



**Freight Railroad Realignment Feasibility Study – Draft Findings**



Virginia Avenue Tunnel

Long Bridge

Benning Rail Yard

Anacostia Crossing



# Freight Railroad Realignment Feasibility Study

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## Purpose

**Study the feasibility of relocating the freight line as a long term solution to rail related security issues.**

### Funding:

- Funded through DHS UASI Grant Program (\$1.0 million)

### Management:

- DDOT is funding mechanism
- NCPC is managing overall project and coordination

### Products:

- Identify potential alternative corridors for the new alignment
- Conduct cost & benefits analysis

### Coordination:

- Coordinate with regional stakeholders and federal agencies

### Consultant:

- Parsons Brinckerhoff is lead with team of subconsultants

## Coordination

### Interagency Security Task Force

Subset of Commission which deals with Security related planning issues

### Working Group

Federal Railroad Administration  
Transportation Security Administration  
Maryland Department of Transportation  
Virginia Department of Rail and Public Transit  
Virginia Railway Express  
District Of Columbia Office of Planning  
District Department of Transportation  
Washington Council of Governments

### Owners/Operators Group

Amtrak  
CSX Corporation  
Norfolk Southern



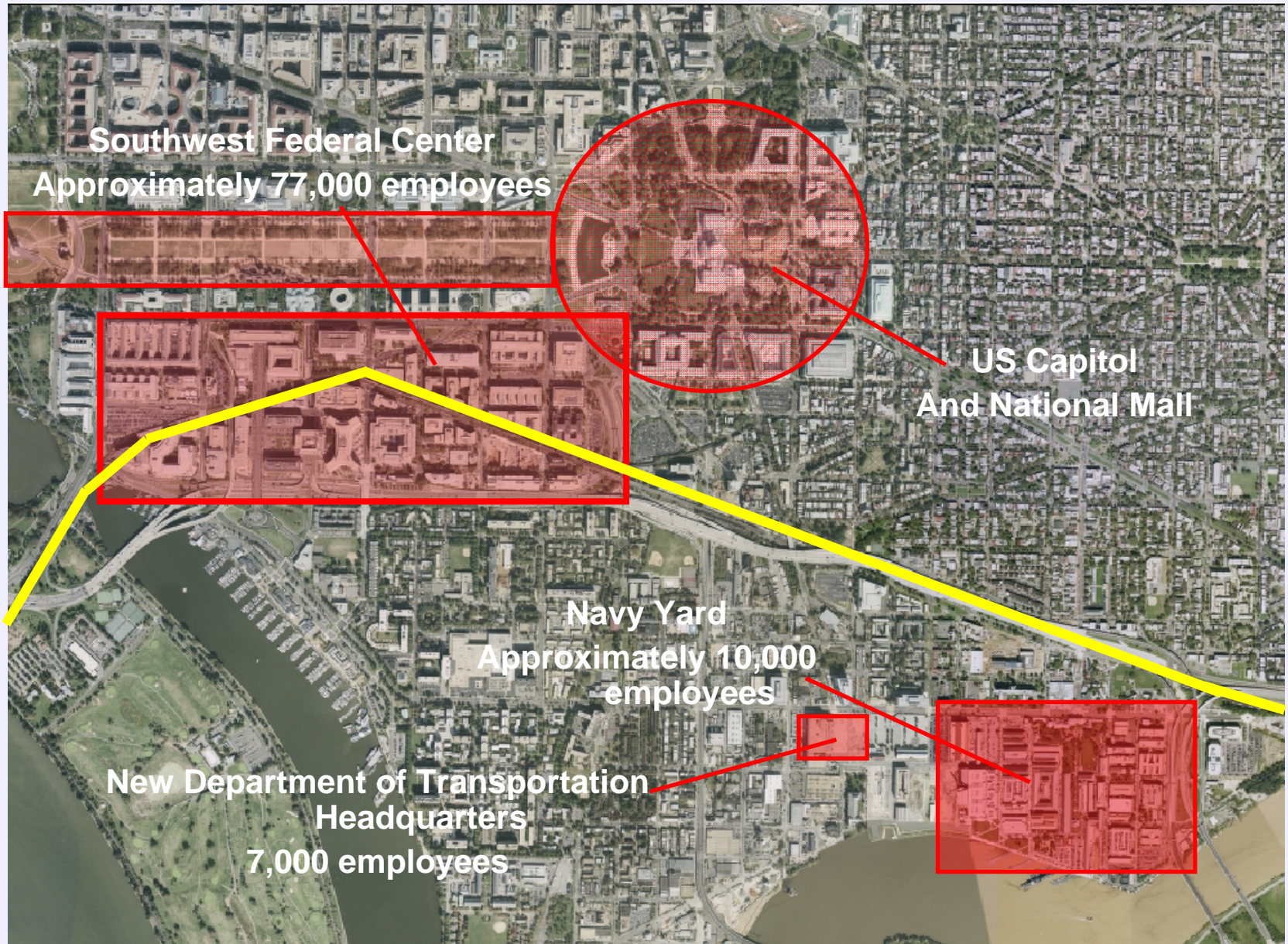
# Rail Line Issues

## Potential Security Issues

- Hazardous materials travel within close proximity to federal buildings and densely populated residential areas



# Security Issue



# Rail Line Issues

## Transportation Issues

- Sharing of track between freight and passenger services
- Single tracking affects flow of traffic through system
- Clearance limitations and single tracking of Virginia Avenue Tunnel creates regional issues
- Correction of Washington DC issues is critical to East Coast network



