

Project Status Meeting

March 6, 2013



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of Transportation



Maryland Department
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Agenda

1. Status Updates

- Commodity Flow Data
- Freight Generators / TLN's
- Stakeholder Outreach

2. "Big Picture" Review

- Opportunities & Concerns
- Purpose & Goals vs. MAP-21
- Planned Projects Review

3. Scenario Planning

- Performance Based Approach
- Economic & Cube Cargo Evaluations
- Potential Scenarios

4. Freight Study Forum / Regional Advisory Group

5. Next Steps



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1. Status Updates

- *Commodity Flow Data*
- *Freight Generators / TLN's*
- *Stakeholder Outreach*



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Status Updates

Commodity Flow Data

- ❖ 2/6/2013 working session with IHS staff
 - Nuances of Transearch database, plus differences vs. FAF data
 - Supplemental needs from stakeholder interviews or research (e.g. Port of Wilmington imports, municipal landfill transfers)
- ❖ Rail waybill data pending
 - Major commodities on the Peninsula unlikely to change significantly
 - Mode share, trading partners, supply chains will be revised from previous

Status Updates

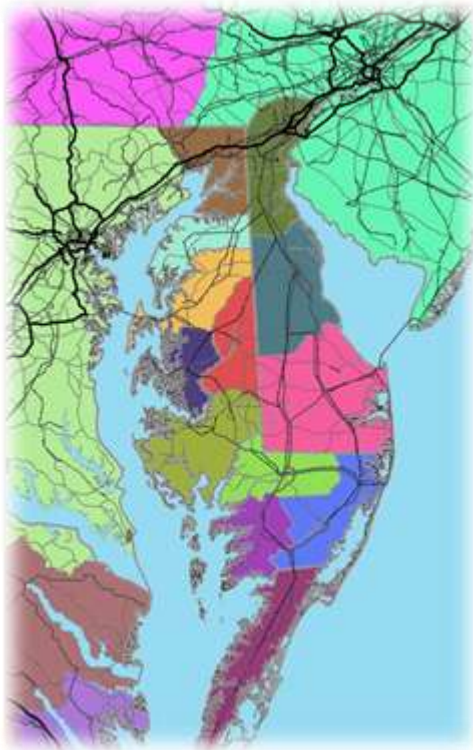
Commodity Flow Data

- ❖ Limitations / exclusions within Transearch dataset:
 - Rail freight (other than NAFTA) – will be fixed with addition of waybill data
 - Short-line rail (other than Class I transfers)
 - International waterborne freight (other than inferred from “import/export”)
 - Municipal / non-industrial waste (e.g., landfill transfers)
 - International air freight
 - Domestic pipeline
 - Truck trips transferred from barge

Status Updates

Commodity Flow Data

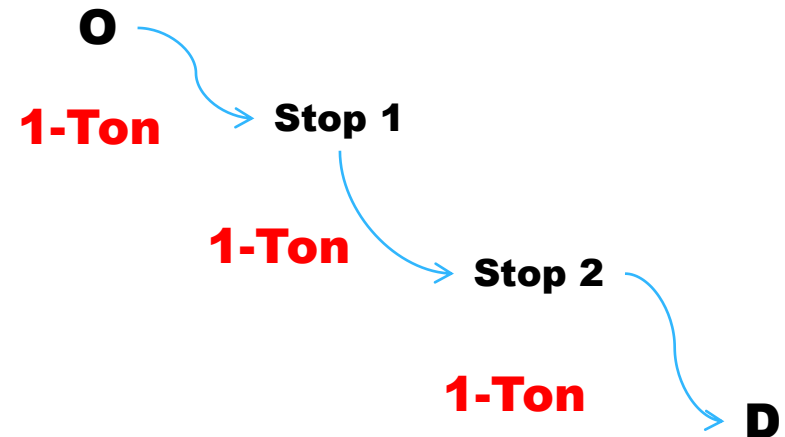
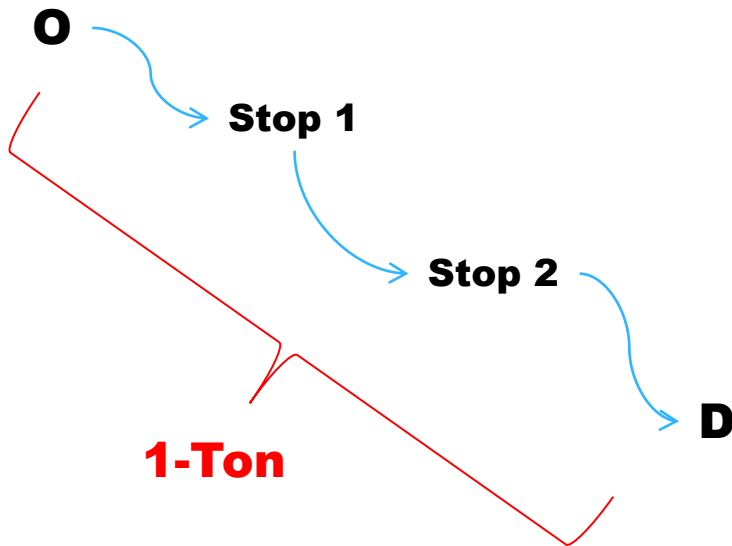
Transearch	FAF
County-level data	Larger regions



