NATIONAL CAPITAL REGION FREIGHT PLAN

Briefing

Jon Schermann Transportation Planner

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



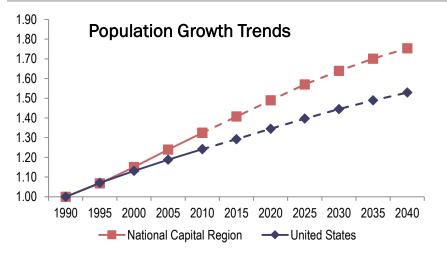
The NCR Freight Plan

Two separate documents:

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



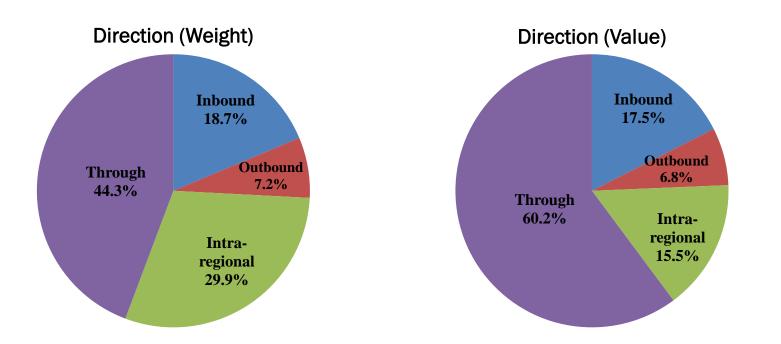
People and Businesses Drive Freight Demand





- 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

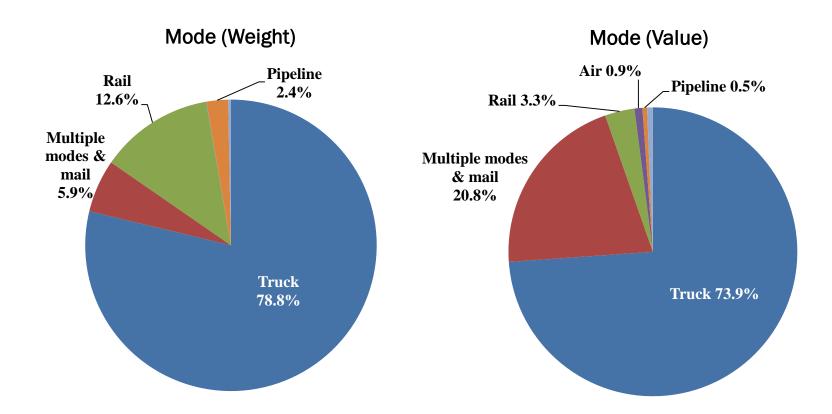
Direction of Freight Movement



• The Region receives over 2 ¹/₂ 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)



Jon Schermann

Transportation Planner (202) 962-3317 jschermann@mwcog.org

mwcog.org/TPB

Metropolitan Washington Council of Governments 777 North Capitol Street NE, Suite 300 Washington, DC 20002



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%

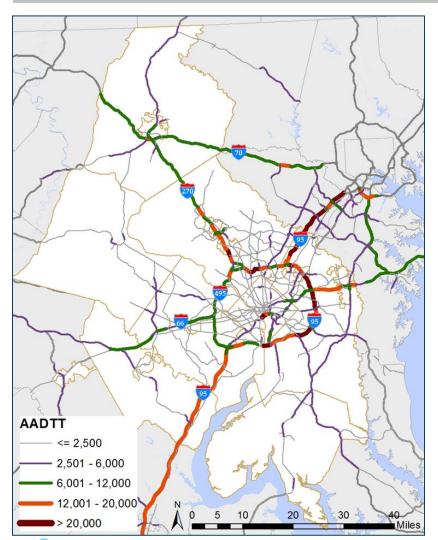


The NCR Freight Plan...