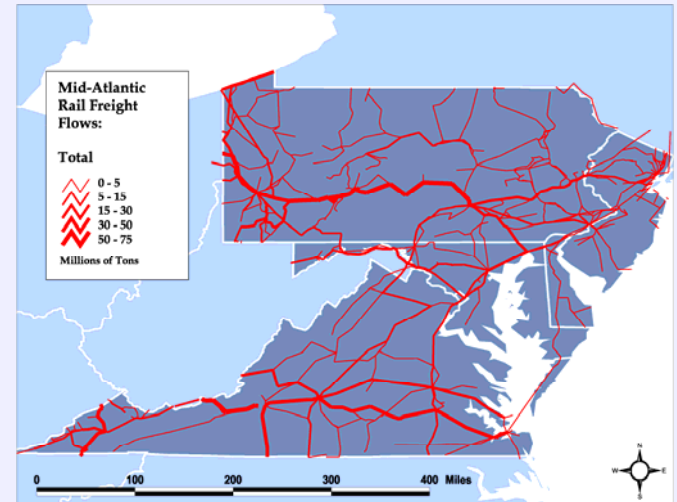
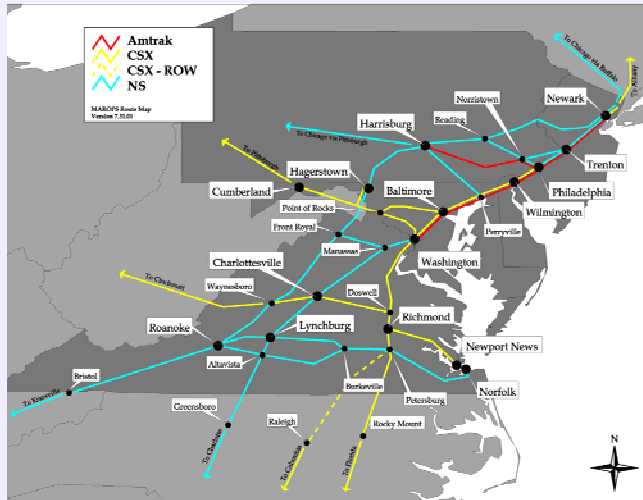
# Mid- Atlantic Rail Operations (MAROPS)

Conducted by the I-95 Coalition

Study of East Coast transportation network and recommendations for improvements

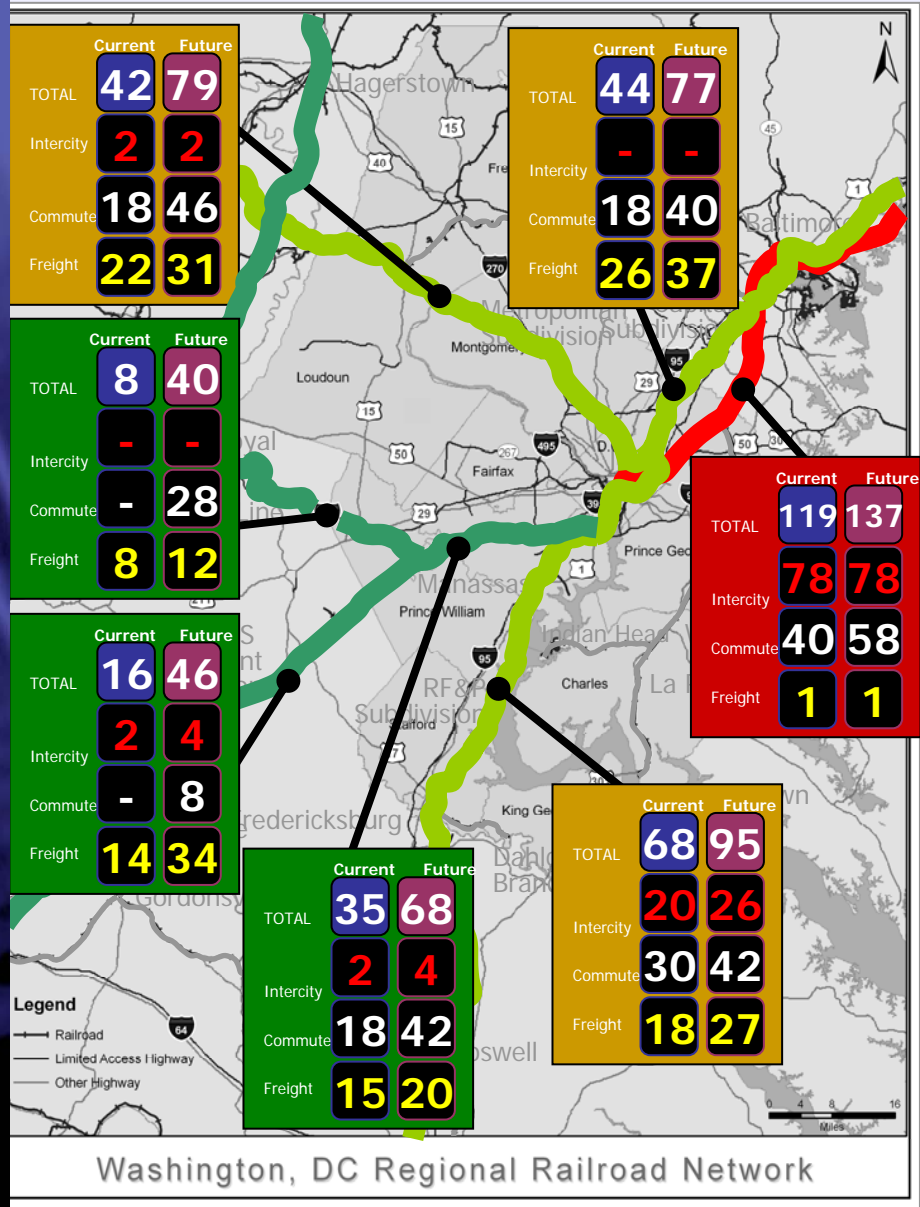
Identified Washington DC as a major choke point and limitation to growth of rail traffic