Status Updates

Commodity Flow Data

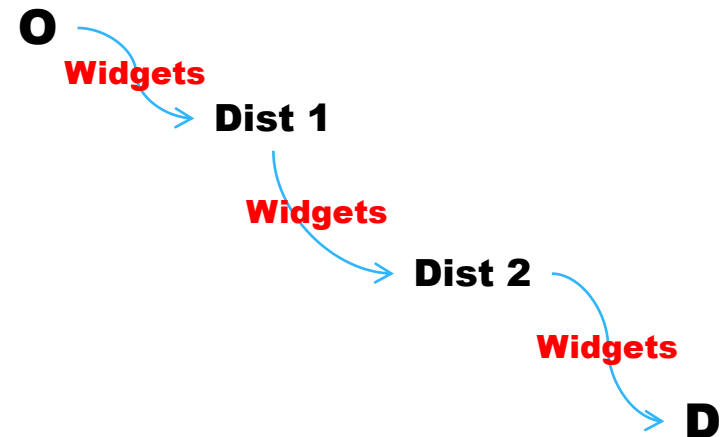
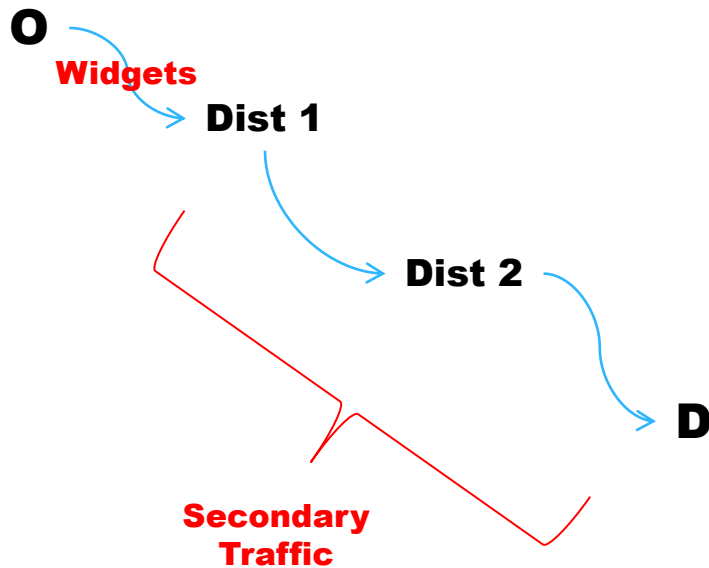
Transearch	FAF
One trip per O-D unless change in mode	Multiple trips based on intermediate stops



Status Updates

Commodity Flow Data

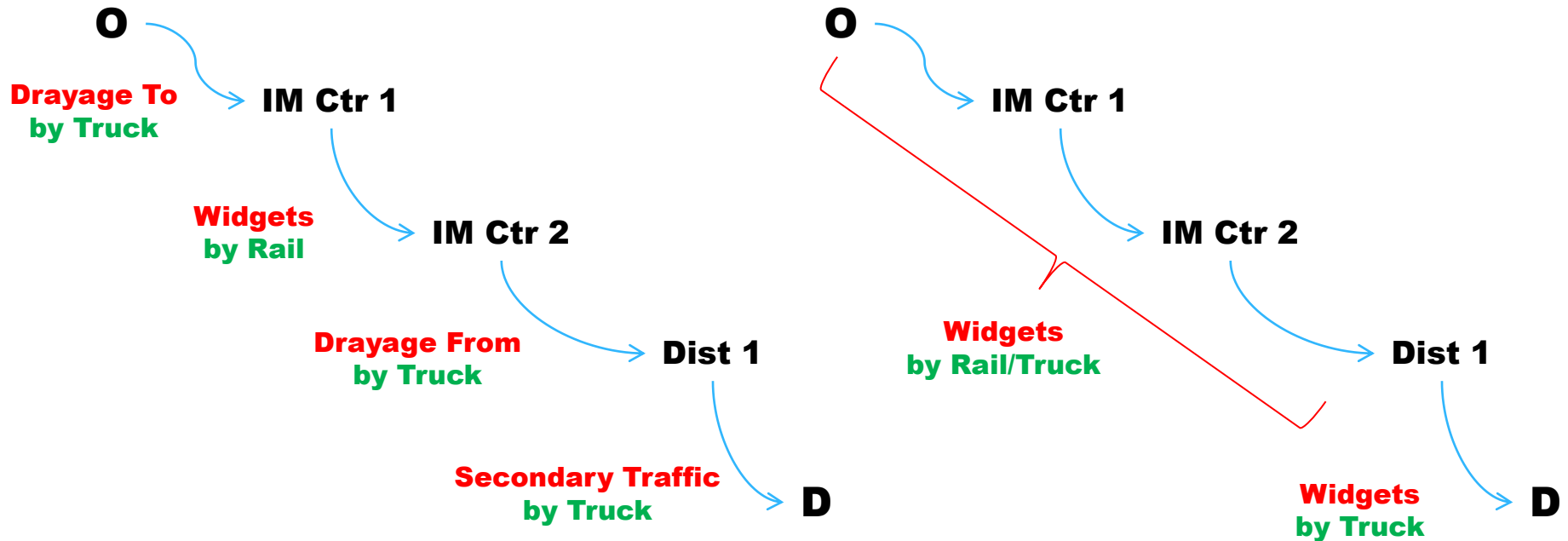
Transearch	FAF
Secondary traffic out of distribution centers	Commodity-specific out of distribution centers



Status Updates

Commodity Flow Data

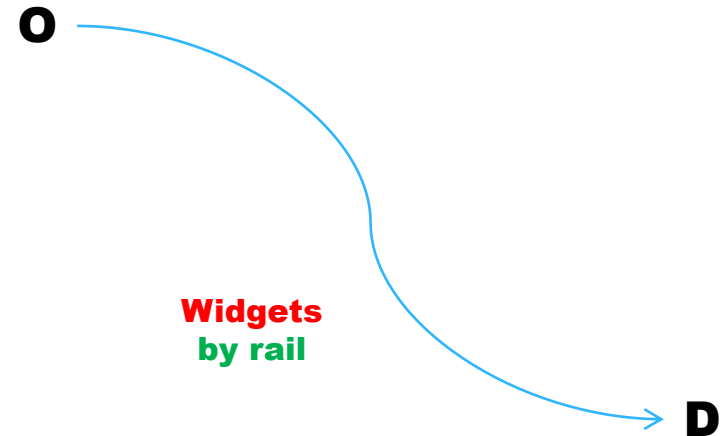
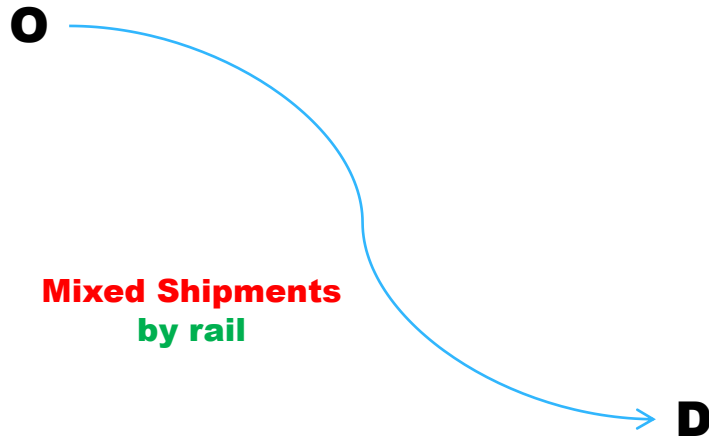
Transearch	FAF
Multimodal legs w/ separate O-D's	Multimodal legs w/ single O-D as mixed modes



Status Updates

Commodity Flow Data

Transearch	FAF
Containerized rail shipments shown as “mixed” if specific commodity not noted	Typically actual commodity included

