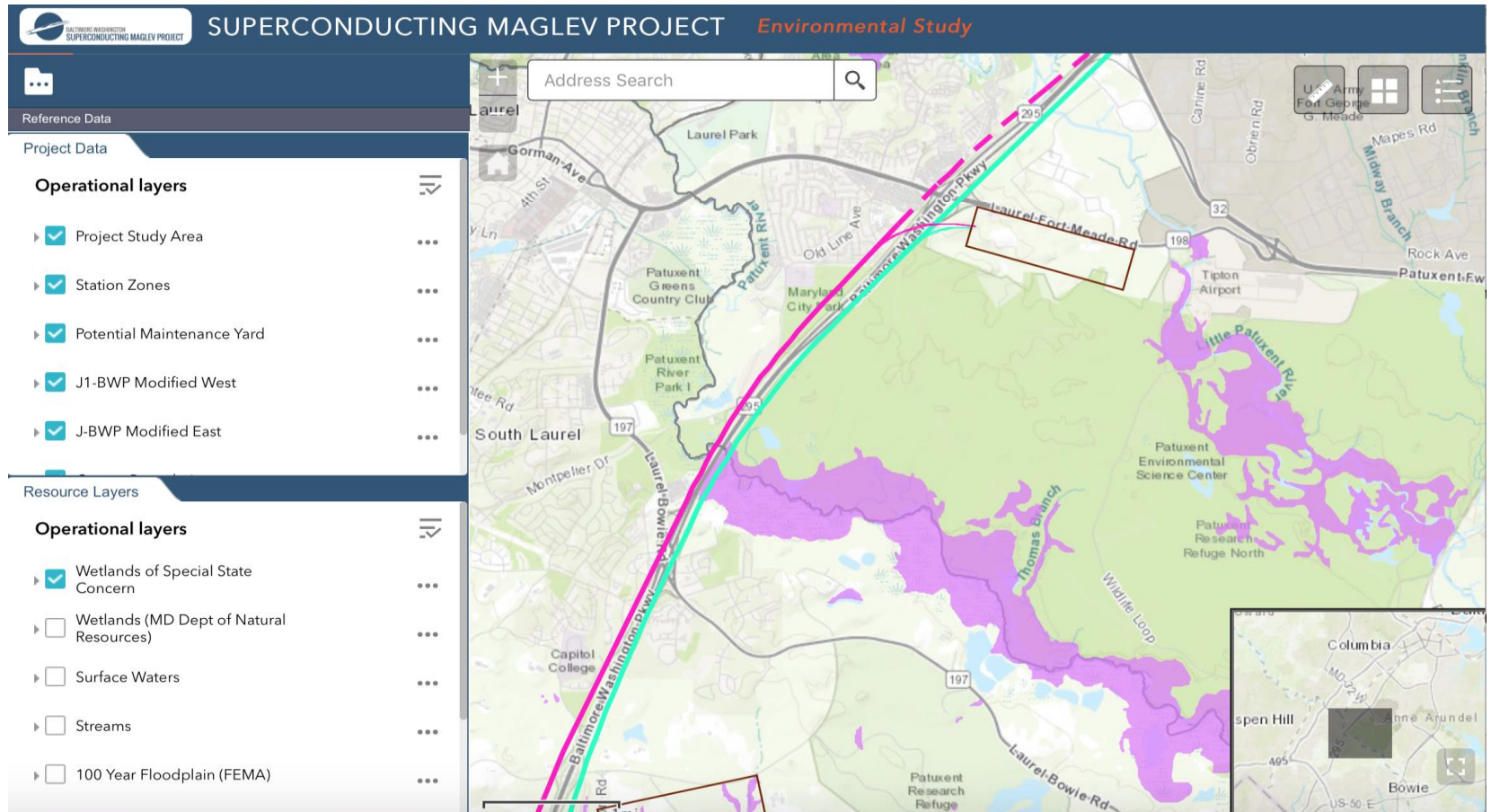
- Disclaimer with initial entry.

Interactive GIS-Based Map Phase 1

Home screen: Study area, proposed alternatives & resources layers.

Interactive GIS-Based Map Phase I

Toggle on and off resource layers, zoom in to specific address, and review various alternatives.

Interactive GIS-Based Map Phase II

- **Next phase will** allow the public to comment directly on the map.