Recommendations are important component of feasibility study





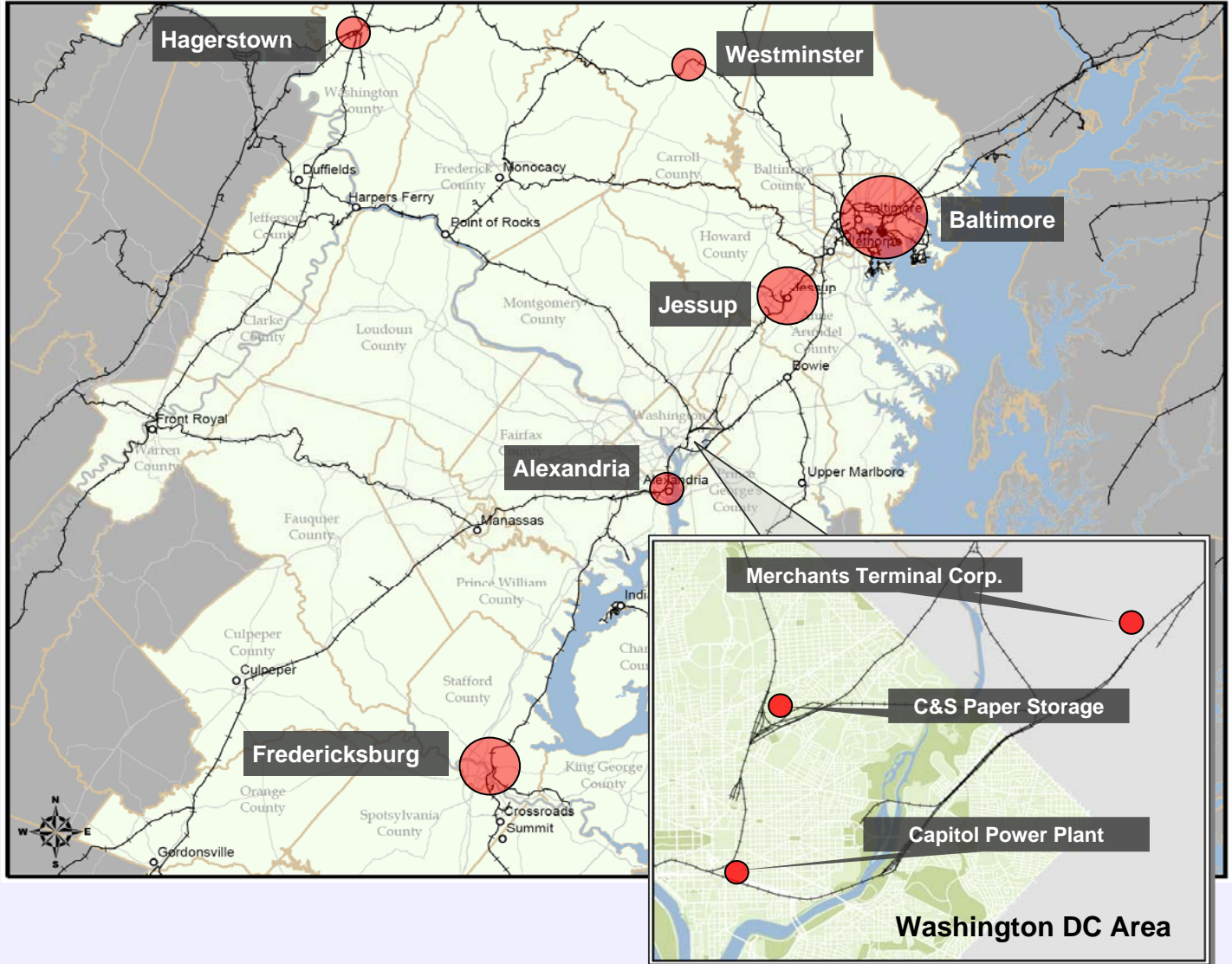
# Growth of Washington Regional Rail Traffic



