

NATIONAL CAPITAL REGION FREIGHT PLAN

Briefing

Jon Schermann
Transportation Planner

Citizens Advisory Committee
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Presentation Items

- Overview of Freight Plan status and next steps.
- NCR Freight Overview.



Freight Plan Status and Next Steps

- Full document and Executive Summary
- Executive Summary in new TPB Report Template
- Final version of the full document will be in the new Template

- Informational item at June 15 Board Meeting
- Action item at July 20 (or later) Board Meeting



The NCR Freight Plan

Two separate documents:

Full Document	Executive Summary
<p>Seven sections plus Appendices</p> <ul style="list-style-type: none">• 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	<p>Summary review of the full document</p> <ul style="list-style-type: none">• 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



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

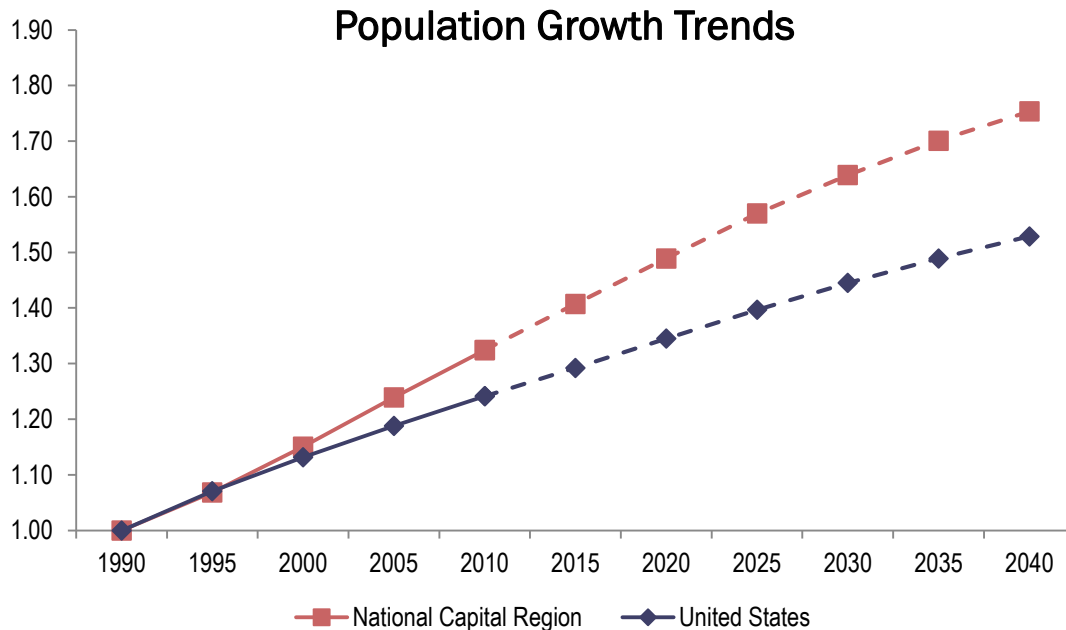


The NCR Freight Plan...

