#### NATIONAL CAPITAL REGION FREIGHT PLAN

#### Briefing

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Transportation Planning Board Meeting June 15, 2016



National Capital Region Transportation Planning Board

Agenda Item 8

## **The NCR Freight Plan...**

- Reflects the policy priorities of the TPB
- Highlights freight's importance to the regional economy
- Sets the stage for freight to be considered in the CLRP and all other regional planning activities



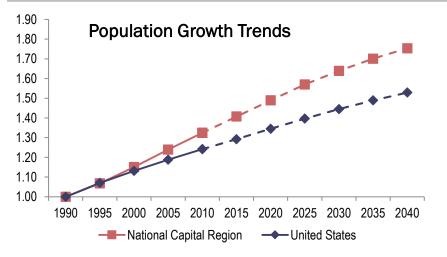
## **The NCR Freight Plan**

#### Two separate documents:

Full Document	Executive Summary
<ul> <li>Seven sections plus Appendices</li> <li>Introduction</li> <li>The Multimodal Freight System</li> <li>Freight Demand</li> <li>Freight Trends and Issues</li> <li>Regional Freight Policies</li> <li>National Capital Region Projects Important to Freight</li> <li>Recommendations and Next Steps</li> </ul>	<ul> <li>Summary review of the full document</li> <li>Summary information from sections of the Plan</li> <li>No project lists or appendices</li> </ul>
117 pages	24 pages
Custom template (final version to utilize new TPB report template)	New TPB report template



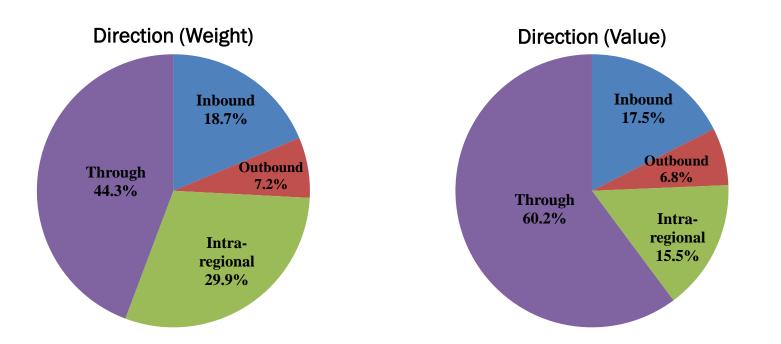
#### **People and Businesses Drive Freight Demand**





- People demand goods and therefore freight
- The Region is growing at a faster rate than the nation overall
- People with higher income generate greater demand for freight
- Regional median household income is 70% higher than the national average
- Every marginal dollar of GDP generates an additional 0.38 tonmiles of freight activity

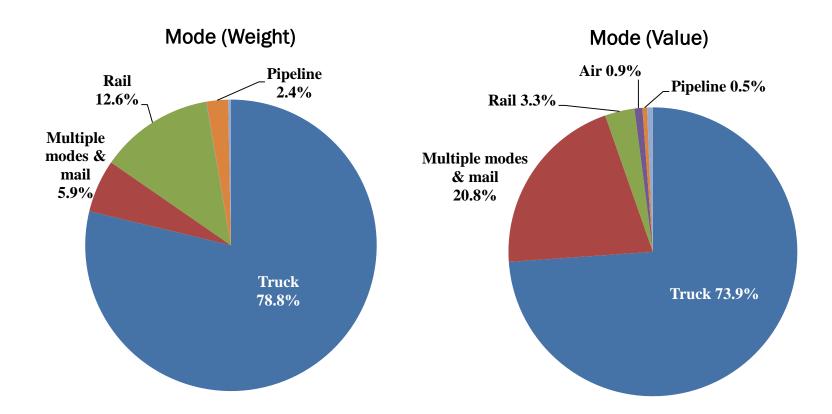
## **Direction of Freight Movement**



• The Region receives over 2 <sup>1</sup>/<sub>2</sub> times more inbound freight than it produces outbound freight.