- **Spatial data** = creation of **heat maps** → **powerful decision making tool.**

- MTA wanted to **test the potential:**

  – **Manually added** all public comments by zip code (when given) from April and October 2017 Public Meetings **to create heat maps**.

    - **2,325 comments received**

    - **Spatial comments = 1,815**

    - **Those living along the Amtrak Alternative submitted the majority of comments.**
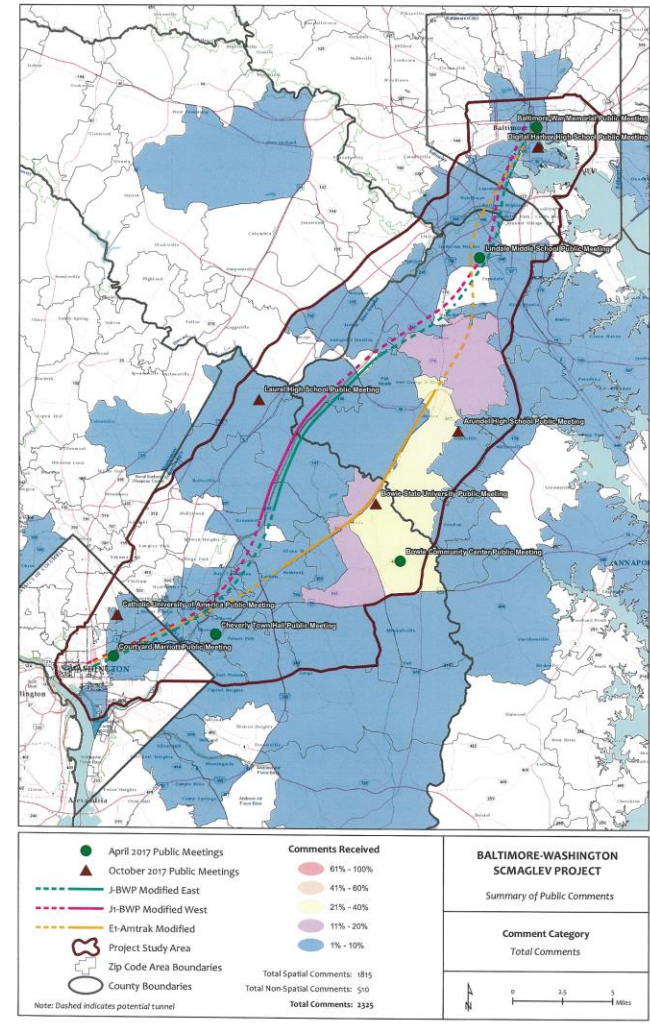
Heat Map: Opposition

- **23 percent** of the comments were in opposition.
- Majority live along the Amtrak Alt.

