Delmarva Freight Advisory Working Group Meetings

New Castle County Chamber of Commerce, New Castle, DE
December 3, 2014

Sussex County Council Chambers, Georgetown, DE
December 4, 2014
• Plan Overview

• Project Screening & Prioritization Methods

• Freight Corridor Summaries and Project/Study Candidates

• Statewide Summary and Broader Insights

• Your Feedback!
Plan Overview

What is the Delmarva Freight Plan?

• Multi-state, multi-MPO, multimodal evaluation of Delmarva’s freight system
• Aims at compliance w/ MAP-21 and National Freight Policy goals & objectives
• Evaluates freight flows and integrates commodity flow modeling
• Reviews freight focus areas while integrating performance-based scenario planning
• Identifies key projects; complies with criteria for accessing potential federal funding options
Plan Overview

CHAPTER 1: Introduction

• Multi-Jurisdictional Plan Perspectives
• MAP-21 and National Freight Policy Goals
• Delmarva-Specific Goals

Five key focus areas...

Economic Vitality
Freight Connectivity, Mobility and Accessibility
Safety and Security
System Mgmt, Operations and Maintenance
Sustainability and Environmental Stewardship
Plan Overview

CHAPTER 2: Existing Economic Context

- Population and Employment
- Key Industries and Supply Chains
- Economic Development Strategies
- Global Economic Perspectives

29% population increase
CHAPTER 3: Existing Commodity Flows

- Delmarva Freight Details
  - Type, Tonnage, Value, Mode
  - Trading Partners
- Commodity Flow Perspectives
- Supply Chain Perspectives

Over 60% of total freight in five core groups

70 M tons ($75 Billion) Delmarva freight
157 M tons ($327 Billion) w/ pass-thru freight
**Plan Overview**

**CHAPTER 4: Existing Transportation System**

• Modal Assets

• Logistics Nodes and Support Facilities

• System/Network Summary
  ✓ Freight Corridors, Zones, and Gateways

*Key Freight Corridors:*

• Metro (I-95)
• Bay (US 301)
• Coastal (US 13/113, DE 1)
• Ocean City (US 50)
• Piedmont (US 202, DE 41)
• Lewes (MD/DE 404, US 9)
**Plan Overview**

**CHAPTER 5: Existing Freight Planning Resources**

- Freight Institutions
- Coordination Activities
- Project Funding and Revenue Sources
- Capital Plans and Programs

*Future project commitment assumptions*
Plan Overview

CHAPTER 6: Freight Trends, Needs, and Issues

- Summary of Delmarva’s freight issues today
- Transition point toward planning for or reacting to an unknown future
- Foundation for project & policy selection

Freight Focus Areas
CHAPTER 7: Future Freight Planning Scenarios

- Future Baseline
- Multimodal Constraint or Enhancement
- Trendline or Accelerated Growth

Cube Cargo Modeling

Scenario Analyses

Tons by Mode by Scenario

Systemwide Truck VHT by LOS
CHAPTER 8: Recommended Action Plan

• Project Screening
• Project Prioritization
• Policy Implications
Freight Corridor Summaries and Project/Study Candidates
# Delmarva Freight Plan

## Project Screening

### Qualitative filtering...

<table>
<thead>
<tr>
<th>Candidate Project Details</th>
<th>Focus Area Influence</th>
<th>Scenario Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Index #</strong></td>
<td><strong>Route / Area</strong></td>
<td><strong>Limits</strong></td>
</tr>
<tr>
<td><strong>DELAWARE</strong></td>
<td><strong>Tier 1S Routes (State Primary)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>BY 40</strong></td>
<td>US 301</td>
</tr>
<tr>
<td></td>
<td><strong>BY 41</strong></td>
<td>US 301</td>
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</table>

### Summary Focus Area Influence

### Summary Scenario Influence

### Potential Freight Influence:
- Nominal
- Low
- Moderate
- High

### Scenario-Specific Influence:
- More potential need
- Less potential need
## Project Prioritization

### Summary Project Scoring

<table>
<thead>
<tr>
<th>Candidate Project Details</th>
<th>Ratings</th>
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<td><strong>Index #</strong></td>
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<td>BY 40</td>
<td>US 301</td>
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<tr>
<td>BY 41</td>
<td>US 301</td>
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### Summary Relative Priority