- 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



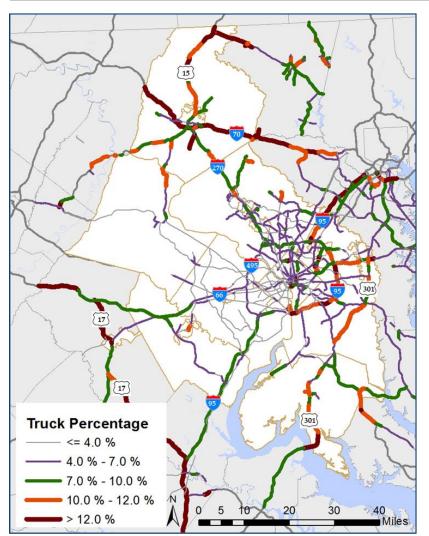
Truck Volumes



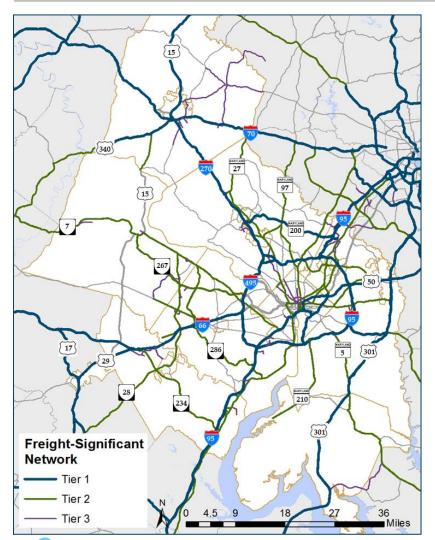
Freight Transportation System: Roadways

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Truck Percentages



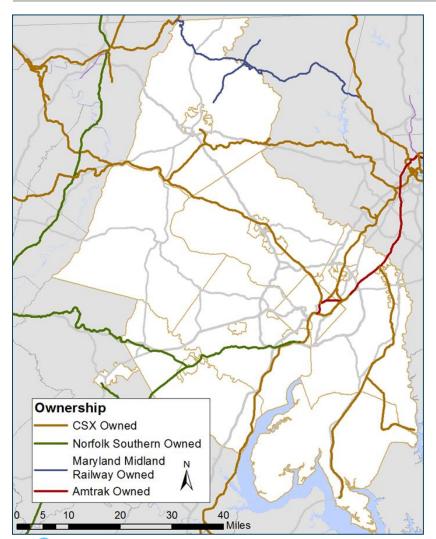
Freight-Significant Network



- **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



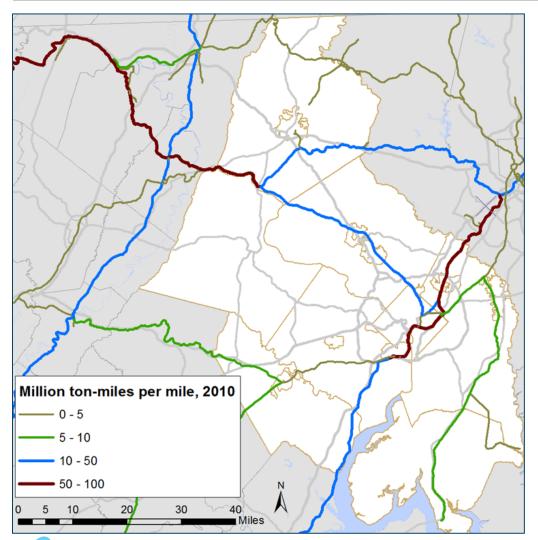
Freight Transportation System: Railroads



Rail Ownership



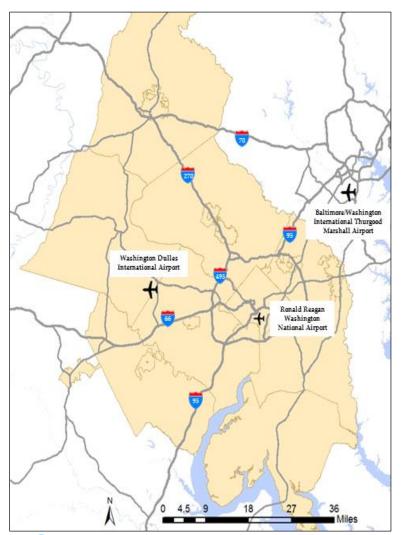
Freight Transportation System: Railroads



Rail Density



Freight Transportation System: Airports



- Dulles and BWI handle nearly all reported air cargo tonnage
- 23rd and 36th 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