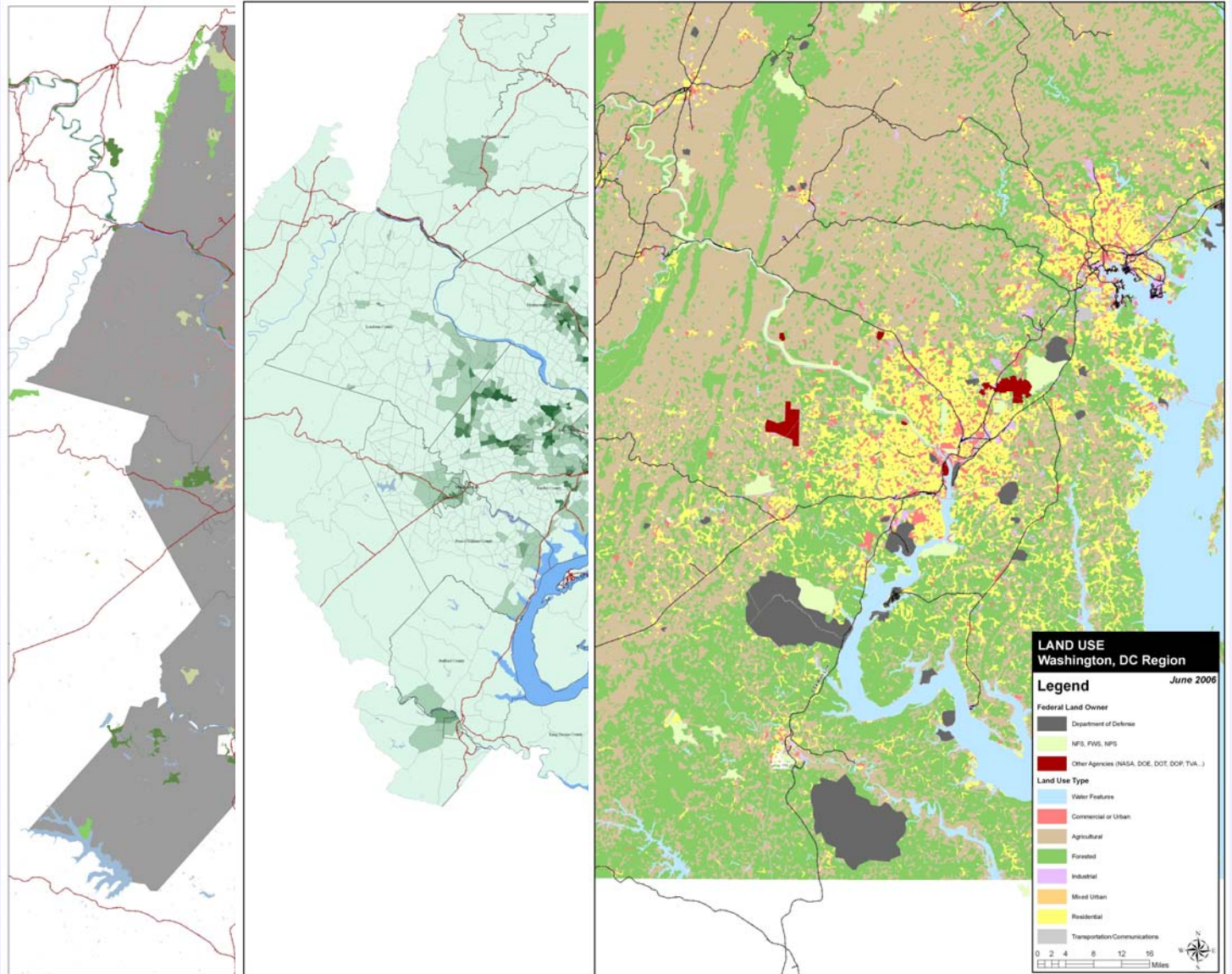
Average trains per day

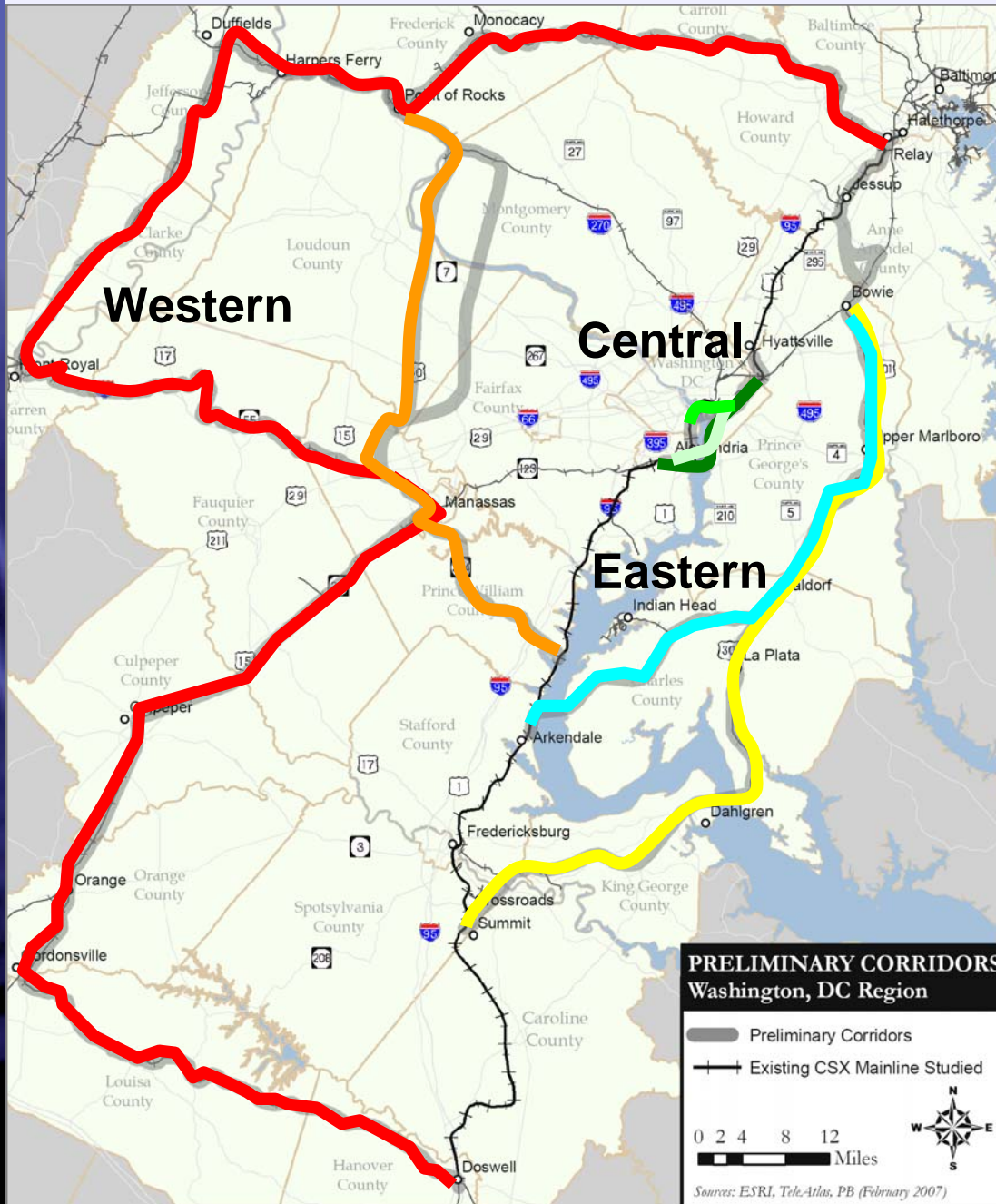
- CSX
- Norfolk Southern
- Amtrak

# Washington Regional Freight Destinations



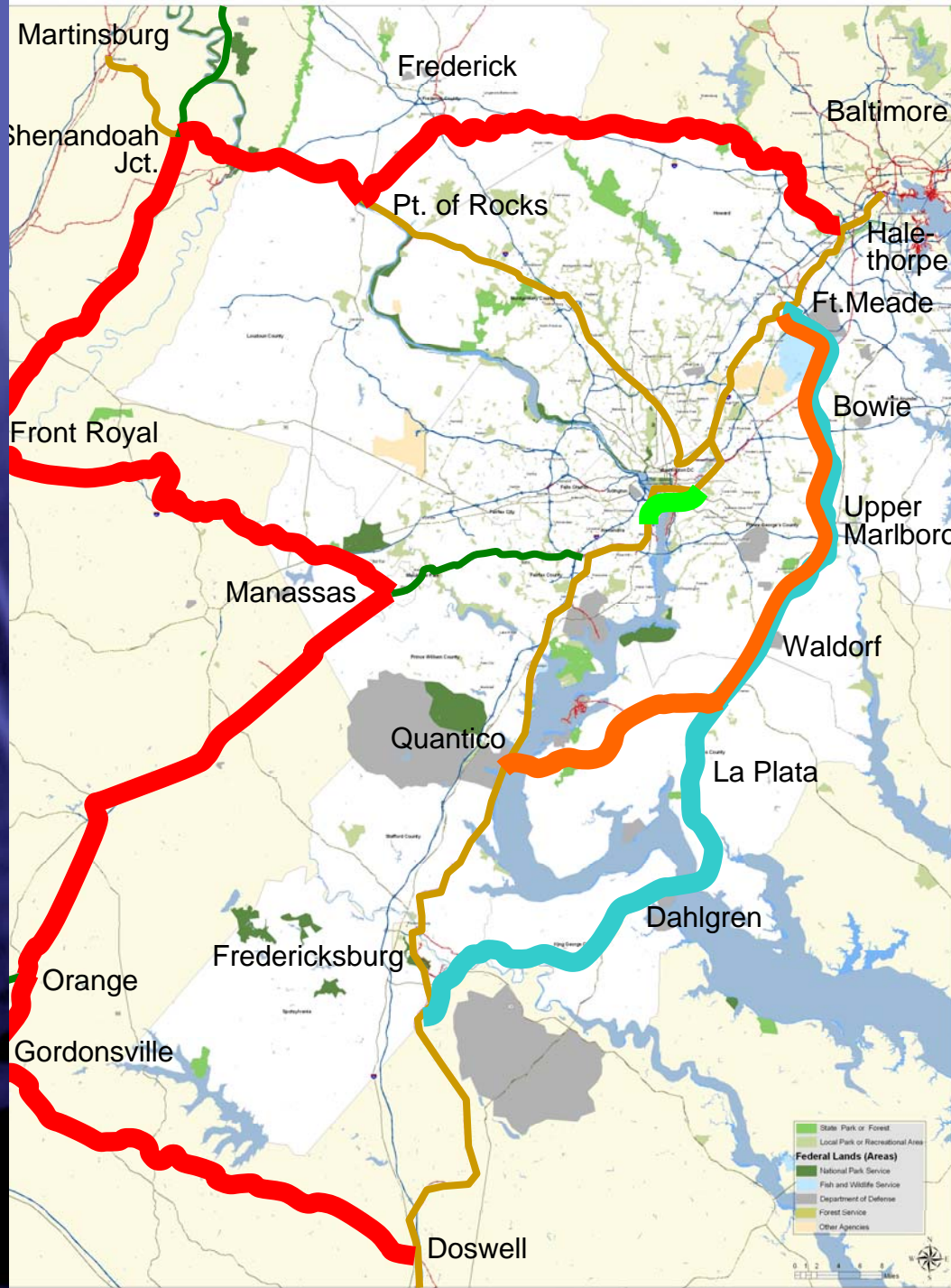
