### DRAFT NATIONAL CAPITAL REGION FREIGHT PLAN UPDATE

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TPB Freight Subcommittee July 6, 2023



National Capital Region Transportation Planning Board

### Agenda

- Plan review
  - Freight planning framework
  - Structure
  - Key points
  - Overview of key findings
  - Recommendations and next steps



### **Regional Freight Planning Framework**

• Highlights freight's significance to the regional economy

 Incorporates planning factors and goals identified in Visualize 2045

- Aligns with federal freight policies and regulations
- Sets the stage for freight to be considered in the CLRP and all other regional planning activities



### **Plan Structure**

- Section 1 Introduction
- Section 2 Multimodal Freight Transportation System
- Section 3 Freight Demand
- Section 4 Key Trends Influencing Freight in the Region
- Section 5 Regional Freight Issues, Challenges, and Opportunities
- Section 6 Regional Freight Policies
- Section 7 National Capital Region Projects Important to Freight
- Section 8 Recommendations and Next Steps
- Appendix

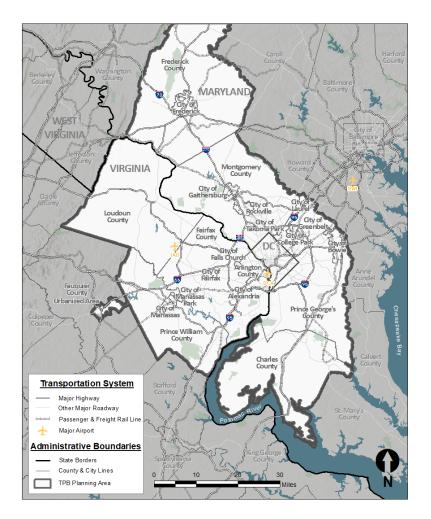


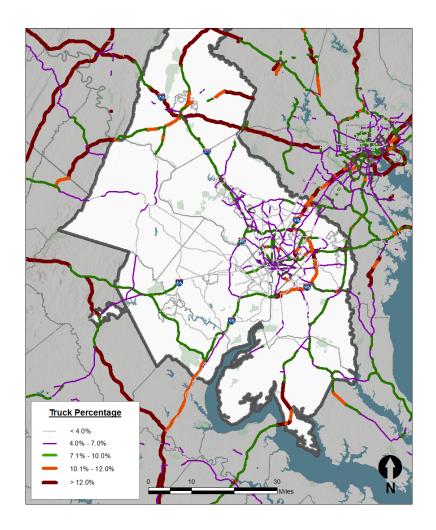
### **Key Points from the Plan**

- 1. Freight movement is shaped by regional, state-level, and federal policies, priorities, and performance measures
- 2.Commercial trucking remains the dominant freight transportation mode in the region: 73% by value and 72% by weight
- 3.Since the 2016 Freight Plan, technological trends, evolving supply chain and logistics patterns, and impacts from the COVID-19 pandemic have altered how freight is transported
- 4. Proactively managing freight movement and delivery at the regional and local levels is critical as the region's population continues to grow and demand for goods increases
- 5. Freight movement remains vital to the economy of the National Capital Region and to the quality of life of its residents



### **Regional Freight Network**

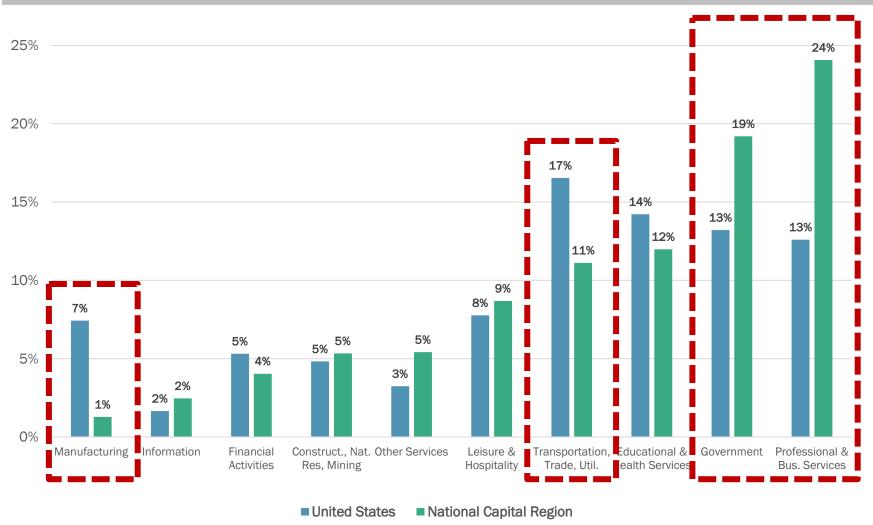






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## **Share of Employment by Industry Sector**