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<thead>
<tr>
<th>Potential Freight Influence:</th>
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<tbody>
<tr>
<td>Nominal</td>
</tr>
<tr>
<td>&lt;15</td>
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### Economic Vitality

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Scenic Inf</th>
<th>Freight Gen</th>
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<tbody>
<tr>
<td>20%</td>
<td>20%</td>
<td>60%</td>
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### Connectivity Mobility

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>LOS (Base)</th>
<th>LOS (No-Bio)</th>
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<tbody>
<tr>
<td>20%</td>
<td>50%</td>
<td>30%</td>
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### Safety & Security

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<thead>
<tr>
<th>Focus Area</th>
<th>Fatal Crash</th>
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<tr>
<td>20%</td>
<td>80%</td>
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### Mgmt O&M

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<tr>
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<th>AOTT</th>
<th>%FFS</th>
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<tbody>
<tr>
<td>20%</td>
<td>80%</td>
<td>0%</td>
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### Sustainability & Env

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>%FFS</th>
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</thead>
<tbody>
<tr>
<td>20%</td>
<td>80%</td>
</tr>
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</table>
I-95 Metro Freight Corridor

Including:
- I-295
- I-495
- US 40
Metro Freight Corridor

• Focal Routes
  ✓ I-95, I-295, I-495: capacity, interchanges, interconnectivity
  ✓ US 40, US 13: operations, interconnectivity

• Focal Connections
  ✓ Freight Corridors: Piedmont, Bay, and Coastal
  ✓ Freight Hubs: Cecil County and New Castle County
  ✓ Regional: Surrounding metro areas and US East Coast

• Multimodal Visions
  ✓ Rail: NS and CSX operations, Chesapeake Connector, Edgemoor Yard, US 40 Overpass
  ✓ Water: Port of Wilmington, Post-Panamax, M-95
  ✓ Air: Wilmington-Philadelphia Regional
  ✓ Pipeline: Project Mariner East
Key Projects:
- MT 50: I-95 @ DE 896 (interchange)
- MT 52: I-95; DE 1 to DE 141 (widen)
- MT 56: I-295; I-95 to DE Mem Br (upgrade)
- MT 51: I-95 @ DE 1 (interchange)
- MT 03: I-95; MDTA Sect 400 (reconstruct & widen)

Key Studies:
- MT 60/61/62: US 13; DE 1 to Wilmington
- MT 95/97: Freight Mgmt Areas
- MT 81: DE 72; US 40 to US 13
US 301 Bay Freight Corridor

Including:
- MD 213
- DE 896
Bay Freight Corridor

• Focal Routes
  ✓ US 301: access control, interchanges, new expressway
  ✓ MD 213, DE 896: capacity, upgrades, operations, bridge widening

• Focal Connections
  ✓ Freight Corridors: Metro, Coastal
  ✓ Freight Hubs: Dover, Smyrna, Centreville, Chestertown
  ✓ Regional: US 50 / US 301 Bay Bridge area

• Multimodal Visions
  ✓ Rail: MDDE Chestertown and Centreville Lines (286k upgrade)
  ✓ Water: Post-Panamax, M-95
  ✓ Air: --
  ✓ Pipeline: --
Key Projects & Studies

**Key Projects:**
- BY 42: DE 896; DE 2 to Boyds Corner Rd (signals)
- BY 41: DE 896; MD Line to DE 1 (expressway)
- BY 40: US 301; Peterson Rd to Levels Rd (widen)
- BY 02: US 301; Bay County Rest Area (truck pkg)
- BY 10: MD 213; Frenchtown Rd to Basil Ave (reconstruct)

**Key Studies:**
- BY 44: DE 896; US 301 to DE 1
- BY 43: DE 896; C&D Canal to US 40
- BY 13: MD 213; Basil Ave to MD 290 / MD 313
US 50 Ocean City Freight Corridor

Including:
- MD 90
- Salisbury Bypass
Ocean City Freight Corridor

• Focal Routes
  ✓ US 50, MD 90: operations (Bay Bridge), capacity, upgrades, access control, bridges