# Regional Analysis





## Preliminary Corridors

“First Cut” at range of possibilities



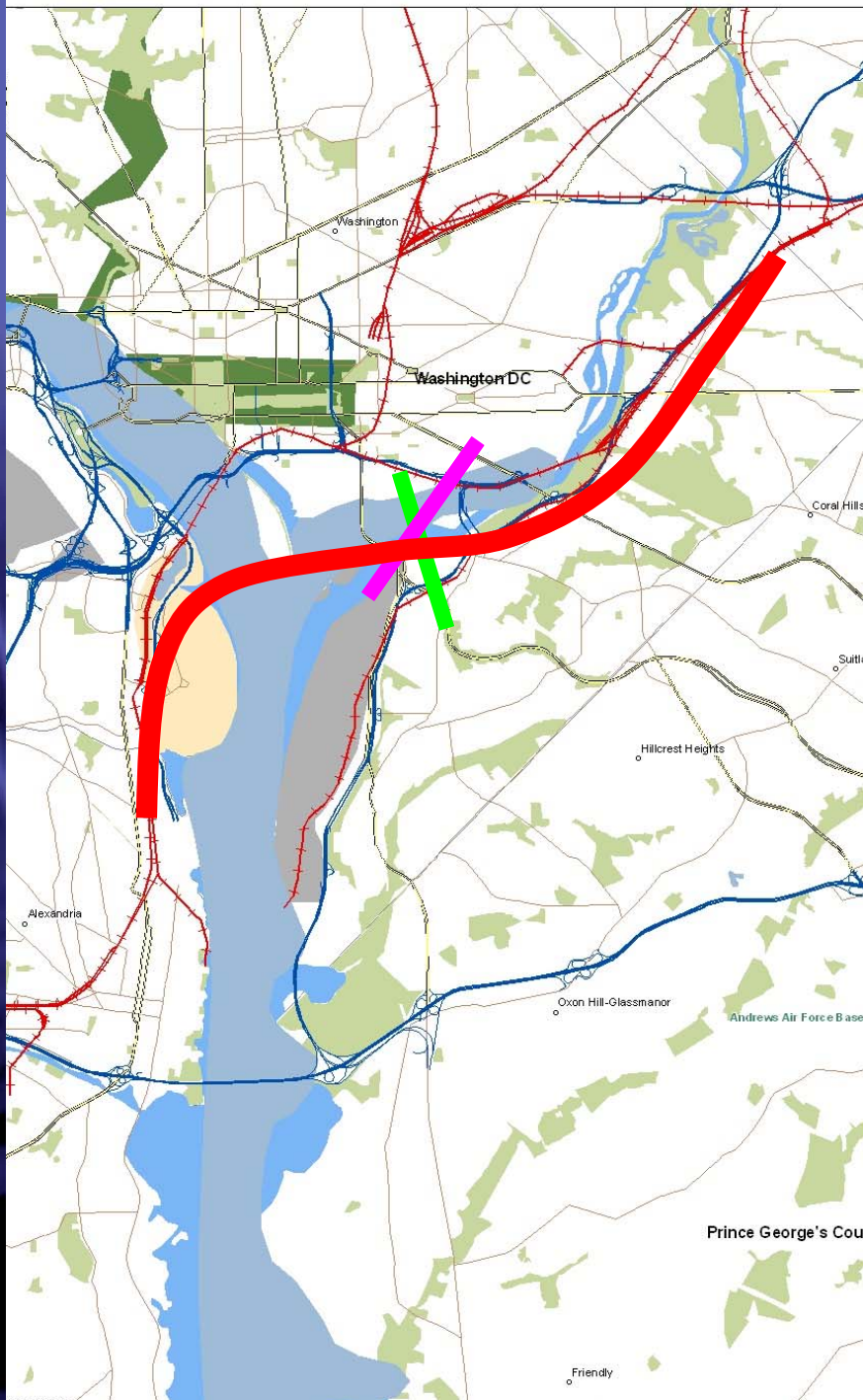
# Feasible Alternatives

**Western Alternative**

**DC