### **Mode of Freight Movement**





## The Freight Transportation System

- **Roadways:** more than 16,000 miles of roadways carrying more than 300 million tons of goods annually
- **Railroads:** two Class I railroads –operating over 250 miles of mainline track and carrying more than 47 million tons of regional freight annually.
- Airports: two major cargo airports
- **Pipelines:** an extensive pipeline network that carries more than nine million tons of freight per year
- Intermodal Connectors: short roadway segments that tie rail terminal facilities, airports, and pipeline terminal facilities to the National Highway System



- Based on input from October 2015 TPB work session
- Collectively address all RTPP Goals
- Collectively address all National Freight Goals
- Freight rail and hazardous materials issues are emphasized in 5 of the 17 policy statements



## **Topic Areas Addressed in Freight Policies**

- Prioritized advancement of freight
   projects
- State of good repair
- Best practices
- Bottlenecks
- Rail options
- Environmental justice
- Economic development
- Activity centers
- Safety education, enforcement, and engineering

- Hazardous materials routing
- Hazardous materials information sharing
- Collaboration regionally and with the private sector
- Performance measurement
- Sustainability
- Land use/rail capacity collaboration
- New technologies and emerging business practices



# **Freight Plan Recommendations**

- Active freight subcommittee including private sector participation
- "Freight Around the Region" outreach
- Regional freight forums
- Data analysis and sharing
- Coordination with partners/ stakeholders
- MAP-21/FAST activities including performance measurement

- Collaboration with local jurisdictional planning including infrastructure and economic development considerations
- Monitoring of autonomous and connected vehicle developments
- Monitoring of industry trends
- Progress tracking





• Action for approval at the July 20 meeting (tentative)



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### **Background Slides**

The following slides are background material and will not be covered during the presentation...



## Why do Freight Planning?

- Freight transportation is vital to the economy of the Region and to the quality of life of its residents
- Hundreds of millions of tons of freight worth \$ billions move over the Region's roadways and railways and pass through its airports each year
- Growing employment, population, and wealth will continue to drive demand for freight
- Economic growth will result in greater quantities of goods moving into, out of, and through the Region
- Evolving supply chain practices, expansion of the Panama Canal, and increasing urbanization are some of the factors impacting freight flows
- Ensuring the safe transport of freight is a primary concern of the TPB



## **Top Commodities**

#### Top Commodities by Weight

Rank	Commodity Class	Total (thousands of tons)	Cumulative Share
1	Gravel & crushed stone	41,277	19%
2	Waste & scrap	32,319	35%
3	Nonmetallic mineral products	25,212	47%
4	Petroleum products	14,421	53%

#### Top Commodities by Value

Rank	Commodity Class	Total (millions of \$)	Cumulative Share
1	Electronic & electrical equip.	31,848	13%
2	Machinery	27,578	25%
3	Mixed freight	22,584	34%
4	Pharmaceutical products	19,225	42%

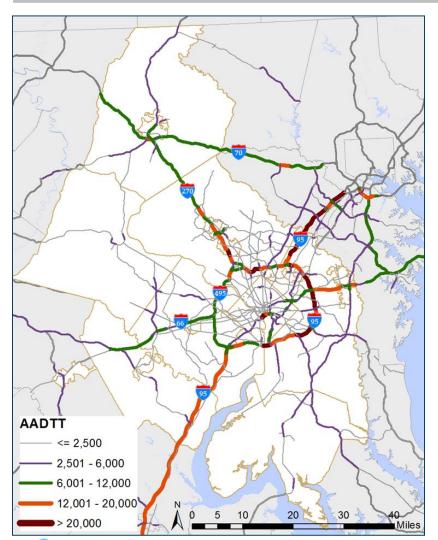


## The NCR Freight Plan...

- Builds on the 2010 edition
- Supports MAP-21 and FAST requirements
- Is a technical reference and a guide to future TPB planning activities
- Describes the role of freight in the Region
- Defines a regional freight-significant network
- Describes the drivers of freight demand and resulting freight flows
- Identifies significant freight issues
- Includes regional freight policies
- Identifies projects that are important to goods movement
- Recommends future freight planning actions



