

#### **Executive Brief**

www.GovernmentAnalytica.com

#### **U.S. Dept of Transportation**

# **Multimodal Freight Infrastructure and Policy**

#### **Background**

#### **Vision**

The freight transportation system of the United States will strengthen our economic competitiveness with safe and reliable supply chains that efficiently and seamlessly connect producers, shippers, and consumers in domestic and foreign markets.

#### **National Freight Policy Strategic Goals**

This National Freight Strategic Plan supports the U.S. DOT strategic goals of Safety, Infrastructure, and Innovation.

- 1. SAFETY: Improve the safety, security, and resilience of the national freight system.
- 2. **INFRASTRUCTURE:** Modernize freight infrastructure and operations to grow the economy, increase competitiveness, and improve quality of life.
- 3. **INNOVATION:** Prepare for the future by supporting the development of data, technologies, and workforce capabilities that improve freight system performance. Federal Role

The following principles can be used to guide U.S. DOT's strategic leadership to support safe, efficient, and reliable goods movement.

- Modernize or eliminate unnecessary or duplicative regulations that inhibit supply chain efficiency, reduce incentives to innovation, delay project delivery, or raise costs to shippers and consumers; while protecting safety and environmental outcomes.
- Improve cross-sector, multijurisdictional, and multimodal collaboration to enhance intermodal connectivity and first-and last-mile connections, streamline interstate policies and regulations, and support multi-state investment.
- Provide targeted Federal resources and financial assistance to support freight projects that provide significant benefits to the national economy.
- Invest in freight data, analytical tools, and research to enhance the abilities of State, regional and local agencies to evaluate and address freight issues.

#### Office of Multimodal Freight Infrastructure and Policy (OST-F)

The Office of Multimodal Freight Infrastructure and Policy (OST-F) is a newly established office within the Office of the Undersecretary of Transportation for Policy (S3), funded by Congress to implement the national multimodal freight policy. OST-F is tasked with:

- administering and overseeing specific multimodal freight grant programs,
- promoting information sharing between the private and public sectors on freight issues, and
- conducting research to enhance multimodal freight mobility.

Additionally, OST-F has the following responsibilities:



- oversees the freight research activities of various agencies within the Department of Transportation,
- assists cities and states in developing freight mobility and supply chain expertise,
- liaises and coordinates with other federal departments and agencies, and
- performs other duties as prescribed by the Secretary of Transportation.

# The National Multimodal Freight Network vs. the National Highway Freight Network (NHFN)

Statutorily, the NMFN and the National Highway Freight Network (NHFN) serve similar goals. However, as currently authorized, the designation of the National Multimodal Freight Network does not have an impact on the National Highway Freight Network or the use of National Highway Freight Program (NHFP) formula funding. The process for designating the NMFN is being undertaken separately from the designation and re-designation of the NHFN, however, DOT is considering approaches that will maintain consistency between both networks

The Fast Act, as codified at 23 U.S.C 167(c), directed the FHWA Administrator to establish the NHFN to strategically direct Federal resources and policies toward improved performance of the NHFN. The NHFN includes the Primary Highway Freight System PHFS), which identifies the most critical highway portions of the U.S freight transportation system as determined by measurable and objective data. Other portions of the Interstate are included in the NHFN as well. States may designate Critical Rural Freight Corridors (CRFCs) and States, in coordination with MPOs, can also designate Critical Urban Freight Corridors (CUFCs). The FHWA Administrator is required to re-designate the PHFS every 5 years. DOT released the re-designated PHFS on December 2, 2022, and the next PHFS re-designation is due in 2027. More details on NHFN are available at <a href="https://ops.fhwa.dot.gov/freight/infrastructure/nfn/index.htm">https://ops.fhwa.dot.gov/freight/infrastructure/nfn/index.htm</a>.