Source: U.S. Bureau of Labor Statistics



# **Top Commodity Types by Weight**

Rank	Commodity Class	Total (thousands of tons)	Share
1	Other petroleum products	52,427	24%
2	Gravel and crushed stone	36,903	17%
3	Non-metallic mineral products	29,172	13%
4	Waste and scrap	13,965	6%
5	Mixed freight	10,125	5%

- Outbound freight by weight in the National Capital Region increased from the 2016 Freight Plan.
- 33% of total freight by weight is inbound, 25% is outbound, and 42% is interregional.

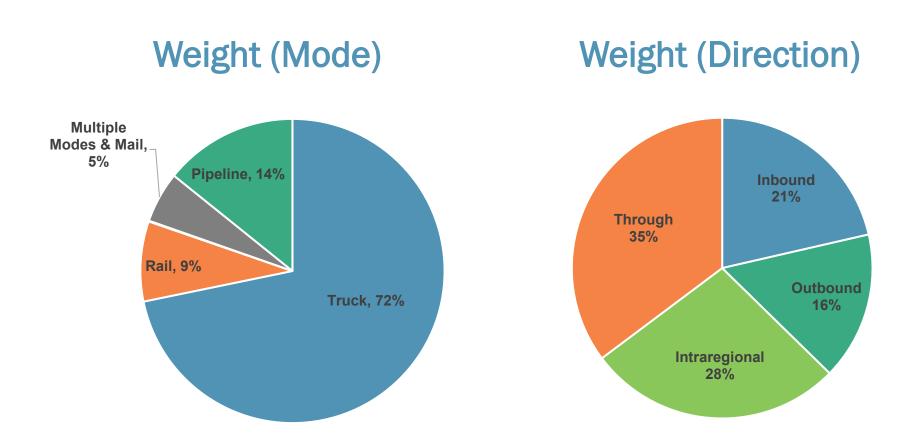


# **Top Commodity Types by Value**

Rank	Commodity Class	Total (millions)	Share
1	Mixed freight	\$43,596	17%
2	Electronic and electrical equipment	\$36,846	14%
3	Pharmaceutical products	\$23,286	9%
4	Motorized and other vehicles	\$16,207	6%
5	Miscellaneous manufactured products	\$14,877	6%