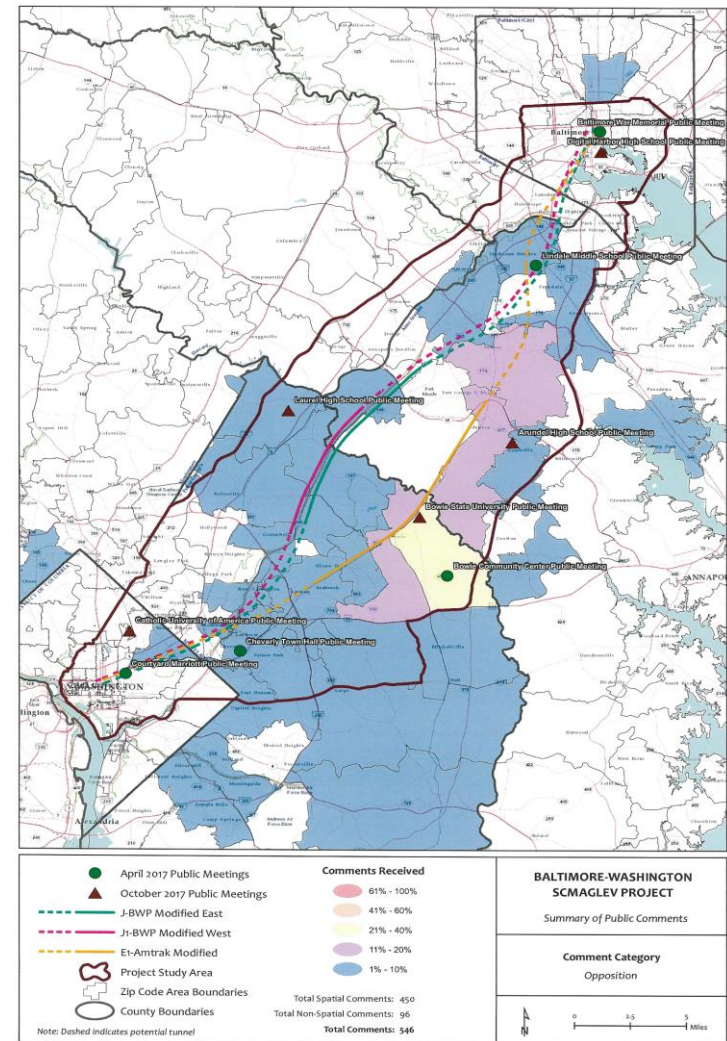*Unanswered Question – Are they in opposition of the project or just the Amtrak Alt?*
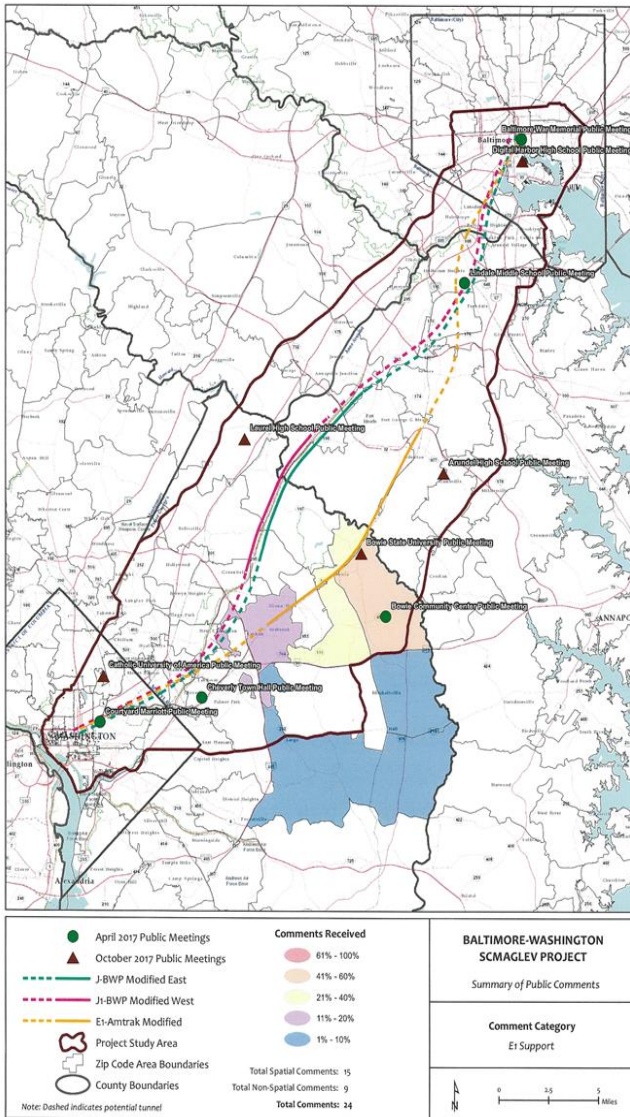
Amtrak Support – neutral along the corridor, support near southern end.

Amtrak Opposition – more vocal, concerns stretch further north, most likely NIMBY effect.