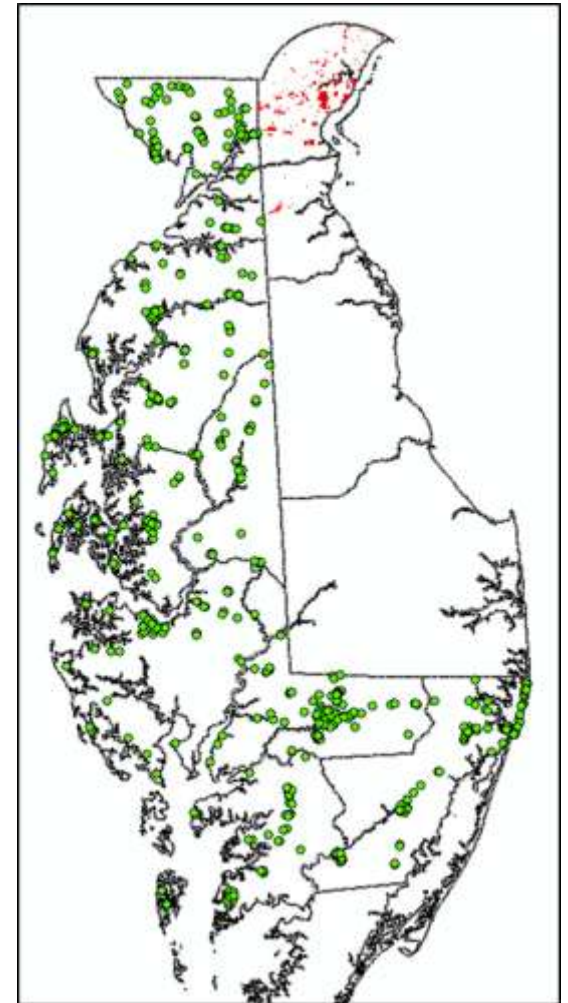


Status Updates

Freight Generators / TLN's

- ❖ January Meeting / 136 Sites
 - 11 Rail Freight Facilities
 - 23 Ports
 - 62 Major Employer and Distribution Centers
 - 15 Intermodal Terminal Facilities
 - 6 Airports
 - 19 Solid Waste Facilities

- ❖ WILMAPCO / Maryland Refinements (Ongoing)
 - Purpose & application
 - Freight-focused filtering
 - Industrial park size or group criteria
 - Retail site size or group criteria



Status Updates

Stakeholder Outreach

❖ Stakeholder Response

- 18 telephone interviews
- 30-60 online surveys (\approx 25% each of Industry, Shipper, Government, or “Other”)



❖ Critical Stakeholders Pending

- Port of Wilmington
- Delmarva Water Transport Committee
- Delaware Solid Waste Authority
- BEACON Contacts
- Short Line Railroad Contacts



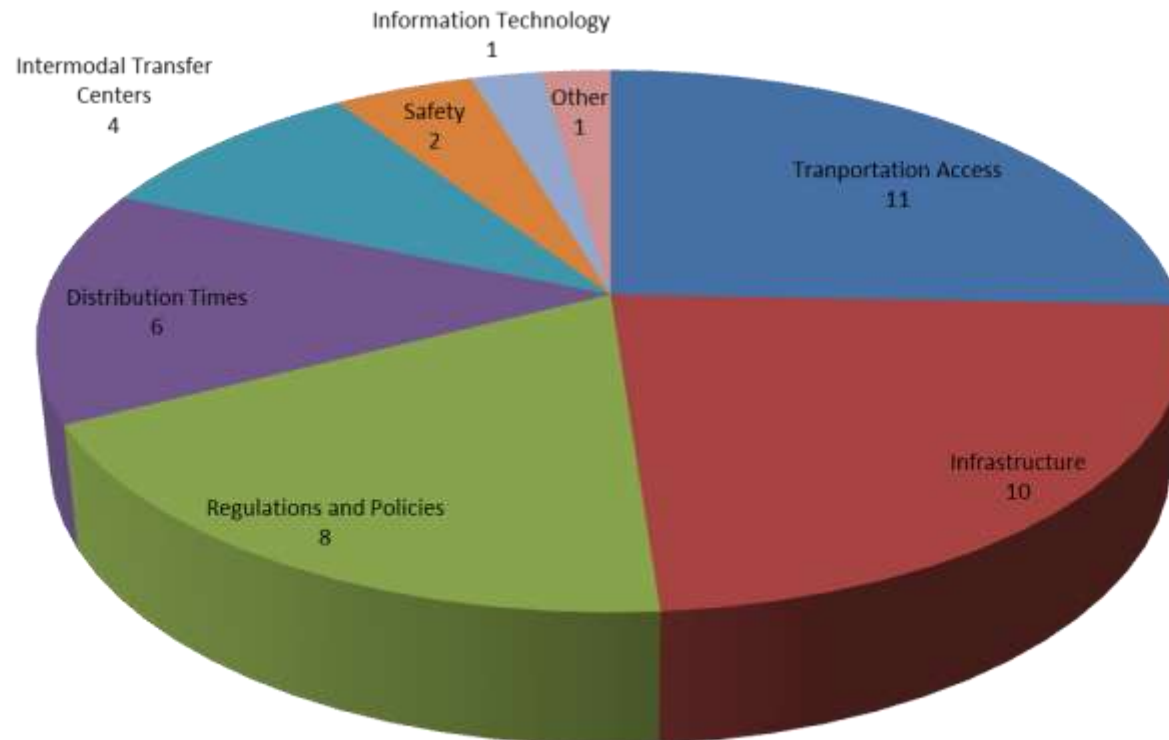
Status Updates

Stakeholder Outreach

- ❖ Online Survey: Specific Problems / Areas of Concern



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because knowledge is everything