- 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



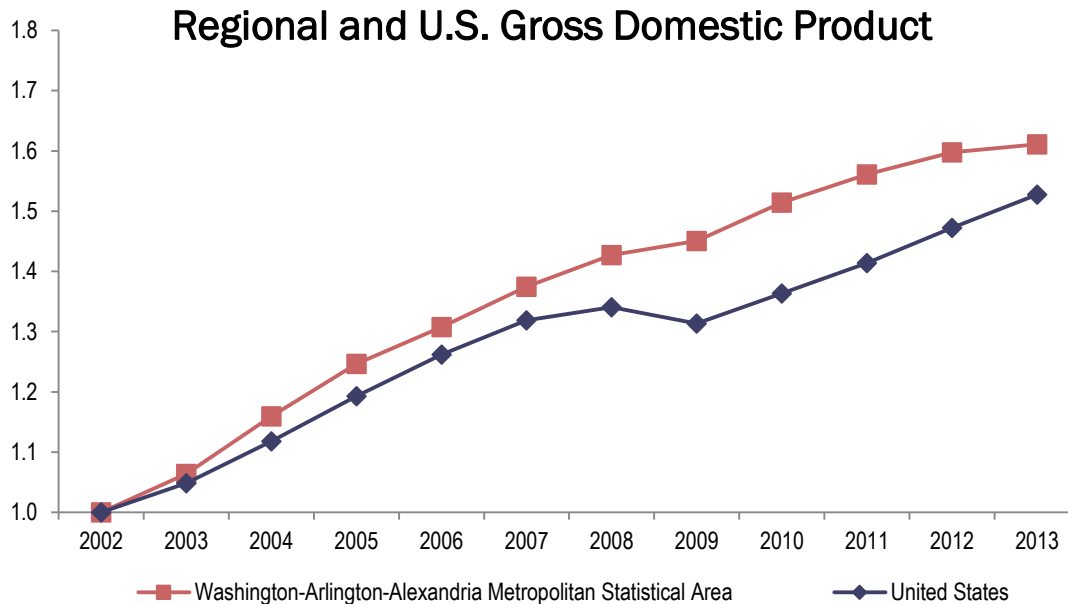
People Drive Freight Demand



- Each new resident creates additional demand for goods and therefore freight.
- Households with higher disposable income generate greater demand for freight.
- The Region is growing at a faster rate than the nation overall.
- Regional median household income is 70% higher than the national average.



Businesses Drive Freight Demand



- There is a direct relationship between growth in economic activity and demand for freight transportation.
- Every marginal dollar of GDP generates an additional 0.38 ton-miles of freight activity.



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%

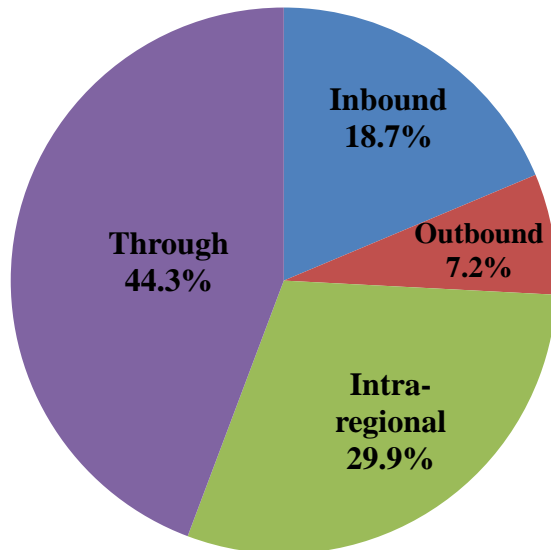
Top Commodities by Value

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%

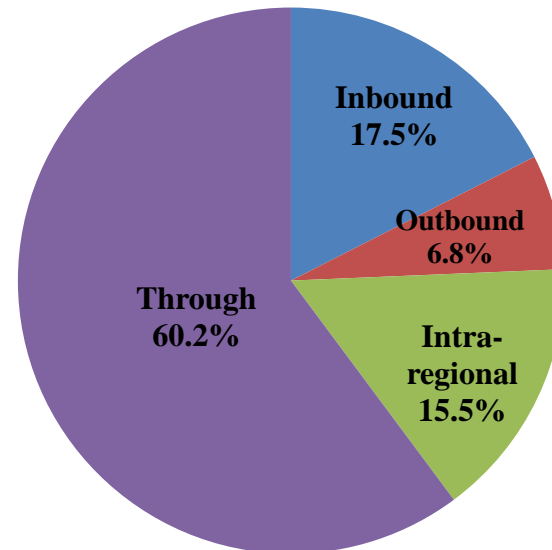


Direction of Freight Movement

Direction (Weight)



Direction (Value)

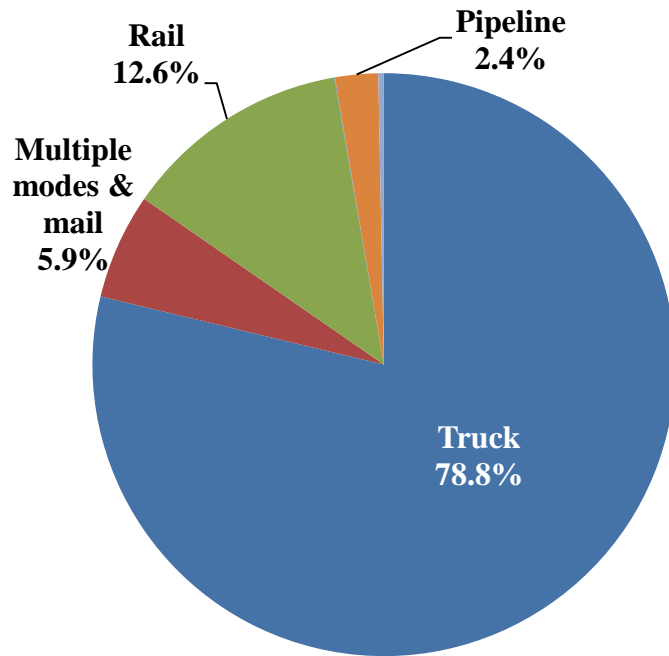


- The Region receives over 2 ½ times more inbound freight than it produces outbound freight.