### **Freight Transportation System: Roadways**



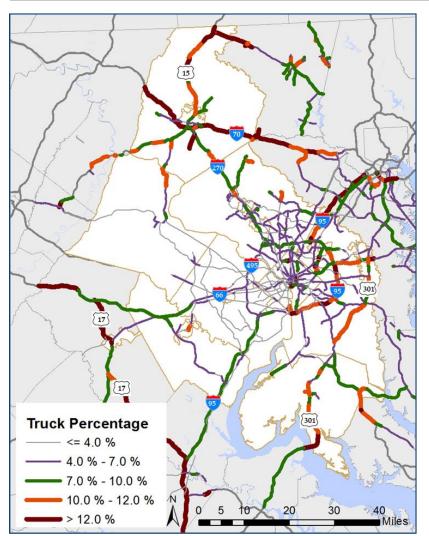
**Truck Volumes** 



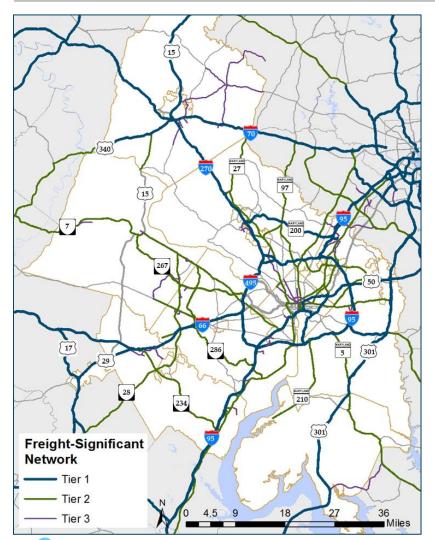
### **Freight Transportation System: Roadways**

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**Truck Percentages** 



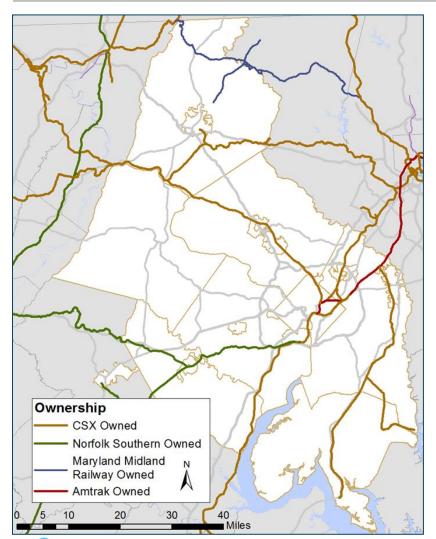
# **Freight-Significant Network**



- **Tier 1:** state-designated truck routes, interstates, and other high volume roadways
- Tier 2: allows trucks to permeate the Region and provide access to important freight generators and attractors
- Tier 3: last mile connectivity



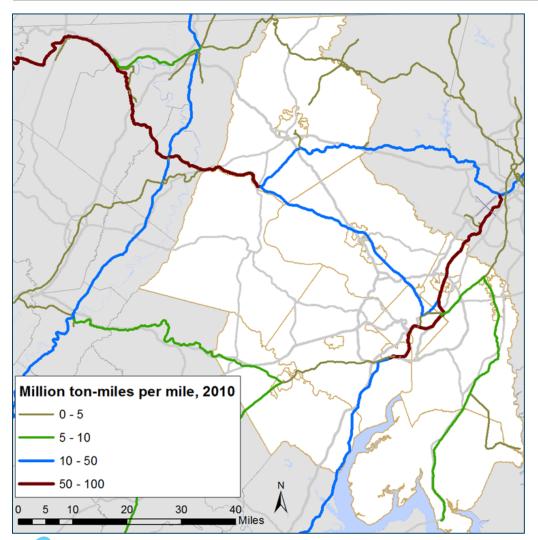
### **Freight Transportation System: Railroads**



Rail Ownership



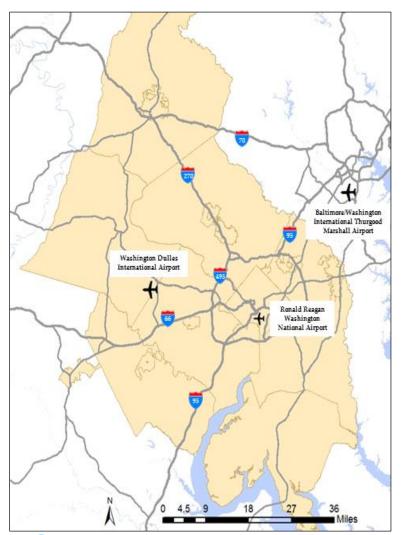
### **Freight Transportation System: Railroads**



Rail Density



## **Freight Transportation System: Airports**



- Dulles and BWI handle nearly all reported air cargo tonnage
- 23<sup>rd</sup> and 36<sup>th</sup> respectively according to ACI rankings of North American cargo airports



### **Rail Safety**

- TPB has expressed particular concerns on the topic of rail safety
  - Recent incidents such as the May 1 CSX derailment highlight the need for improved safety on the freight rail system
- The Freight Plan addresses this through the regional freight policies
- The Plan also provides an overview of the freight rail safety regulatory structure



- 1. supports the prioritized advancement of freight-related transportation projects that provide maximum value, efficiency, and safety with particular emphasis on those that improve freight access to activity centers.
- 2. supports investments that maintain a state of good repair for the Region's freight transportation system.
- 3. supports the use of best practices for safety, engineering, and maintenance, of freight-related transportation infrastructure.