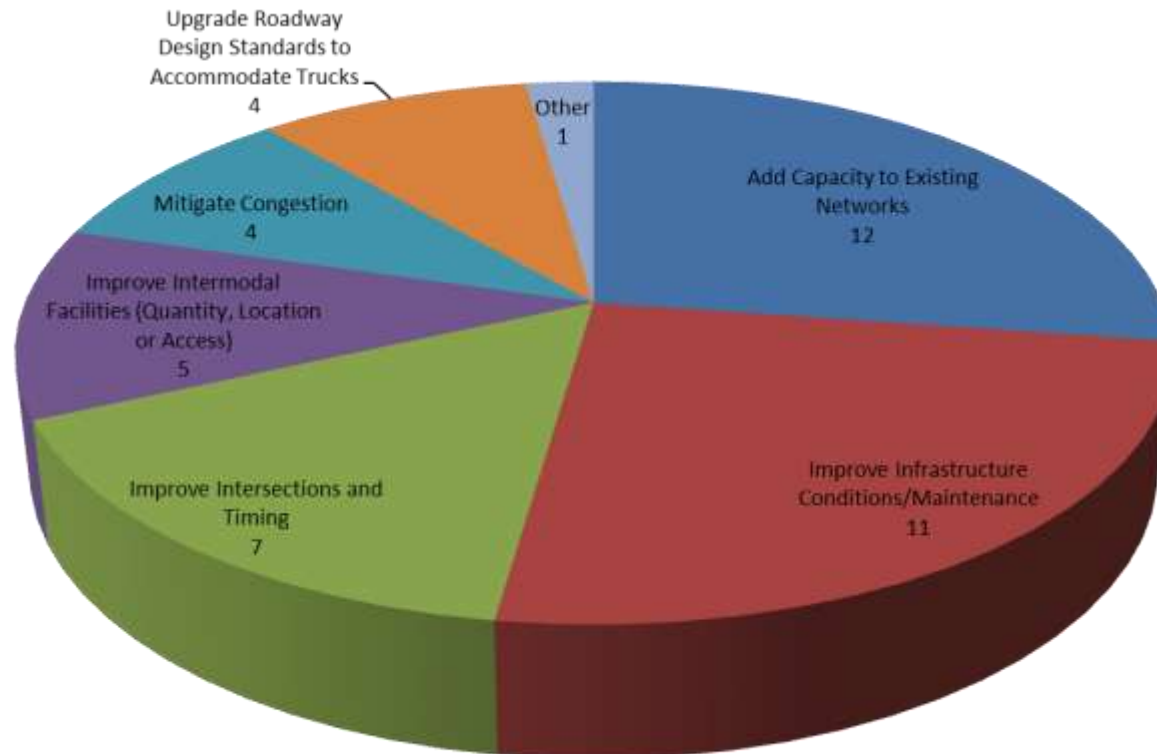
Status Updates

Stakeholder Outreach

- ❖ Online Survey: Key Infrastructure Related Improvements



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Status Updates

Stakeholder Outreach

- ❖ Online Survey: General Comments
 - 36% Miscellaneous Infrastructure Improvements
 - 25% Truck Restrictions (height, weight, width, hazmat)
 - 17% Northeast Corridor Constraints
 - 11% Rail Restrictions (height, weight, width)
 - 11% Short Line Railroad Support



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2. “Big Picture” Review

- *Opportunities & Concerns*
- *Purpose & Goals vs. MAP-21*
- *Planned Projects Review*



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Areas of Opportunity



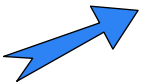
Growth & Industry

- Cecil County
- New Castle County
- Sussex County
- Wicomico County



Site-Specific Issues

- PBF Energy Rail Expansion
- Dogfish Head Brewery Expansion
- Seaford Multimodal Connectivity
- Salisbury Multimodal Connectivity
- NASA Wallops Flight Facility

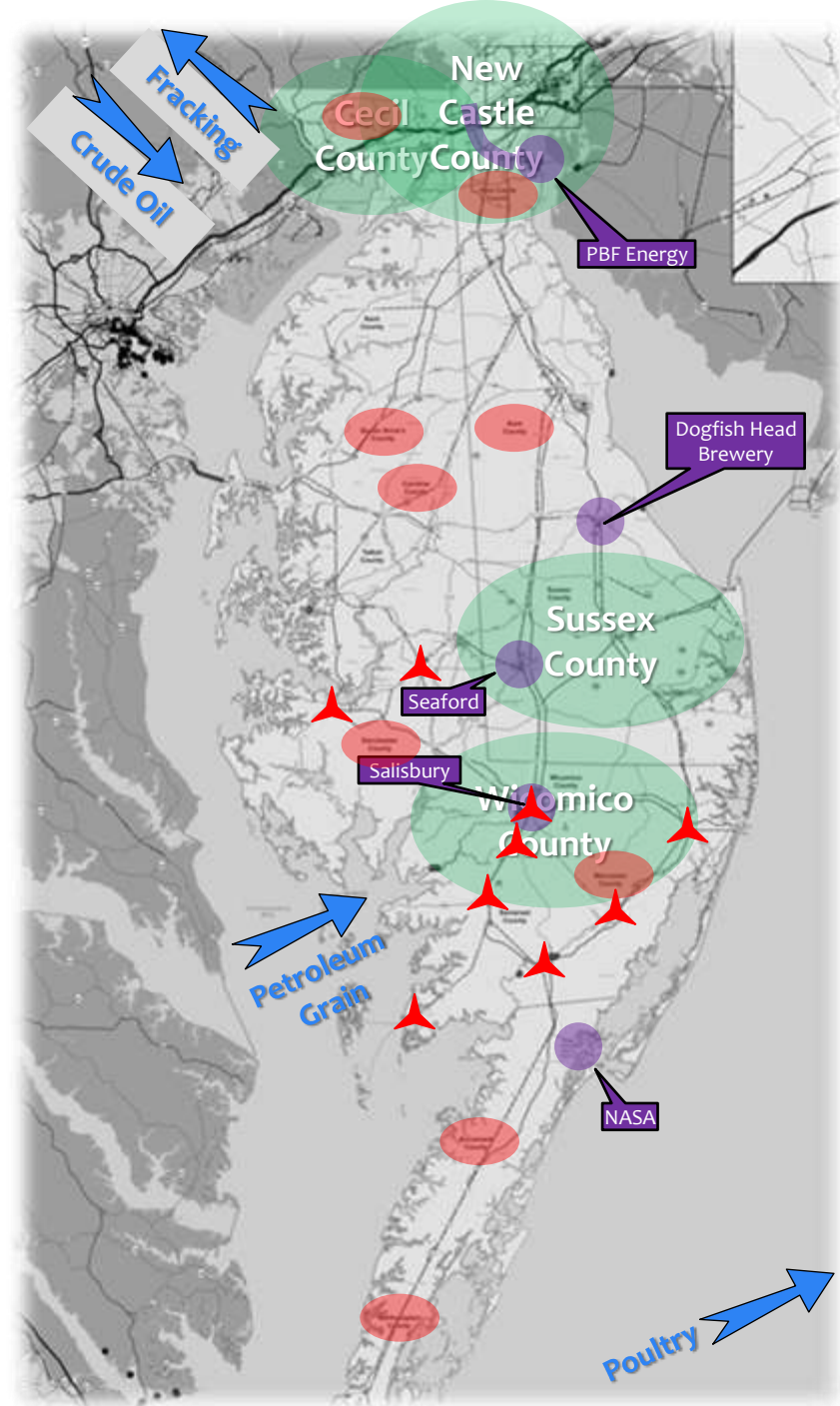


Import-Export

- Fracking Materials to Marcellus Shale
- Crude Oil from Canada or Midwest
- Grain from Midwest
- Frozen Poultry to Russia