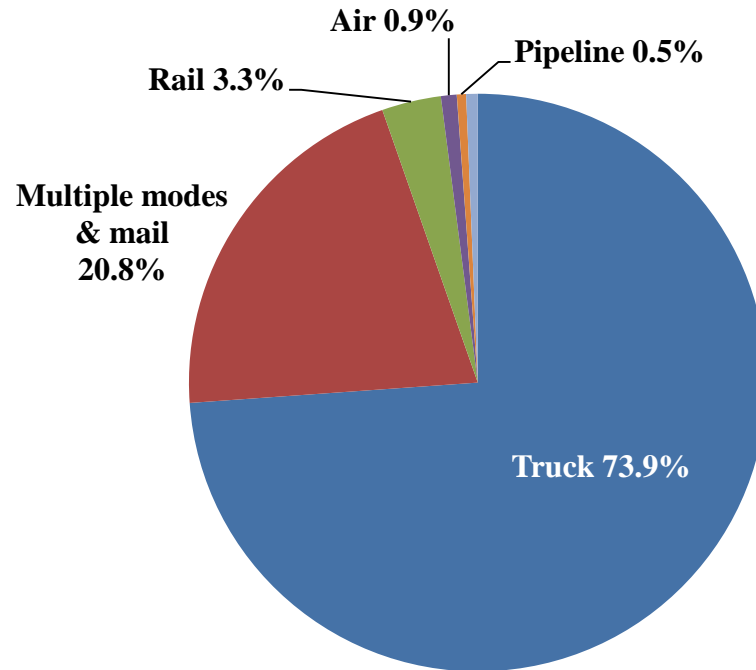


Mode of Freight Movement

Mode (Weight)



Mode (Value)