- 4. supports the alleviation of roadway bottlenecks where feasible to improve travel times and reliability for trucks and passenger vehicles.
- 5. supports maximizing opportunities to expand transportation options, address roadway congestion, and reduce pollution by increasing the use of passenger and freight rail.
- 6. supports the consideration of potential social, economic, and environmental effects of freight-related programs, policies, and activities on minority populations, low-income populations, and people with disabilities.



- 7. recognizes freight's role in economic development and supports efforts to maximize the use of important economic drivers, including airports, ports, and intermodal facilities serving the Region's residents and businesses.
- 8. supports the safe and community-friendly accommodation of freight deliveries within the Region's activity centers.
- 9. supports improvements in truck safety using education, enforcement, and engineering strategies.



- 10. supports efforts to route hazardous materials away from the National Capital Region; for hazardous materials that must be transported to, from, within, and through the Region, the TPB supports the selection of the safest and most secure modes and routes.
- 11. encourages information sharing on explosive, toxic by inhalation, and radioactive materials being shipped to, from, within, and through the Region, including real-time notifications and long-term planning information.
- 12. supports robust first responder training and exercise activities regarding freight in general and hazardous materials transport in particular.



- 13. supports collaboration among agencies and with the private sector on freight planning and operations concerns to support mutual goals.
- 14. supports the proactive analysis of freight-related performance measures in the context of overall regional performance measurement to identify lessons learned and promote regional goals.
- 15. promotes sustainable methods of freight operations that are sensitive to environmental, cultural, and community resources.



- 16. encourages collaboration among transportation planners, land use planners, private railroads, elected officials, and other stakeholders to find creative ways to facilitate community-beneficial land use development (residential, commercial, or industrial as appropriate) while providing space for necessary future rail expansion along key rail corridors.
- 17. supports the review and study of new freight-related technologies, emerging business practices, and evolving commodity mixes and mode shares to advance regional goals.



# Actions Related to Maintaining and Strengthening the Regional Freight Planning Process

- Continue to Support the TPB Freight Subcommittee
- Maintain and Strengthen Private-Sector Participation in the TPB Freight Subcommittee
- Create Opportunities to Hold Joint Meetings with Other TPB Subcommittees
- Develop "Freight Around the Region" Brochures in Coordination with Member Jurisdictions



Actions Related to Maintaining and Strengthening the Regional Freight Planning Process (continued...)

- Organize Periodic Regional Freight Forums
- Collect and Analyze Freight Data and Make Available to Member Jurisdictions and the Public
- Continue Coordination with Federal, State, Local, and Private-Sector Freight Partners
- Coordinate TPB's MAP-21/FAST Freight-Related Activities Including Performance Measures



Actions Related to Maintaining and Strengthening the Regional Freight Planning Process (continued...)

- Identify and Communicate Freight-Related Infrastructure Issues to Member Agencies to Address in their Planning and Programming Activities
- Strengthen Relationships with Local Jurisdiction Planners
- Highlight Economic Development Aspects of Freight with Local Jurisdiction Planners



#### **Strategic Regional Freight Planning Activities**

- Identify and Communicate Freight-Related Infrastructure Issues to Member Agencies to Address in their Planning and Programming Activities
- Strengthen Relationships with Local Jurisdiction Planners
- Highlight Economic Development Aspects of Freight with Local Jurisdiction Planners
- Monitor Developments of Autonomous and Connected Freight Vehicles



#### Strategic Regional Freight Planning Activities (continued...)

- Monitor Key Economic and Industry Trends Impacting Goods Movement
- Monitor the Development of New and Emerging Freight-Relevant Data Sources and Incorporate them into Transportation Planning Activities as Appropriate
- Provide Information to the TPB and Freight Stakeholders on the Status or Progress on this Plan's Identified Freight Policies When Such Information Becomes Available