Enterprise Zones / Other Incentives



Areas of Concern



Rail

- NEC / Chesapeake Connector
- Delmarva Secondary / Indian River Coal
- 75 Rail Car Capacity
- Cape Charles Rail Car Float



Ports

- Post-Panamax
- New Markets



Inland Waterways

- Nanticoke & Wicomico Rivers
- Spoil Sites for Dredged Materials

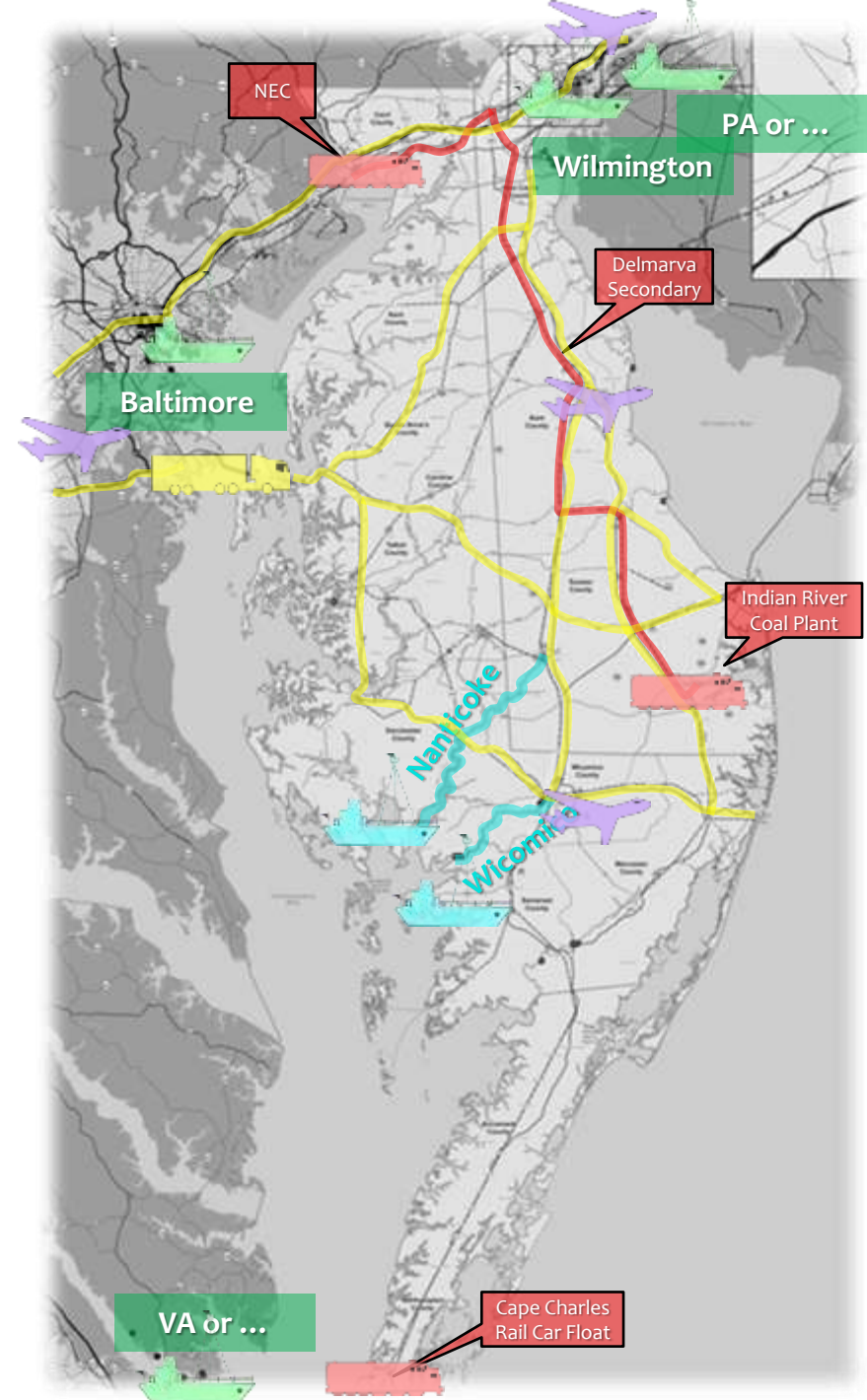


Motor Freight

- Seasonal / Tourist-Based Congestion
- Secondary Roads / Bridges
- Fuel Taxes / Toll Rates / Weight Limits
- Parking & Rest Areas



Air Freight



Purpose

- ❖ To comprehensively evaluate the multimodal freight transportation system and related operations on the Delmarva Peninsula
- ❖ To determine its effect on the environment and economic development
- ❖ To develop and assess future planning scenarios to identify priorities for relevant investment and regulation changes

MAP 21: A State Freight Plan must improve the ability of the State to meet the national freight goals established under 23 U.S.C. 167 and included as part of the National Freight Policy, while also highlighting and/or expanding on the most important strategic goals for the State.



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Goals

- *Freight Connectivity, Mobility & Accessibility*
- *Safety & Security*
- *Sustainability & Environmental Stewardship*
- *Economic Vitality*
- *System Management, Operations & Maintenance*



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Goals

Freight Connectivity, Mobility & Accessibility

- ❖ **MAP-21:** Reduce congestion on the freight transportation system
- ❖ **Delmarva Focus:** Enhance freight mobility through broader transportation improvements that recognize the unique **seasonal or tourist-based congestion** aspects of travel to, from, and within the Delmarva Peninsula
- ❖ **Delmarva Focus:** Enhance freight network connectivity with an emphasis on the unique needs and constraints related to serving the Delmarva Peninsula as a peninsula with **limited geographical points of access**
- ❖ **Delmarva Focus:** Enhance opportunities for accessing and utilizing the freight transportation network on the peninsula through **strategic multimodal infrastructure improvements**