• Focal Connections
  ✓ Freight Corridors: Coastal
  ✓ Freight Hubs: Easton, Federalsburg, Hurlock, Salisbury
  ✓ Regional: US 50 / US 301 Bay Bridge area

• Multimodal Visions
  ✓ Rail: Southern Delmarva Intermodal Center
  ✓ Water: Salisbury/Wicomico River ports, river dredging
  ✓ Air: Easton-Newnam, Salisbury-OC-Wicomico Regional, OC Municipal
  ✓ Pipeline: --
**Key Projects & Studies**

**Key Projects:**
- **OC 10:** US 50; US 50/301 Split to MD 404 (reconstruct)
- **OC 18:** US 50 @ US 13 (signal and ramp weave issue)
- **OC 17:** US 50 @ Salisbury Bypass (additional lane)
- **OC 12:** US 50; MD 322 north-south of Easton (reconstruct)
- **OC 13:** US 50; MD 322 to Choptank River (access control)

**Key Studies:**
- **OC 02:** US 50/301; Bay Bridge to Split
- **OC 14:** US 50; MD 16 Overlap Segments
- **OC 70/71:** Salisbury Freight Mgmt & Airport Connectivity
US 13/113 and DE 1 Coastal Freight Corridor
Coastal Freight Corridor

• Focal Routes
  ✓ US 13, US 113: upgrades, interchanges, access control / Salisbury area, south of Berlin
  ✓ DE 1: widening / north of US 13 split; freight management / Del. City, Smyrna, Dover, Milford

• Focal Connections
  ✓ Freight Corridors: Ocean City, Lewes, Bay, Metro
  ✓ Freight Hubs: Delaware City area, Dover, resort areas, numerous local freight hubs
  ✓ Regional: Access to Metro Corridor and Virginia’s Chesapeake Bay Bridge/Tunnel

• Multimodal Visions
  ✓ Rail: NS access, Seaford rail bridge, Southern Delmarva Intermodal Center; MDDE Snow Hill Line (286k upgrade), BCRR upgrades, siding expansions
  ✓ Water: Nanticoke, Wicomico, and Pocomoke Rivers; Post-Panamax; M-95; Ferry
  ✓ Air: Dover ACR, Salisbury-OC-Wicomico Regional, Sussex Co., Accomack Co.
  ✓ Pipeline: --
Key Projects:
CS 41: DE 1; Tybouts Corner to DE 273 (widen)
CS 52: DE 72; McCoy Rd to DE 71 (widen)
CS 51: DE 7; Newtown Rd to DE 273 (widen)
CS 02: US 13; Salisbury Bypass to DE Line (reconstruct)
CS 03: US 13; Somerset Co Line to US 13 Bus (reconstruct)

Key Studies:
CS 42: DE 1 / US 13; DE 72 to DE 71
CS 43: DE 1; Dover to Smyrna
CS 53: DE 24; US 113 to DE 23
US 202 / DE 41  
Piedmont  
Freight Corridor

Including:
- DE 2, DE 7, DE 48, DE 141
- MD 273
Piedmont Corridor

• Focal Routes
  ✓ DE 41, DE 48, DE 7: freight management upgrades, potential widening (DE 48)
  ✓ DE 2, DE 141: upgrades, operations, bridge widening

• Focal Connections
  ✓ Freight Corridors: Metro (including surrounding urban areas)
  ✓ Freight Hubs: Northern Cecil County (including MD 273)
  ✓ Regional: PA/MD access into Newark; PA access to Lancaster

• Multimodal Visions
  ✓ Rail: Northeast Corridor (CSX, NS and related rail yard, transfer, support facilities
  Shortline opportunities to/from PA via WWRC or ESPN
  ✓ Water: --
  ✓ Air: --
  ✓ Pipeline: --
Key Projects & Studies

**Key Projects:**
- **PD 35:** DE 141; Tyler McConnell Bridge
- **PD 34:** DE 141; Kirkwood Hwy to Faulkland Rd (upgrade)

**Key Studies:**
- **PD 32:** DE 41; DE 48 to PA Line
- **PD 30:** DE 2; DE 273 to DE 141
- **PD 31:** DE 7; Valley Rd to PA Line
- **PD 33:** DE 48; Hercules Rd to DE 41
MD/DE 404 Lewes Freight Corridor