So, the question remains…If Amtrak Alt is dropped, will J and J-1 Alts survive? Or public opposition = politically DOA?
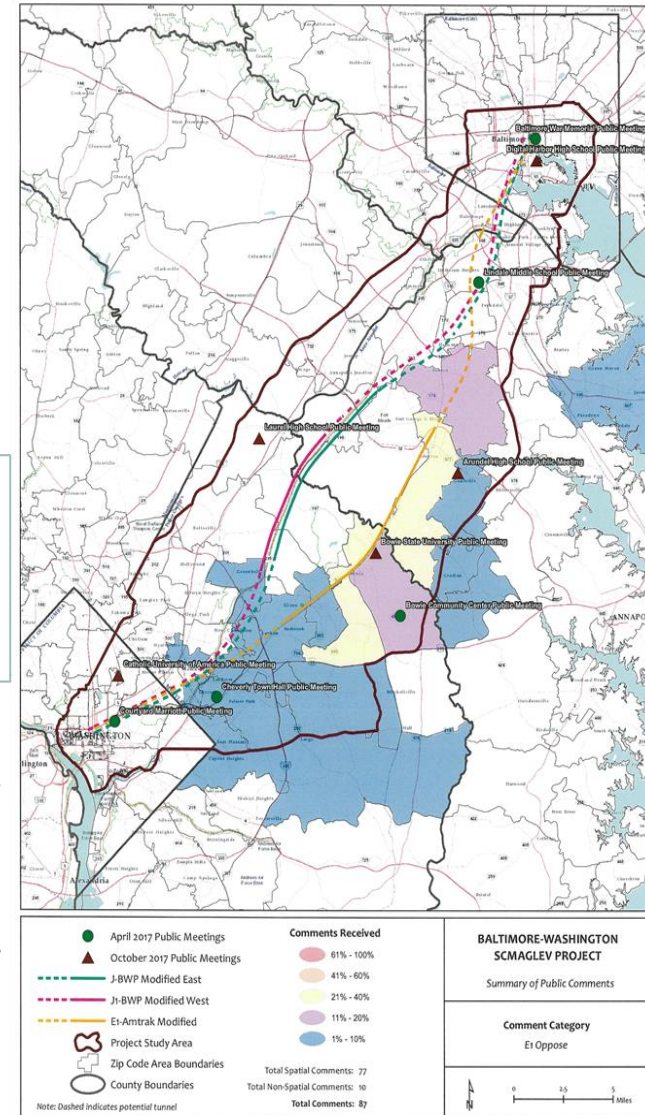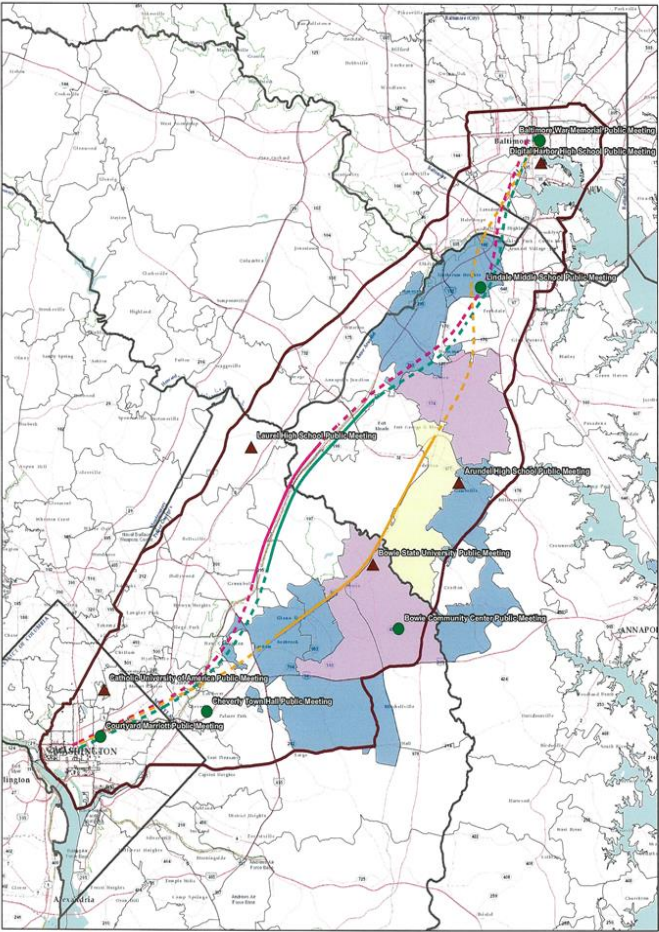
J and J-1 Support – Residents along Amtrak Alt support J and J-1 Alts.

J and J-1 Opposition <1% of residents living along J and J-1 Alts oppose the project.