Goals

Safety & Security

- ❖ **MAP-21:** Improve the safety, security, and resilience of the freight transportation system
- ❖ **Delmarva Focus:** Support improvements that recognize the criticality and **regional / national freight significance of the I-95 / Northeast Corridor**
- ❖ **Delmarva Focus:** Support improvements that enhance **system redundancy** with respect to the I-95 / Northeast Corridor and with respect to the geographical point of access limitations of the peninsula
- ❖ **Delmarva Focus:** Support improvements that recognize the presence and unique needs of the **region's governmental, military, or international shipping** communities

Goals

Sustainability & Environmental Stewardship

- ❖ **MAP-21:** Reduce adverse environmental and community impacts of the freight transportation system
- ❖ **Delmarva Focus:** Support improvements that recognize the unique relationships between consumer demand and commodity flows on the peninsula with respect to **seasonal or tourist-based variability and quality of life**
- ❖ **Delmarva Focus:** Support efforts to improve the flexibility and resiliency of the freight transportation system to meet **changing global energy demands or sources**

Goals

Economic Vitality

- ❖ **MAP-21:** Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness
- ❖ **Delmarva Focus:** Support efforts to preserve **existing multimodal freight-transportation infrastructure** to assure mode choice & competition between modes
- ❖ **Delmarva Focus:** Support efforts to preserve **land use compatibility** adjacent to freight infrastructure throughout the peninsula
- ❖ **Delmarva Focus:** Support strategically-located or planned improvements that recognize the existing and projected **population concentrations, employment and development, and related secondary traffic / population-based freight patterns**
- ❖ **Delmarva Focus:** Support efforts that address **changes in economic activities** (local, regional, national, or global) or **growth in targeted industries**
- ❖ **Delmarva Focus:** Support efforts to enhance **access to/from major regional ports** and international shipping opportunities in multiple surrounding states

Goals

System Management, Operations & Maintenance

- ❖ **MAP-21:** Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system
- ❖ **MAP-21:** Improve the state of good repair of the freight transportation system
- ❖ **Delmarva Focus:** Enhance policies and opportunities related to truck parking & rest areas, weight limits, taxes, tolls, or other **motor freight specific issues**
- ❖ **Delmarva Focus:** Support efforts to address physical improvements on **secondary roads and bridges** critical to motor freight access throughout the peninsula
- ❖ **Delmarva Focus:** Support efforts to maintain or enhance dredging operations and the identification and preservation of **adequate spoil sites for dredged materials**

Planned Projects Review

❖ Freight-Related Studies (*Map + Project List*)

- Delaware State Rail Plan (2011)
- Delaware Freight and Goods Movement Plan (2004)
- Maryland Statewide Freight Plan (2009)
- Northeast Corridor Infrastructure Master Plan

❖ Delaware LRTP (*Project List*)

❖ Pending – MD LRTP or related

❖ Pending – VA LRTP or related

Completed?

Pending / Programming?

Pending / Aspirations?

Not Applicable?



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3. *Scenario Planning*

- *Performance Based Approach*
- *Economic Evaluation*
- *Cube Cargo Evaluation*
- *Potential Scenarios*



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Scenario Planning

Performance Based Approach

- ❖ Include performance measures to guide freight-related transportation decisions
- ❖ Retain consistency w/ the National Freight Strategic Plan
- ❖ Tie each measure to each goal to indicate how well the system is achieving that goal
- ❖ Reflect measures of conditions of infrastructure and of service performance
- ❖ Reflect outcomes that are directly important to system users and the general public
- ❖ Avoid measures that are not of direct importance to users or the general public

Scenario Planning

Economic Evaluation

- ❖ Qualitative screening relative to scenario-specific issues
 - Review of low-medium-high levels of impact
 - Review of global factors or unknowns vs. potential for “missed” opportunities
- ❖ Address industry-specific impacts of changes in:
 - Freight costs, availability, reliability, and time
 - Related impacts on jobs and payrolls
 - Secondary / multiplier effects on jobs and payrolls
 - Secondary / multiplier effects on fiscal and tax impacts
- ❖ Add'l research: cost of goods movement as a % of overall costs
- ❖ Add'l research: industry-specific elasticities (e.g., tourist impact vs. congestion)

Scenario Planning

Cube Cargo Evaluation

- ❖ Potential Measures of Effectiveness include:
 - Travel Time to Market by Mode
 - Level of Service
 - Delay
 - Transportation Cost by commodity and mode
 - Emissions
 - Truck Volumes on Roadways
 - Freight Demand by Mode
- ❖ Add'l research: Cost assumptions for freight movement by mode

CUBE Cargo Modeling

❖ Travel Demand Model Datasets

- *DVRPC*
- *BMC*
- *WASHCOG*
- *South Jersey TPO*
- *Hampton Roads*
- *Richmond*
- *Peninsula Model*



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Freight TAZs

❖ Coarse and Fine detail levels

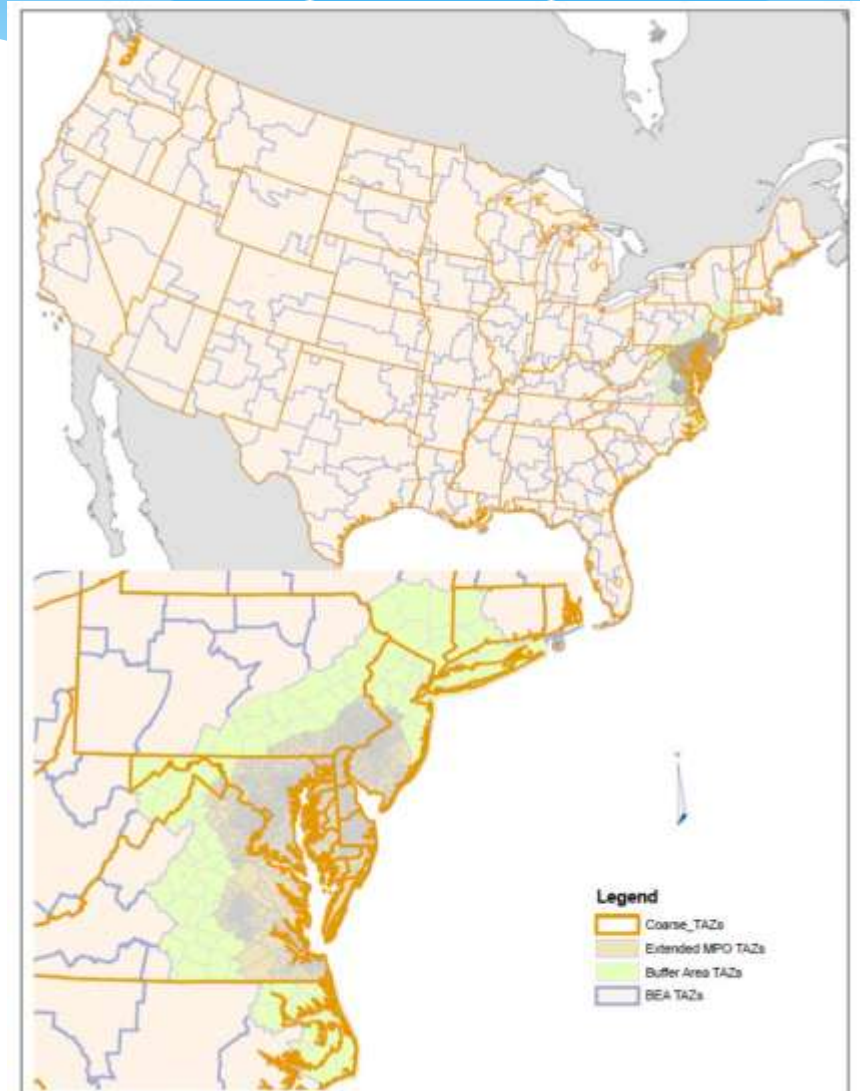
- *First modeled nationwide at the coarse level, then distributed to Fine TAZs*
- *Fine TAZs provide “cost” for coarse zone modeling*