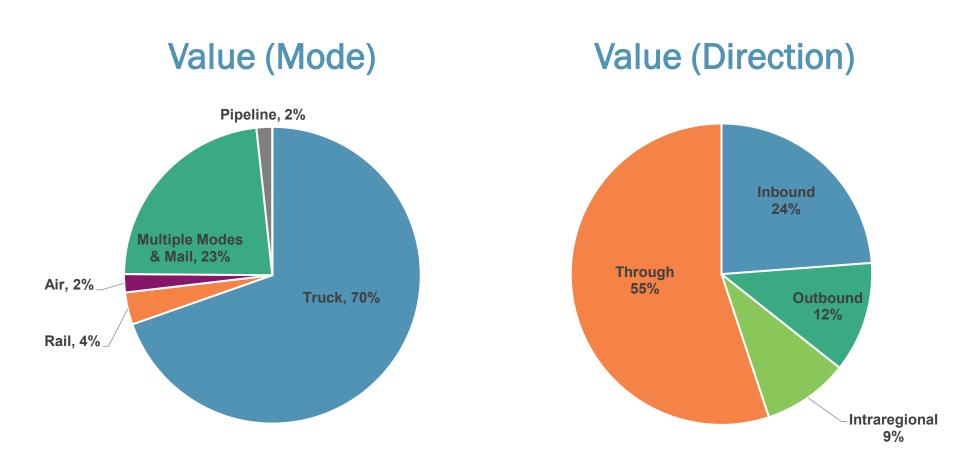
## **Regional Freight Weight**



Source: Federal Highway Administration Freight Analysis Framework, 2020



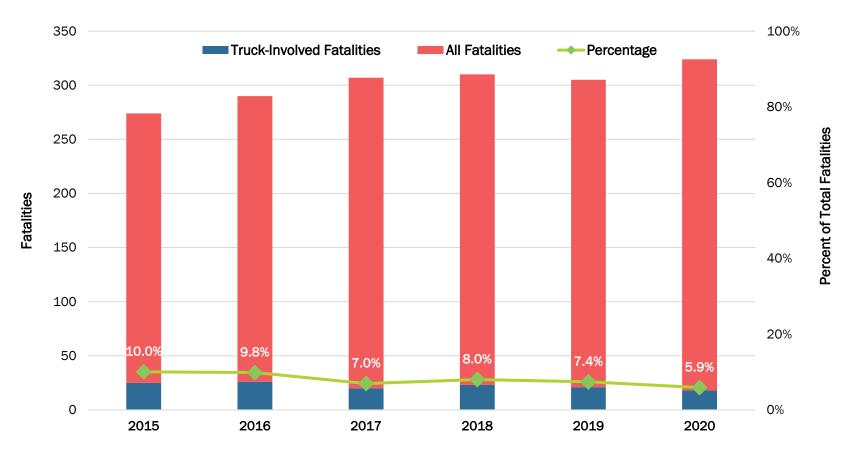
### **Regional Freight Value**



Source: Federal Highway Administration Freight Analysis Framework, 2020



## **Regional Truck-Involved Fatalities**



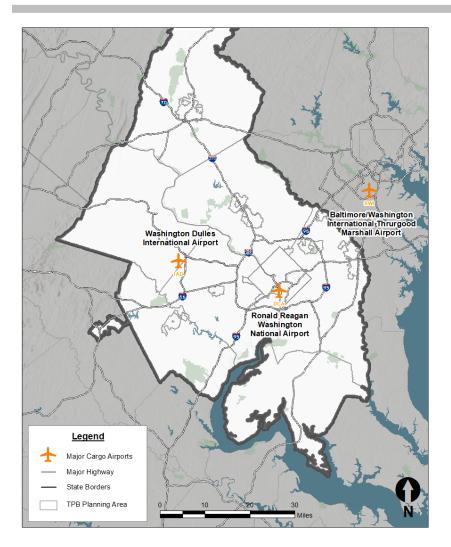
Year

Source: Fatality Analysis Reporting System, Fatality and Injury Reporting System Tool (via NHTSA)



Agenda Item 3: Draft National Capital Region Freight Plan Update July 6, 2023

### Air Cargo

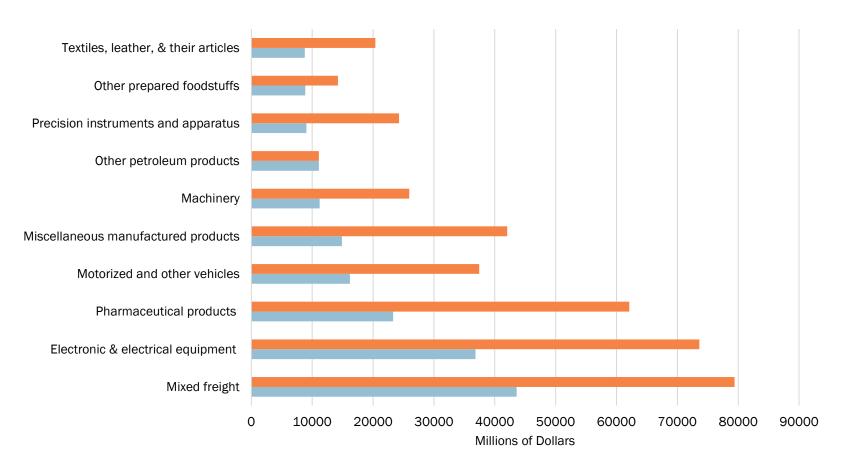


Rank	City (Airport Code)	Total Cargo
		(metric tons)
1	Memphis TN (MEM)	4,613,431
2	Anchorage AK (ANC)	3,157,682
3	Louisville KY (SDF)	2,917,243
4	Los Angeles CA (LAX)	2,229,476
5	Miami FL (MIA)	2,137,699
6	Chicago IL (ORD)	2,002,671
7	Cincinnati OH (CVG)	1,300,758
8	New York NY (JFK)	1,104,480
9	Indianapolis IN (IND)	1,013,054
10	Ontario CA (ONT)	843,852
26	Baltimore MD (BWI)	269,976
33	Washington DC (IAD)	197,917

Source: Airports Council International, 2020 Freight activity at DCA not within the top 100 U.S. airports.