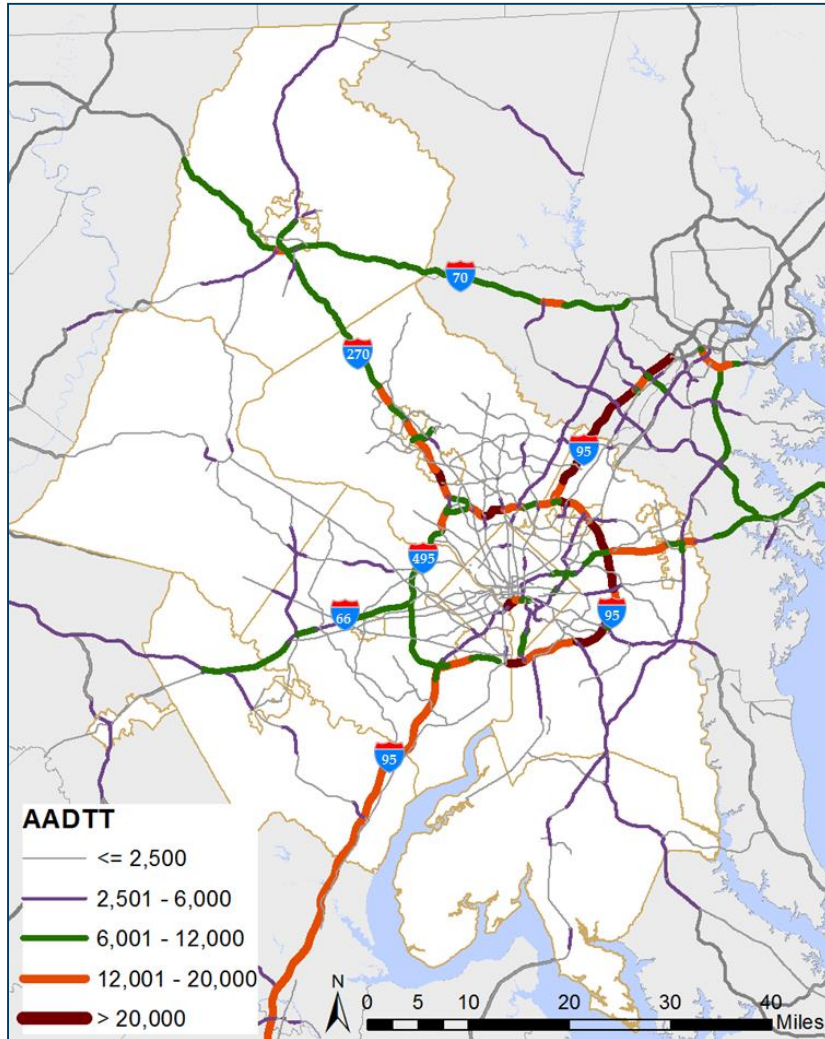


The Freight Transportation System

- **Roadways:** more than 16,000 miles of roadways carrying more than 300 million tons of goods annually.
- **Railroads:** two Class I railroads – CSX Transportation and the Norfolk Southern Corporation – operating over 250 miles of mainline track and carrying more than 47 million tons of regional freight annually.
- **Airports:** two major cargo airports – Washington Dulles International and Baltimore Washington International Thurgood Marshall.
- **Pipelines:** an extensive pipeline network that carries more than nine million tons of freight per year.
- **Intermodal Connectors:** a number of short roadway segments that tie rail terminal facilities, airports, and pipeline terminal facilities to the National Highway System (NHS).