Tunnel**

**Eastern, Dahlgren**

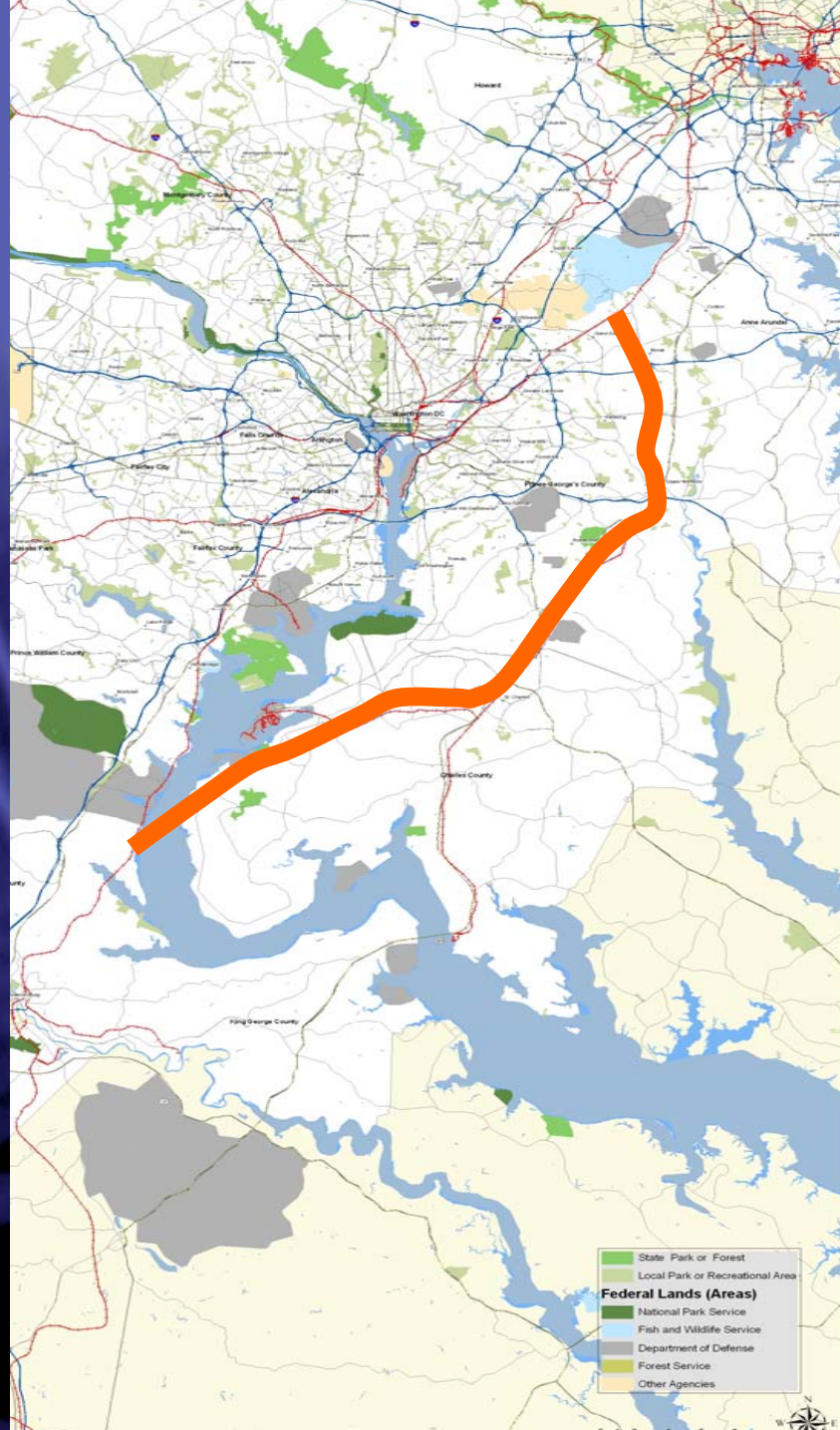
**Eastern, Indian Head**



## Viable Alternative DC Tunnel Option

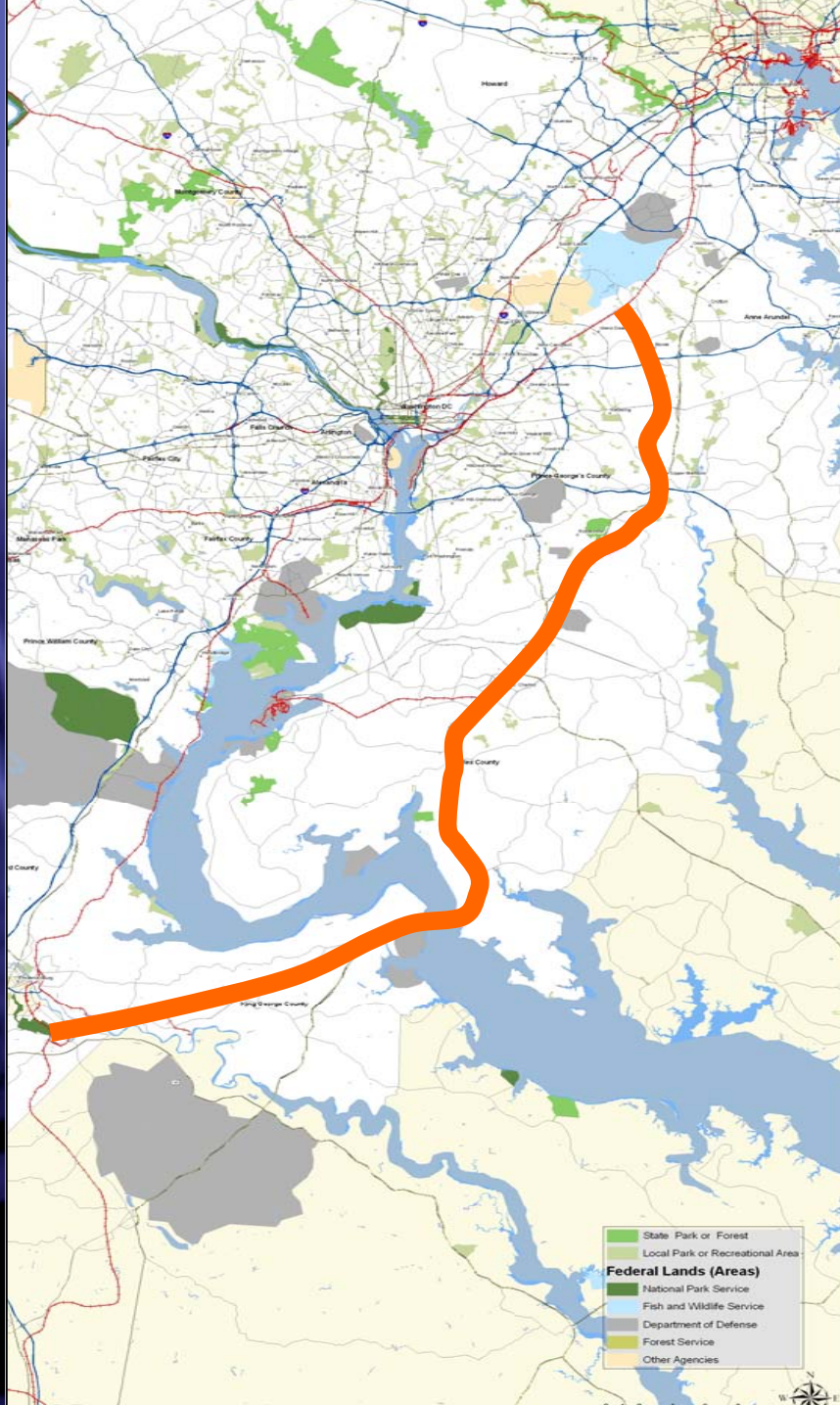
- 8-mile tunnel alignment