### **Forecasted Growth in Regional Commodities by Value**

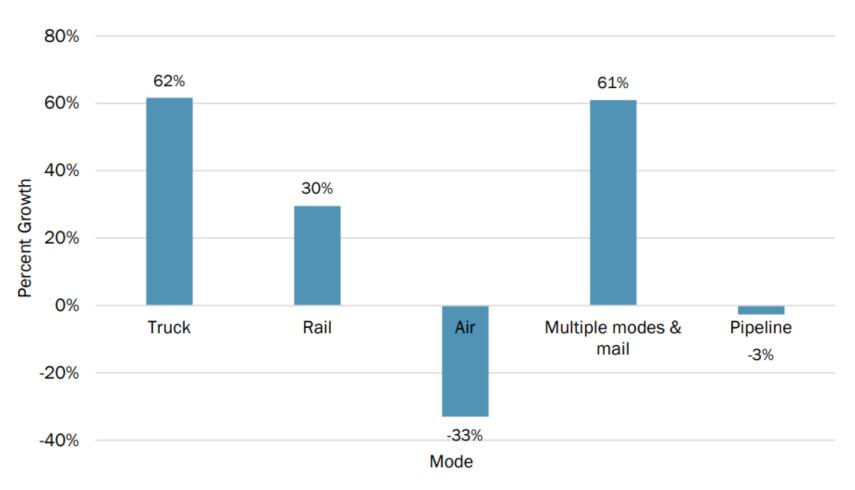


2050 2020

Source: Freight Analysis Framework, FHWA



### Forecasted Growth in Tonnage by Mode (2020-2050)



Source: Freight Analysis Framework, FHWA



# **Freight Impacts**

### Freight enables livability:

- The movement of goods is essential to ensure and maintain a high quality of life in the National Capital Region
- Freight-related industries represent 12% of employees in the National Capital Region

### Freight considerations:

- Forecasting the need for future freight infrastructure and facilities to support the region's future population growth
- Reviewing and addressing freight movement is important to understand impacts on regional mobility, access, safety, and equity



# **Equity Emphasis Area Analysis**

Roadway Classification	Major Roadway Miles within NCR	Major Roadway Miles within EEAs	Major Roadway % within EEAs
Interstate	234	52	22%
Principal Arterial-	271	51	19%
Freeway/Expressway	271	51	1970
Principal Arterial-Other	802	203	25%
Total/Average Percent	1,307	306	23%

Roadway Classification	NCR Roadway Truck %	EEA Roadway Truck %	Outside EEA Roadway Truck %
Interstate	6.5%	6%	6.7%
Principal Arterial-	4.2%	5.3%	3.9%
Freeway/Expressway	4.270	5.5%	3.9%
Principal Arterial-	3.6%	3.7%	3.5%
Other	5.0%	5.7 /0	5.5%
Total/Average Percent	4.7%	4.9%	4.69%



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

#### 2023 National Capital Region Freight Plan

- 1. Encourage projects/programs that support TPB Visualize 2045 policies
- 2. Prioritization of freight projects
- 3. State of good repair
- 4. Environmental/resiliency objectives
- 5. Best practices
- 6. Bottlenecks
- 7. Rail options
- 8. Equity
- 9. Economic development
- 10. Livability
- 11.Security/cybersecurity

- 12.Safety education, enforcement, and engineering
- 13. Hazmats routing
- 14. Hazmats information sharing
- 15. First responder training/exercises
- 16. Collaboration regionally and with the private sector
- 17. Performance measurement
- 18. Sustainability
- 19. Land use/rail capacity collaboration
- 20. New technologies and emerging business practices



### **Actions to Strengthen the Freight Planning Process**

- Continue to support the TPB Freight Subcommittee; include private sector participation
- Joint meetings with other TPB subcommittees
- Host periodic regional freight forums
- Continue to collect and analyze freight data and make data available to member jurisdictions and the public
- Strengthen relationships with local jurisdiction planners; highlight economic development aspects of freight

- Continue to facilitate coordination with federal, state, local, and private-sector freight partners
- Coordinate TPB's IIJA freight-related activities
- Support TPB's Continuous Airport System Planning (CASP) program (addressing air cargo)
- Continue to identify and communicate freight-related infrastructure issues to member agencies



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

- Continue to monitor key economic and industry trends
- Monitor the impacts within Equity Emphasis Areas
- Continue to monitor technological developments in freight movement
- Monitor policies and efforts related to truck electrification, decarbonization, conversion to clean fuels
- Deploy a regionwide robust electric vehicle charging network (or refueling stations for alternate fuels)

- Ensure consideration of freight movement issues in regional curbside management planning
- Continue to 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



### **Next Steps**

- July 7 Present to TPB Technical Committee
- July 7–11 Quick comments welcome
- July 19 Present to TPB
- July 19 August 21 Comments welcome
- September 8 Present revised draft based on comments to TPB Technical Committee
- September 20 On TPB agenda for approval



### **Comments and Questions?**





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