Including:
- US 9
• Focal Routes
  ✓ MD/DE 404: upgrades, access control, and widening
  ✓ US 9, US 9 Truck: freight management upgrades

• Focal Connections
  ✓ Freight Corridors: Ocean City, Bay, Coastal
  ✓ Freight Hubs: Federalsburg, Denton, Georgetown, resort areas
  ✓ Regional: Access to US 50/301 Bay Bridge

• Multimodal Visions
  ✓ Rail: --
  ✓ Water: Cape May-Lewes Ferry connectivity
  ✓ Air: Sussex County Airport connectivity
  ✓ Pipeline: --
Key Projects & Studies

Key Projects:

LW 01: MD 404; US 50 to MD 404 Bus (upgrade w/ access control)
LW 02: MD 404; Queen Anne’s Co to MD 404 Bus (reconstruct & widen)
LW 04: MD 404; MD 16 Overlap Segments (reconstruct w/ access control)
LW 05: MD 404; MD 16 to DE Line (reconstruct w/ access control)

Key Studies:

LW 22: US 9; US 113 to DE 5
LW 20: DE 404; MD Line to US 13
Statewide Summary and Broader Implications
Delaware Statewide

Top 10 Delaware Projects w/ Tier 1 Commitment

★ MT 52: I-95; DE 1 to DE 141 (widen)
★ MT 56: I-295; I-95 to DE Memorial Br (improvements)
★ MT 51: I-95 @ DE 1 (interchange)
★ BY 41: US 301; MD Line to DE 1 (new expressway)

• PD 35: DE 141; Tyler McConnell Bridge
• MT 75: DE 4; DE 2 to DE 896 (widen)
• MT 54: I-95 @ US 202 (interchange)
• BY 40: US 301; Peterson Rd to Levels Rd (widen)
• BY 50: DE 299; DE 1 to Catherine St (widen)
• CS 52: DE 72; McCoy Rd to DE 71 (widen)
Delaware Statewide

Top 10 Delaware Projects w/ Tier 2 or 3 Commitment

★ MT 50: I-95 @ DE 896 (interchange)
★ BY 42: DE 896; DE 2 to Boyds Corner Rd (signals)
  • MT 53: I-95 @ DE 141 (interchange)
  • MT 72: US 40 @ US 13 (interchange)

• MT 55: I-95; US 202 to I-495/DE 2 (widen)
• MT 67: US 40 @ DE 72 (intersection)
• CS 41: DE 1; Tybouts Corner to DE 273 (widen)
• MT 70: US 40; Salem Church Rd to Walther Rd (widen)
• MT 65: US 40 @ DE 896 (interchange)
• MT 68: US 40 @ NS Rail Crossing (grade separation)

★ = overall DE statewide top 10 candidate

High Priority Rating

Moderate Priority Rating
Delaware Statewide

**Top 10 Delaware Studies w/ Tier 3 or 4 Commitment**

- **MT 61**: US 13; DE 1 to I-495
- **MT 62**: US 13 @ DE 273 (interchange)
- **PD 32**: DE 41; DE 48 to PA Line
- **CS 42**: DE 1 / US 13; DE 72 to DE 71
- **BY 44**: DE 896; US 301 to DE 1
- **PD 30**: DE 2; DE 273 to DE 141
- **MT 60**: US 13; I-495 to Christiana River
- **MT 81**: DE 72; US 40 to US 13
- **CS 43**: DE 1; Dover to Smyrna
- **PD 31**: DE 7; Valley Rd to PA Line

*High Priority Rating*

*Moderate Priority Rating*
Delaware Statewide

Additional Interests

• Local Area / Freight Management Studies
  ★ MT 96: Newark Intermodal Center Feasibility
  ★ MT 95: Newark Freight Management
  ★ MT 97: Wilmington Freight Management & Route Signage
  ✓ CS 83: Seaford Freight Management
  ✓ CS 80: Dover Freight Management
  ✓ CS 81: Dover ACR Expansion