## **National Multimodal Freight Network Designation**

Section 70103(b)(2) of Title 49, United States Code, directs DOT to consider twelve distinct factors in designating the route miles and facilities on the NMFN:

- 1. Origins and destinations of freight movement within, to, and from the United States;
- 2. Volume, value, tonnage, and the strategic importance of freight;
- 3. Access to border crossings, airports, seaports, and pipelines;
- 4. Economic factors, including balance of trade;
- 5. Access to major areas for manufacturing, agriculture, or natural resources;
- 6. Access to energy exploration, development, installation, and production areas;
- 7. Intermodal links and intersections that promote connectivity;
- 8. Freight choke points and other impediments contributing to significant measurable congestion, delay in freight movement, or inefficient modal connections;
- 9. Impacts on all freight transportation modes and modes that share significant freight infrastructure;



- 10. Facilities and transportation corridors identified by a multi-State coalition, a State, a State freight advisory committee, or an MPO, using national or local data, as having critical freight importance to the region;
- 11. Major distribution centers, inland intermodal facilities, and first- and last-mile facilities; and
- 12. The significance of goods movement, including consideration of global and domestic supply chains.

#### **National Multimodal Freight Network Exploratory Work**

The National Multimodal Freight Network, once designated, will be used to guide the development of a cohesive national strategy that integrates various modes of transportation to enhance supply chain efficiency, improve infrastructure planning, and support state and local government initiatives for better freight system performance.

Currently the development process at the DOT level is focusing on addressing the following:

- 1. Which of the following purposes is most important to ensuring the NMFN provides a foundation for the U.S. to compete in the global economy and why?
  - a. Prioritizing federal formula or discretionary grant investment.
  - b. Assisting States and local governments with strategically directing investments towards overall improved freight system performance.
  - c. Informing freight infrastructure planning and land use planning by state and local governments and private sector owners and operators.
  - d. Informing a national, integrated, and multimodal supply chain strategy.
- 2. How do you plan to use the National Multimodal Freight Network once it is designated? Statutory Factors for Designation

# 3. How should DOT prioritize the twelve factors in designating route miles and facilities on the NMFN? Which factors are most important to ensuring the network provides a foundation for the U.S. to compete in the global economy? Which factors are most important to ensuring the NMFN serves regional and state goals?

#### Measurable Thresholds, Criteria, and Data

- 4. Among the various statutory factors, volume, value, and tonnage are among some of the most quantifiable and readily comparable across modes and routes/corridors within modes. What thresholds should DOT consider for volume, value, and tonnage for designating the NMFN? For reference, DOT has provided examples below.
  - a) HIGHWAY NETWORK: Prior to the current PHFS, FHWA's proposed a 2015 Highway Primary Freight Network designation in 2015 that included a threshold of 8,500 Average Daily Truck Traffic (ADTT) or greater for Interstates and other roads as a baseline threshold for identifying significant roadways in urban areas with a population of 200,000 or more. For non-Interstate routes, thresholds included a daily average of at least 3,000 trucks and having proximate land use or connectivity demonstrating indicators of national significance. Border crossings carrying an annual average of at least 75,000 trucks is another example consideration.



- i. The Interim NMFN designated by DOT in 2016 incorporated the full NHFN, which includes the PHFS, the remaining Interstate miles, and Critical Urban and Critical Rural Freight Corridors designated by the States. The Department invites comments regarding whether the final NMFN should incorporate the full NHFN, or whether the highway portion of the NMFN should include additional or fewer routes relative to the NHFN and why.
- b) RAIL NETWORK: FHWA's 2008 Freight Story identified rail lines that carry 50 million tons in bulk cargo per year as significant for freight. Other example considerations include rail routes that fall within the top two thirds volume and/or value thresholds based on Carload Waybill data. The top 50 bulk origination/destination markets and the top 25 intermodal origination/destination markets may be another consideration.
- c) MARITIME NETWORK: The Congress required the Interim NMFN to include ports that handle at least 2,000,000 short tons of domestic and foreign trade annually, as well as other ports designated as commercial strategic seaports, based on data from the USACE Waterway Commerce Statistics. The value of goods handled by a port facility could also be used as a factor as well. Waterways (including inland river and coastal ocean routes) carrying more than 1.5 million tons of cargo are an example threshold consideration as well.
- d) AVIATION NETWORK: The Interim NMFN was designated based on the landed overall weight collected from FAA's Air Carrier Activity Information System (ACAIS), but an alternative approach could use landed origin and destination cargo weight data based on the BTS T-100 database. ACAIS data captures operations only by all-cargo aircraft whereas BTS T-100 data includes cargo transported both by all-cargo aircraft and as belly cargo in other aircraft operations. A potential threshold could be airports with at least 0.5% of cargo weight at all airports in the National Plan of Integrated Airport Systems (NPIAS), based on BTS-100 data.
- 5. Which of the 12 factors are most important for identifying network components that are critical to our economy but that may not stand out on a volume or value basis?
- 6. DOT has identified potential data sources for each of the 12 factors, below. Are there other data sources or approaches DOT should consider in applying these factors to the NMFN designation? Are there any concerns with using a particular data source listed below for the associated factor?