Good chance of moving J and J-1 forward into the DEIS with little public outcry.
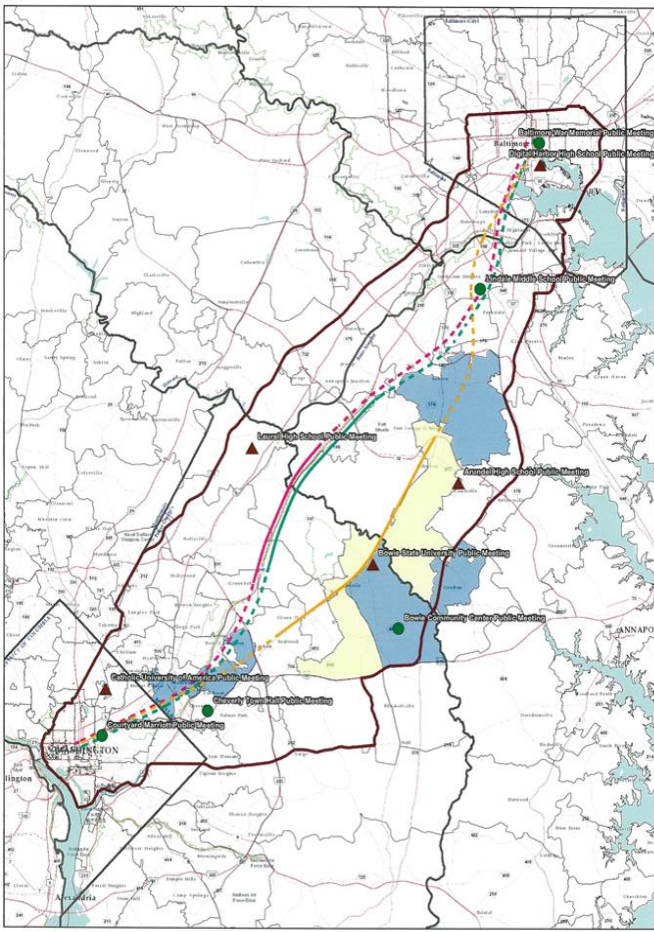
Next Phase of the Pilot Project

- **Project Website** – Continue to upload reports, seek state and federal agency approval/accolades to foster support of this process.

- **Document Management System** – Develop a version 1.0 for DEIS Review (December 2018).
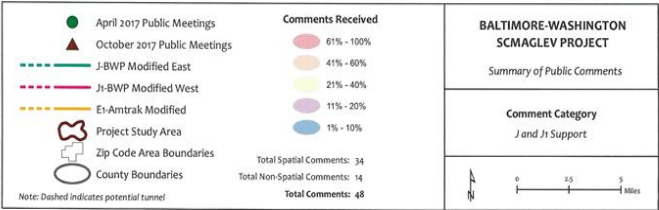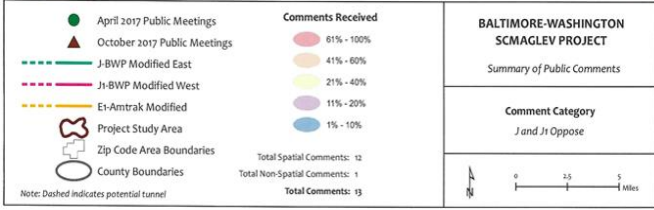
- **Interactive GIS-Based Map Phase II** (Fall 2018)
  - Commenting with spatial data
    - Public comments in real time
    - Show comments spatially
    - Comment by topic (support, oppose, tunnel, etc)
  - Respond to Comments
    - Track for Admin. Record and FOIA requests
    - Document actual response (letter, call, email, on map).

Modernizing the NEPA Process
(Implementation of the three tools)

- **Tool #1: Project Website** allows for detailed project information to be accessed by agencies and the public.

- **Tool #2: DMS** = allows for improved agency review and collaboration.

- **Tool #3: Interactive Map** = allows for transparency and creation of heat maps = impactful decision making tool.

3 Tools = reduction in page number

PROJECT	PAGE No. (w/ appendices)	Page No. (w/o appendices)	Page No. (Virtual NEPA)
EA/FONSI FTA/MTA MARC NE Maintenance Facility			
Total Page Number	**506**	**108**	**18**
Purpose and Need		6	2
Project Limits		13	1
Alternatives		28	5
Environmental Resources, Impacts and Mitigation		61	10
Purple Line (DEIS/ROD)			
Total Page Number	**9131**	**406**	**136**
Purpose and Need		16	5
Alts		36	8
Environmental Resources		178	55
Construction		16	16
4(f)		98	28
Section 106		17	5
ICE		24	5
Outreach		9	2
Index		12	12

Contact Information

Environmental Planning Division

Lauren Molesworth 410-767-7272 (Lmolesworth@mta.maryland.gov)

Kelly Lyles 410-767-3780 (Klyles1@mta.maryland.gov)