❖ Fine TAZs :

- *Delmarva Peninsula: Peninsula TAZs*
- *Adjacent MPOs: census tract*
- *Buffer Area: county*
- *Out of Buffer Area: BEA Economic Area*

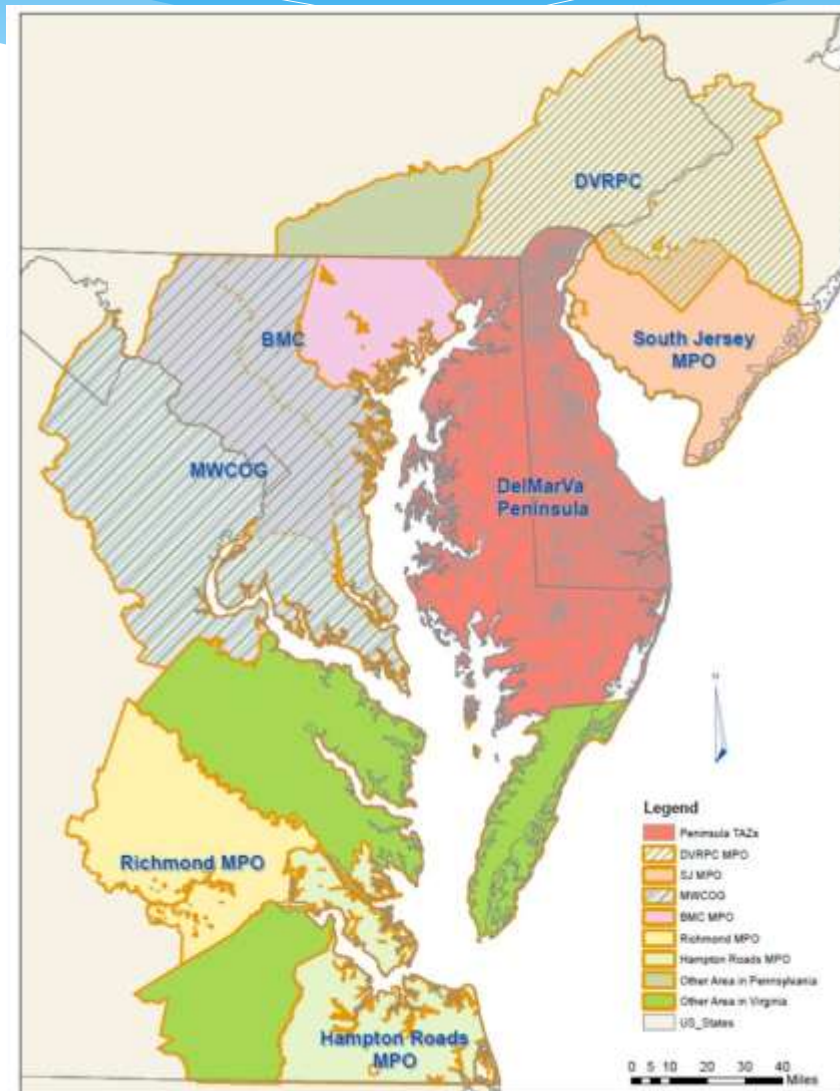
❖ Coarse TAZs:

- *Delmarva Peninsula: County*
- *Out of Peninsula: State*



Adjacent MPOs

- ❖ Delmarva Peninsula Model, plus...
- ❖ 6 adjacent MPO's and corresponding travel demand model areas
- ❖ Some MPO model overlap
- ❖ Additional counties added to span MPO model gaps in PA and VA