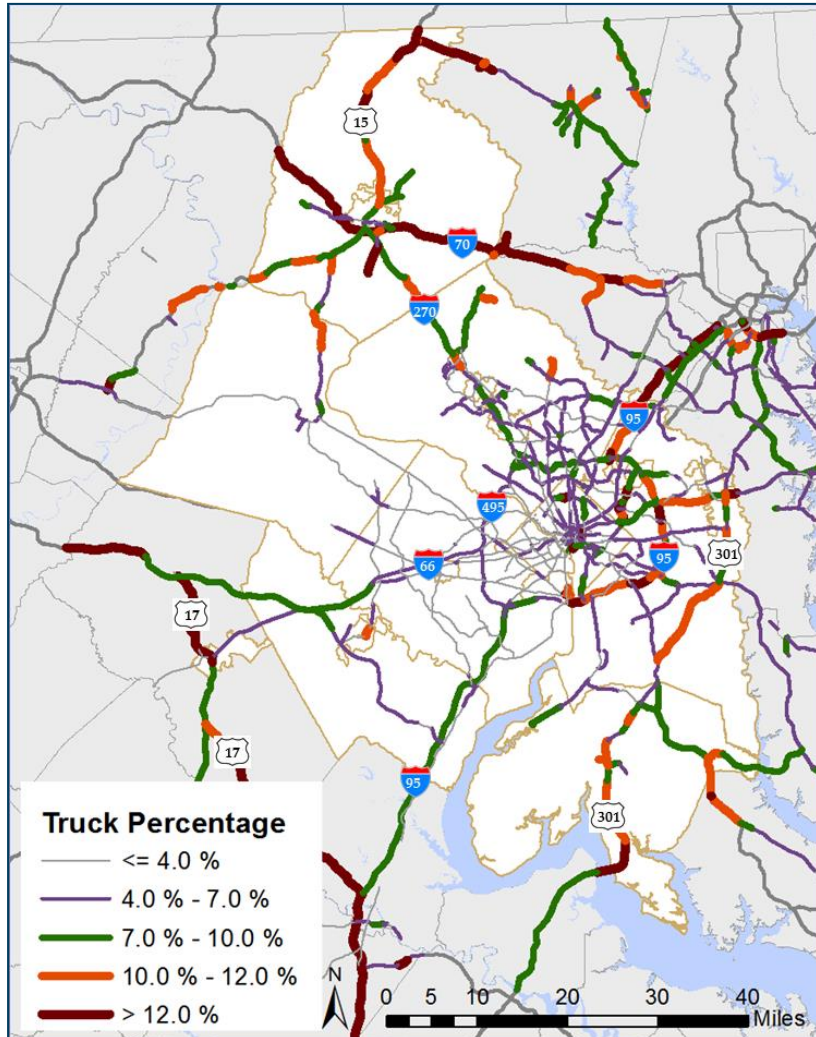
Freight Transportation System: Roadways



- Truck Volumes



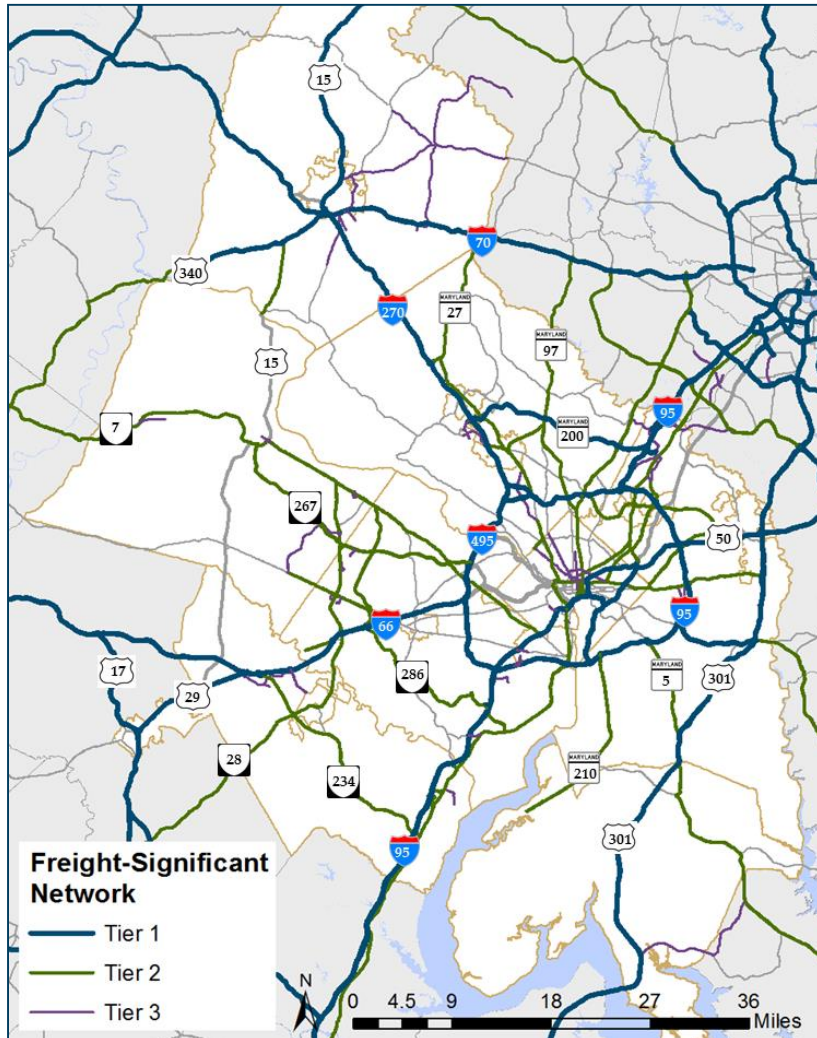
Freight Transportation System: Roadways



- Truck Percentages



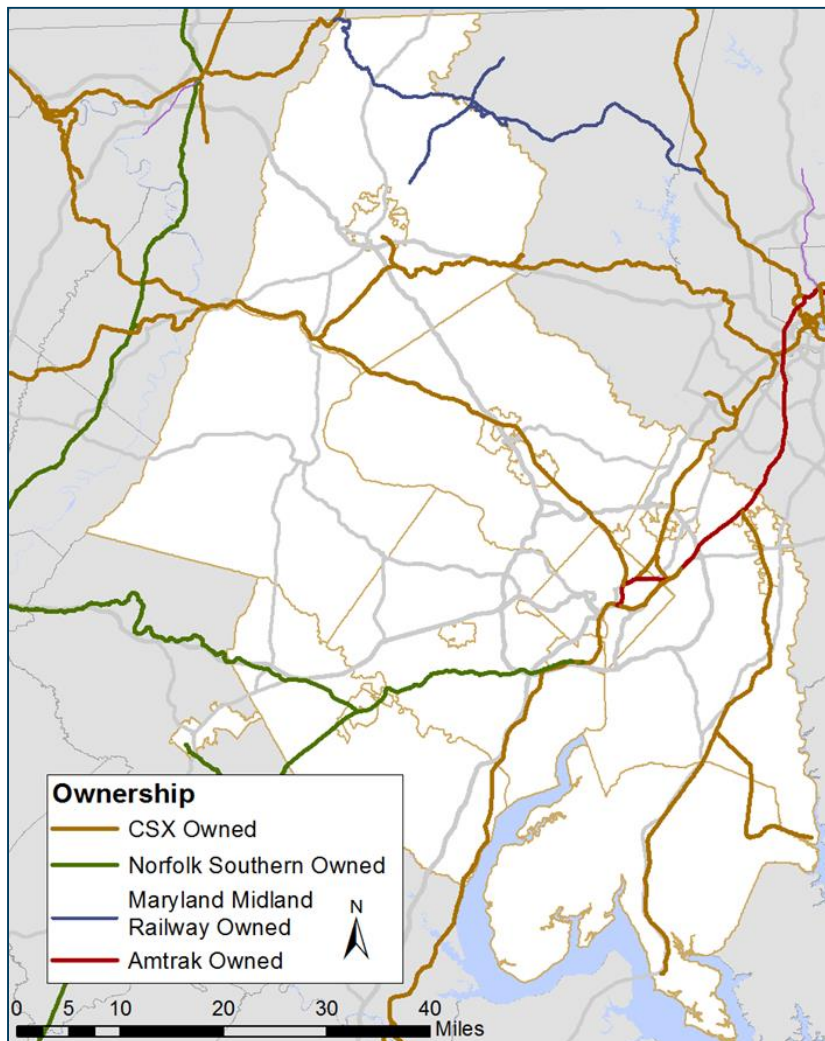
Freight-Significant Network



- **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

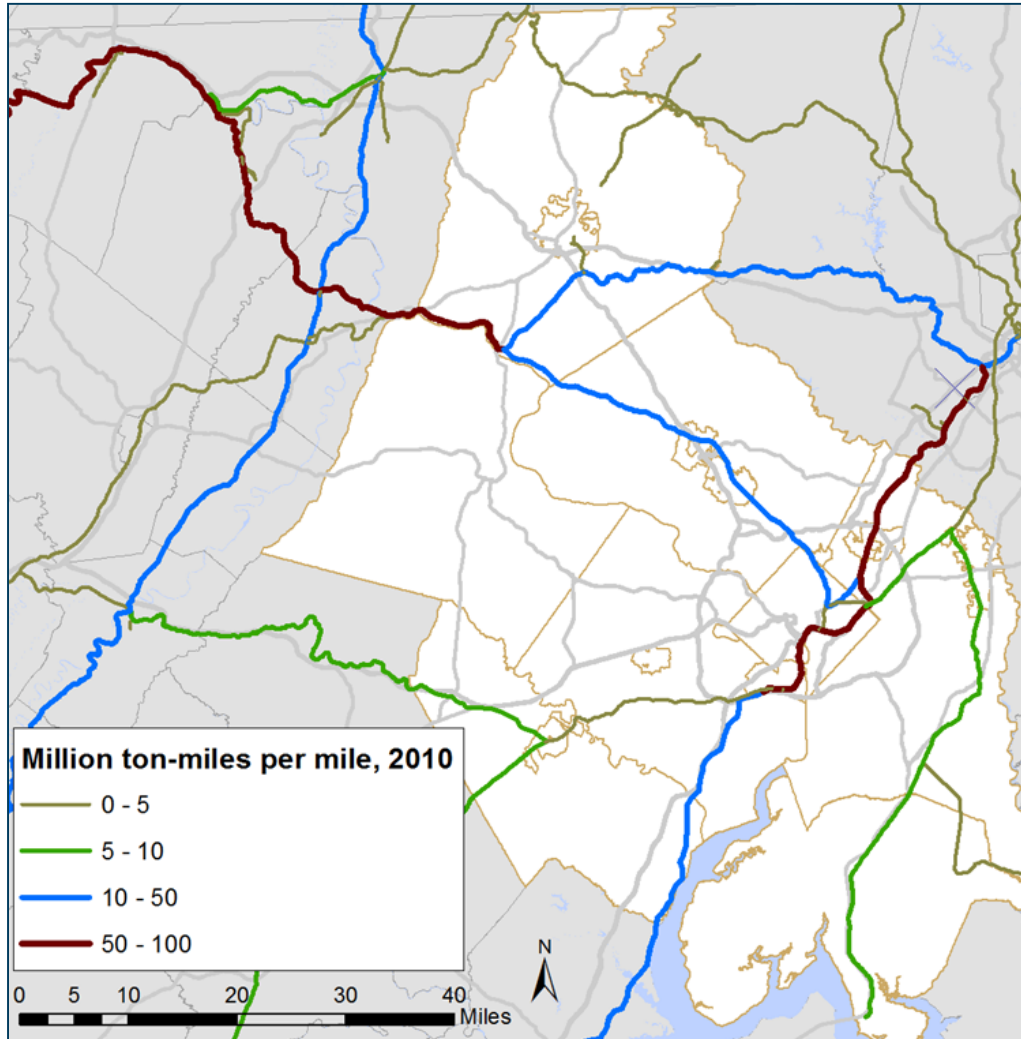


- Rail Ownership

Railroad	Class 1 Freight	Class III Freight	Passenger	Miles owned
CSX Transportation	<input checked="" type="checkbox"/>			211
Norfolk Southern Corporation	<input checked="" type="checkbox"/>			46