• Planned VWS Sites
  ✓ CS 45: DE 1 (Smyrna area)
  ✓ CS 50: US 13 (Smyrna area)
  ✓ BY 60: DE 299 (west of Middletown)
  ✓ BY 51: DE 300 (west of Smyrna)
  ✓ BY 61: DE 6 (west of Smyrna)
# Delmarva Freight Plan

## Delmarva Rail

<table>
<thead>
<tr>
<th>Amtrak</th>
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<tbody>
<tr>
<td>R 01</td>
<td>Baltimore City (B&amp;P and Union Tunnels)</td>
<td></td>
</tr>
<tr>
<td>R 02</td>
<td>Susquehanna River Bridge</td>
<td></td>
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<tr>
<td>R 03</td>
<td>Yard to Ragan Interlockings</td>
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<tr>
<th>CSX</th>
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<tbody>
<tr>
<td>R 10</td>
<td>MD Line to to Landenberg Jct (Double Track)</td>
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</tr>
<tr>
<td>R 11</td>
<td>Elsmere to PA Line (Double Track)</td>
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<th>NS</th>
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<tr>
<td>R 20</td>
<td>Chesapeake Connector</td>
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<tr>
<td>R 21</td>
<td>New Castle Secondary Siding</td>
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<tr>
<td>R 22</td>
<td>Edgemoor Yard (Raise)</td>
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<tr>
<td>R 23</td>
<td>Edgemoor Yard (Relocate)</td>
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<tr>
<td>R 24</td>
<td>Rail Program Autoport</td>
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<td>R 25</td>
<td>at Seaford Rail Bridge</td>
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<tr>
<td>R 26</td>
<td>Georgetown Siding</td>
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<tr>
<td>R 30</td>
<td>Frankford to Snow Hill (286k upgrade)</td>
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</tr>
<tr>
<td>R 31</td>
<td>Massey to Worton (286k upgrade)</td>
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</tr>
<tr>
<td>R 32</td>
<td>Massey to Centreville (286k upgrade)</td>
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<td>R 40</td>
<td>Cape Charles to Pocomoke City (upgrade)</td>
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<tr>
<td>R 41</td>
<td>Cape Charles Carfloat</td>
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### Delmarva Freight Plan

**Broader Insights**

<table>
<thead>
<tr>
<th>Broader Insights</th>
<th>Metro</th>
<th>Bay</th>
<th>Ocean City</th>
<th>Coastal</th>
<th>Piedmont</th>
<th>Lewes</th>
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<tbody>
<tr>
<td>Sensitivity to Accelerated Scenario*</td>
<td>+3%</td>
<td>+34%</td>
<td>+11%</td>
<td>+38%</td>
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<td>+34%</td>
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<tr>
<td>Sensitivity to Constraint Scenario*</td>
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<td>+16%</td>
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<td>Development patterns or warehousing shifts</td>
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<td>Regional alternate routes or system redundancy</td>
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<td>✓</td>
<td>✓</td>
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<td>Peak season traffic, tourism and freight conflicts</td>
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<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<td>Community and freight access conflicts</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>Multi-jurisdictional cooperation</td>
<td>✓</td>
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<td>✓</td>
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<td>Oversize or special freight movements</td>
<td>✓</td>
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<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
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<td>Technology advancements (ITS, VWS, autonomous vehicles)</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
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* shown as a % increase and equivalent $ value increase in truck costs based on VHT and VMT changes vs. the future baseline
Anticipated strengths of the plan:

- MAP-21 emphasis on freight planning
- Scenario testing to assess which projects may benefit “more potential futures”
- Project screening and prioritization, especially “data-oriented” elements
- Project evaluation to help pursue freight-specific funding options (e.g., 95% match)
- Modeling tool to support future planning revisions (e.g., flooding impact scenarios)

Anticipated next steps:

- Finalize project and policy perspectives
- Explore implications for long-term performance monitoring
- Formalize the draft plan for agency/stakeholder/public reviews
Based on the overall information presented today, does the Delmarva Freight Plan appear to capture the freight issues or concerns that are most relevant to the Delmarva Peninsula?

Based on the Project Candidate Index and Freight Corridor Maps on display today, will the key projects or studies help to address the most relevant freight needs on the Delmarva Peninsula?
Thank You!

Comments / Questions / Display Boards

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creese@wrallp.com