- Challenges

- Metro Green Line
- Planned WASA CSO Tunnel



## Viable Alternative Eastern, Indian Head

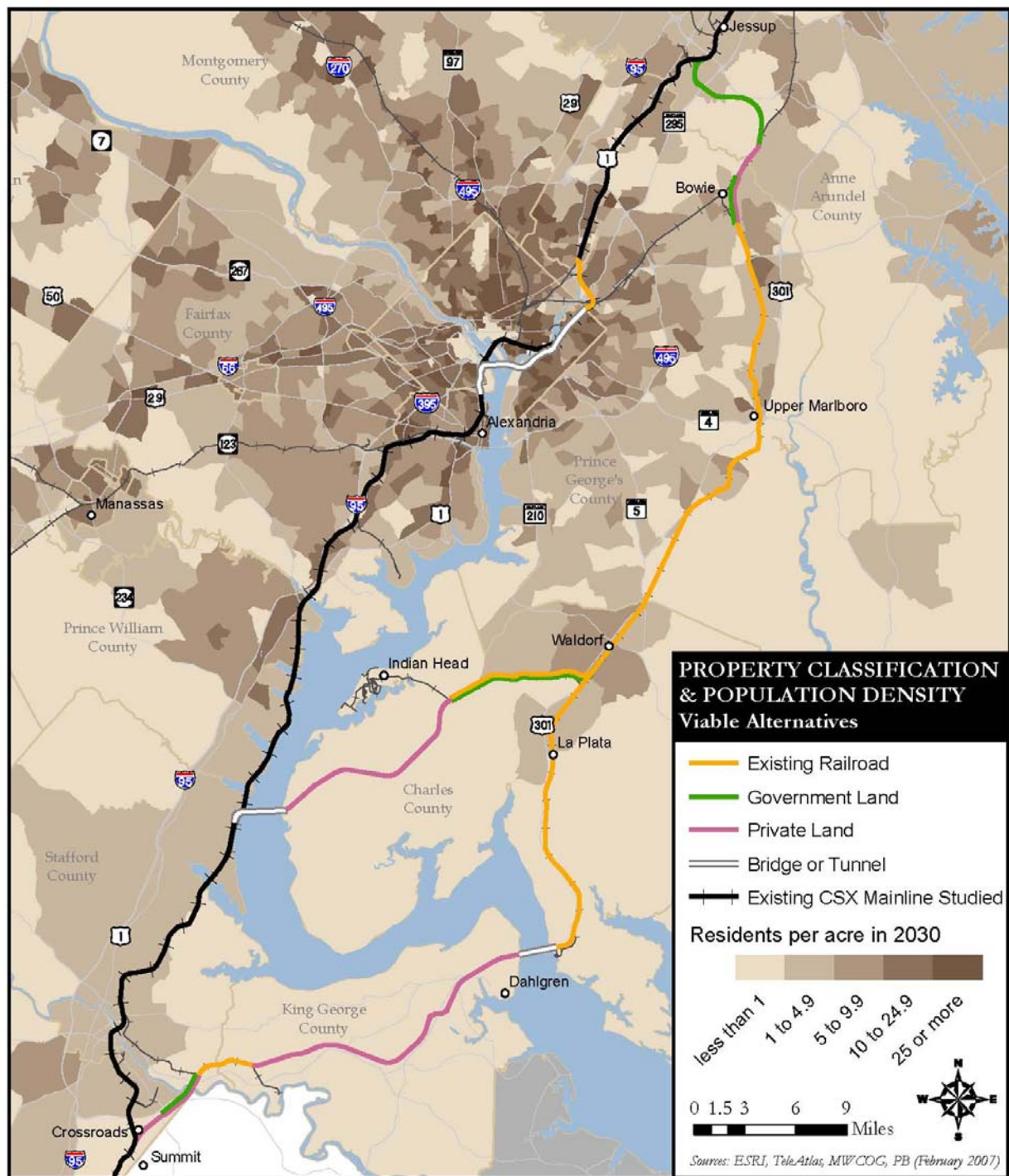
- 69 mile corridor
- Utilizes spur rail line in Indian Head area