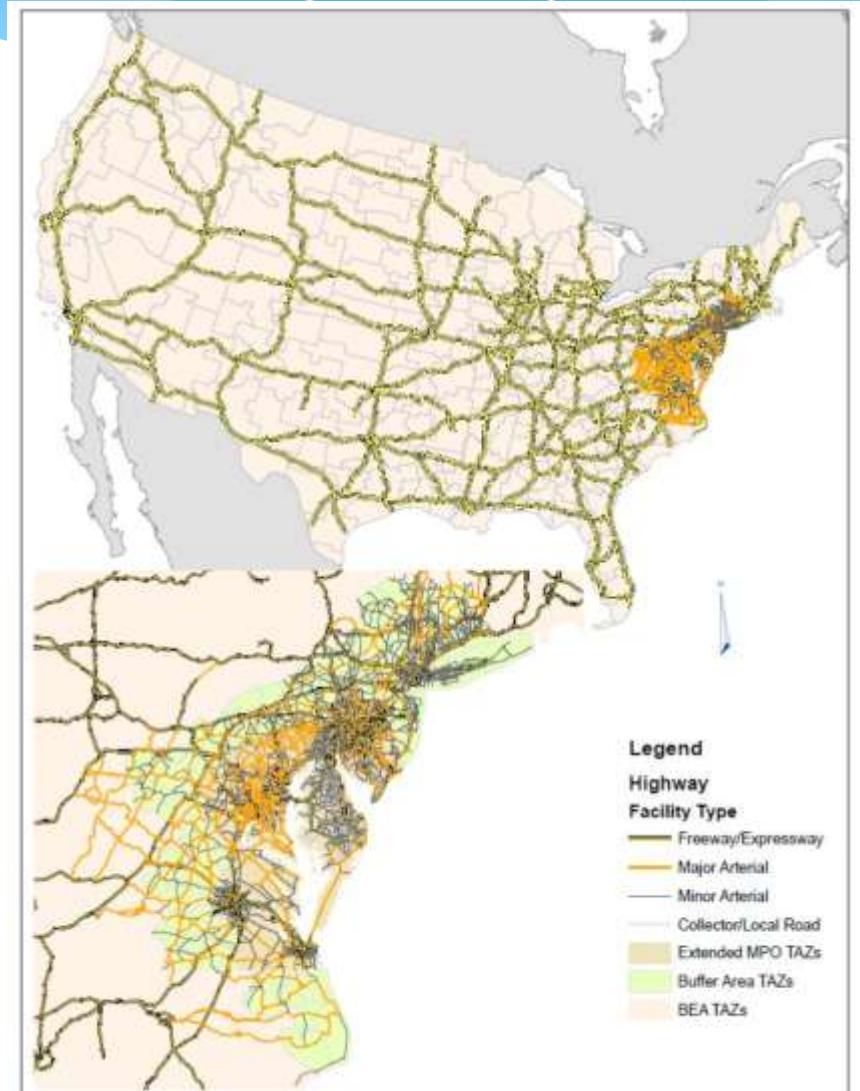
Buffer Area

- ❖ Based on IHS Transearch Regions
- ❖ 6 BEA's
- ❖ Additional counties added to span gaps between:
 - *Washington-Baltimore-Northern Virginia*
 - *Philadelphia-Camden-Vineland*



Highway Network

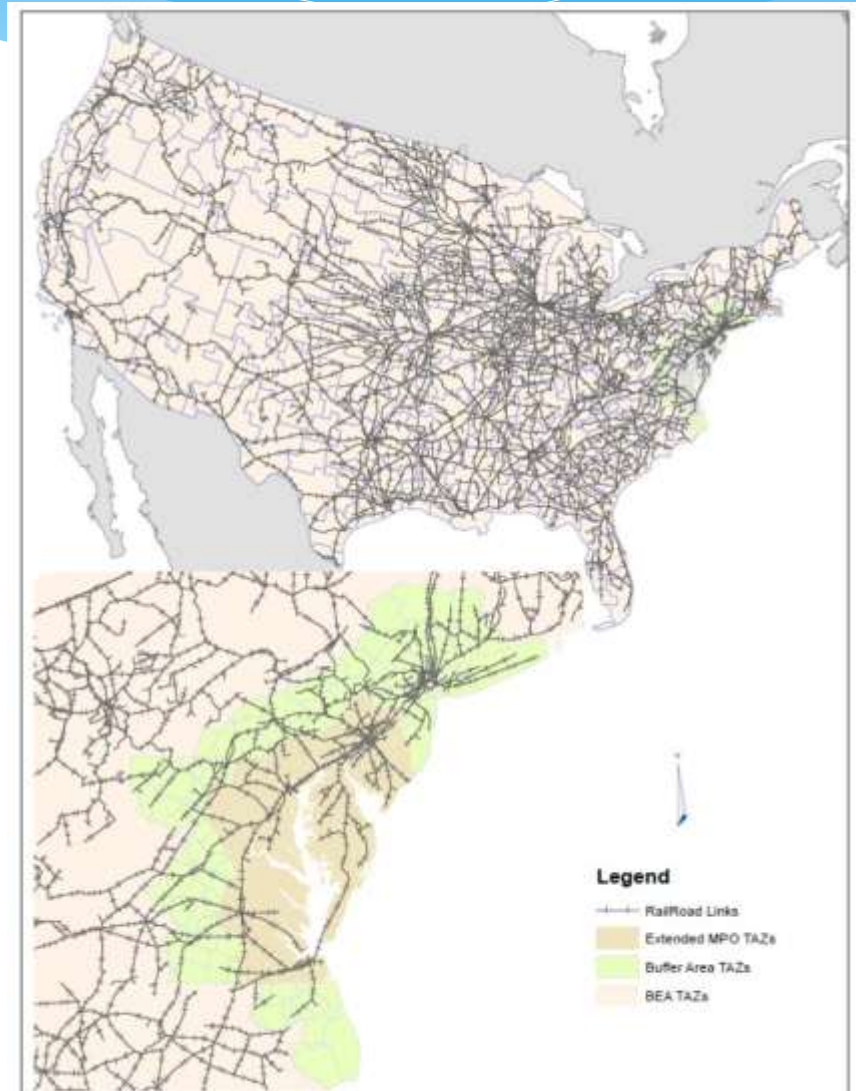
- ❖ 3 highway detail levels
- ❖ Delmarva Peninsula:
 - *passenger car model highway network*
- ❖ Adjacent MPO and Buffer Areas:
 - *Interstate, US, and state highways*
 - *Necessary roads for network connection*
- ❖ Remaining Model Area:
 - *Interstate Highways*
- ❖ Source:
 - *National Highway Planning Network (NHPN)*



Rail Network

❖ Source:

- *Center for Transportation Analysis*



Potential Scenarios

- *Factors to React to*
- *Factors to Influence*



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Potential Scenarios

Factors to React to...

Rail Service Loss

Port Expansion or Market Shifts

Post-Panamax Impacts

Inland Waterway Loss

Truck Transportation Costs

Energy Market Trends (e.g., Coal, Oil)

Fulfillment Services Trends

Factors to Influence...

Rail Service Efficiencies

Intermodal Infrastructure

Port Access Enhancements

Infrastructure Preservation

Truck Transportation Policies

Freight Network Connectivity

Land Use Preservation

4. Freight Study Forum

- *Establish Regional Advisory Group*
- *Upcoming 5/1/2013 Meeting*

MAP 21 (Section 1117): Establish a state freight advisory committee consisting of a representative cross-section of public and private sector freight stakeholders, including representatives of ports, shippers, carriers, freight-related associations, the freight industry workforce, the transportation department of the state, and local governments.



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Freight Study Forum

Committee Roles per MAP-21 Section 1117:

- ❖ Advise the State on freight-related priorities, issues, projects, and funding needs;
- ❖ Serve as a forum for discussion of State decisions affecting freight transportation;
- ❖ Communicate and coordinate regional priorities with other organizations;
- ❖ Promote the sharing of information between the private and public sectors on freight issues
- ❖ Participate in the development of the State's Freight Plan.

5. Next Steps

TASK 1 – Outreach & Data Collection

TASK 2 – Projections & Analysis

TASK 3 – Planning Scenarios & Sensitivity Analysis

TASK 4 – Results & Recommendations



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Next Steps