Maryland Midland Railway		<input checked="" type="checkbox"/>		26
Amtrak			<input checked="" type="checkbox"/>	18



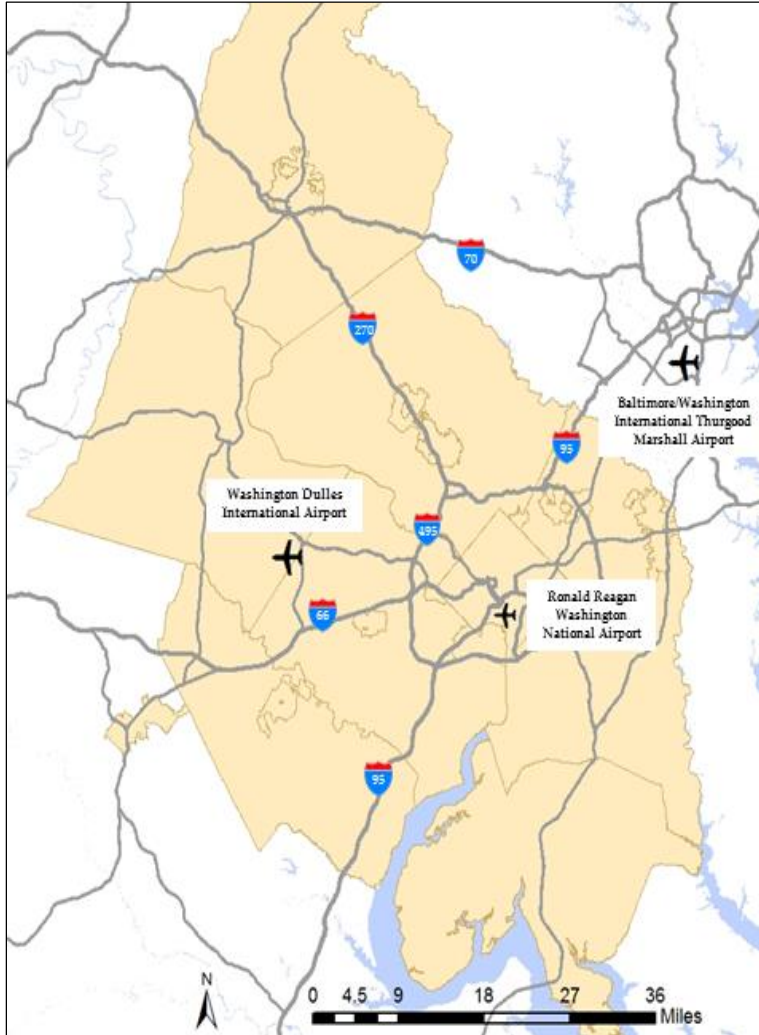
Freight Transportation System: Railroads



- 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



Freight Trends: E-Commerce

Customer demand...

Customers increasingly expect instant gratification

Less time in stores and more time shopping on the internet



Industry response...

Trend is that e-commerce share of sales is increasing

Less demand for retail space

More demand for distribution and fulfillment centers

Retailers turning brick and mortar stores into urban distribution centers



Planning considerations...

More (smaller) trucks on the road and more delivery movements

Fewer retail “sales floor” jobs and more fulfillment center jobs

More distribution and fulfillment centers



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



Jon Schermann

Transportation Planner

(202) 962-3317

jschermann@mwkog.org

mwkog.org/TPB

Metropolitan Washington Council of Governments

777 North Capitol Street NE, Suite 300

Washington, DC 20002



National Capital Region
Transportation Planning Board