## Viable Alternative Eastern, Dahlgren

- 93 mile corridor
- Utilizes full length of existing right-of-way in Maryland 301 corridor





## Security & Safety Benefits

**Realigning the Railroad will:**

**Greatly reduce risk of terrorist attack on hazardous materials in the Monumental Core**

**Reduce proximity of freight rail to dense residential and employment areas**

**Improve safety and security by separating freight and passenger services**

**Provide ability to transfer more freight to rail which is generally a safer mode than trucks**



# Transportation Benefits

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## Types of Benefits identified by realignment:

### Freight Shipper Benefits:

- Decreased travel time
- Lower shipping costs

### Highway System Benefits:

- Transfer of freight from trucks to rail
  - Lower congestion and travel times
  - Reduced highway maintenance
  - Lower environmental impacts

### Passenger Rail Benefits:

- Increasing passenger service capacity
- Lowering travel times
- Reduce schedule conflicts

Fully realized when implemented with other East Coast improvements

# Real Estate Development Benefits

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## Overview of Analysis:

**Assess new development potential and real estate impacts in the District of Columbia from removal of rail line**

## **Benefits included:**

- **New development opportunities and increases in property values**
- ***Advances *Extending the Legacy* and *Anacostia Waterfront Initiative* goals***

## Dollar Value of Total Benefits

### Transportation Benefits

	DC Tunnel	Eastern, Indian Head	Eastern, Dahlgren
With East Coast Improvements	<b>\$1.9 Billion</b>	<b>\$3 .0 Billion</b>	<b>\$2.9 Billion</b>
Washington Realignment Only	<b>\$178 Million</b>	<b>\$1.3 Billion</b>	<b>\$1.2 Billion</b>

### Real Estate Benefits

	DC Tunnel	Eastern, Indian Head	Eastern, Dahlgren
Real Estate Benefits	<b>\$6.6 Billion</b>	<b>\$6.6 Billion</b>	<b>\$6.6 Billion</b>

### Total Benefits

	DC Tunnel	Eastern, Indian Head	Eastern, Dahlgren
With East Coast Improvements	<b>\$8.5 Billion</b>	<b>\$9.6 Billion</b>	<b>\$9.5 Billion</b>
Washington Realignment Only	<b>\$6.8 Billion</b>	<b>\$7.9 Billion</b>	<b>\$7.8 Billion</b>

## Total Benefits by Jurisdiction

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### DC Benefits

- Increased land values and development opportunity
- Simplified construction of roadway improvements
- Improved access to Anacostia River and park

### Virginia Benefits

- Expansion and improvement of passenger services (VRE, Amtrak)

### Maryland Benefits

- Enhances value of Baltimore rail improvements
- Enhances Port of Baltimore for destinations south
- Improves opportunity for possible expansion of MARC service to destinations south of DC

## Estimated Costs of Rail Realignment

	Eastern Dahlgren	Eastern Indian Head	DC Tunnel
Estimated Costs	\$3.5 – 4.7 Billion	\$3.2 -4.3 Billion	\$4.7 – 5.3 Billion

## Benefit - Cost Analysis

- **Benefit/Cost Ratios calculated based on quantifiable benefits and costs (transportation and real estate)**
- **Calculated with and without other needed East Coast rail improvements**

	<b>With East Coast Improvements</b>	<b>Washington Region Improvements Only</b>
<b>DC Tunnel</b>	<b>1.7</b>	<b>1.4</b>
<b>Eastern Indian Head</b>	<b>2.4</b>	<b>2.0</b>
<b>Eastern Dahlgren</b>	<b>2.2</b>	<b>1.8</b>



## Study Findings

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- **Removing the freight railroad from the monumental core would greatly reduce the security risks of transporting freight through the region**
- **There are viable alternative railroad alignments for the freight line which deserve further study**
- **Realigning the freight rail would provide benefits to the transportation network in the Washington Region and the East Coast**
- **The total benefits of realignment would be greater than the costs**

## Next Steps

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### **Beyond this Study:**

**Develop a funding strategy that considers the complexities of each alternative including:**

- **Sharing public/private costs appropriately**
- **Capturing the benefits to offset the costs**
- **Identify availability of appropriate security and transportation funding**

**Prepare Environmental Impact Statement and identify preferred alternative including the identification of necessary mitigation for project related impacts**