### **National Freight Strategic Plan Evolution**

The National Freight Strategic Plan defines the USDOT's vision and goals for the nation's multimodal freight system and outlines strategies to achieve these goals. Developed through a multi-agency effort with extensive consultation with freight stakeholders in both the public and private sectors, the Plan guides national freight policy, programs, initiatives, and investments. It informs state freight plans and identifies freight data and research needs, providing a framework for increased cross-sector, multijurisdictional, and multimodal coordination and partnerships. The Plan meets the FAST Act requirement to develop a strategic plan for implementing the goals of the new National Multimodal Freight Policy. This plan dates back to 2020 (NFSP fullplan 508 0.pdf, NFSP execsum 508.pdf)



#### **New State Freight Plans and Guidance**

New revised guidance provides the minimum required elements that Freight Plans must meet (updated per the Bipartisan Infrastructure Law) and suggests recommended, but optional elements, that States may include in their State Freight Plans. This revised guidance also provides suggestions for establishing State Freight Advisory Committees to benefit State freight planning.

- Guidance: State Freight Plan and State Freight Advisory Committee Guidance\_signed.pdf
- For more tools developing state freight plans, please follow this link: https://fpcb.ops.fhwa.dot.gov/toolkit/allplans.aspx
- Effective Date: Wednesday, March 8, 2023 (Issued Date: Thursday, January 12, 2023)

Minnesota Freight Plan
Investment Plan

#### 2024 National Plan Development Input Sought

The U.S. Department of Transportation (DOT) is calling for public input on the National Multimodal Freight Network (NMFN). Established under the Fixing America's Surface Transportation (FAST) Act and amended by the Infrastructure Investment and Jobs Act (IIJA), the NMFN aims to improve freight system performance and connectivity. This network is crucial for assisting states in strategic resource allocation, informing freight transportation planning, prioritizing federal investments, and supporting national freight policy goals.

DOT is inviting feedback from stakeholders, including state and local governments, private sector entities, and the general public. The feedback period will culminate in the publication of a Draft NMFN in late spring 2024. Subsequently, states will have a 90-day window to submit additional designations and certifications. The final NMFN is expected by the end of 2024.

Input Deadline 11 June 2024 at <a href="https://www.federalregister.gov/documents/2024/04/12/2024-07810/request-for-information-on-goals-criteria-thresholds-and-measurable-data-sources-for-designating-the">https://www.federalregister.gov/documents/2024/04/12/2024-07810/request-for-information-on-goals-criteria-thresholds-and-measurable-data-sources-for-designating-the</a>

# **NMFN 3 Primary Input Areas**

DOT seeks comments on three primary areas for designating the NMFN.

- 1. GOALS: The first area seeks feedback from stakeholders on the NMFN goals.
- 2. 12-FACTOR PRIORITIZATION: The second area asks stakeholders to prioritize the 12 factors listed above.
- 3. **ANALYTICS:** The third area seeks comment on the potential thresholds, criteria, and data sources that correspond to one or more of the twelve factors, including a discussion of why the thresholds, criteria and data sources should be considered for designating the Final NMFN.



### **National Multimodal Freight Network Plan: 12 Key Factors**

DOT contemplates prioritizing twelve key factors such as freight volume, economic impact, and access to major transportation hubs. Additionally, comments on measurable thresholds, criteria, and data sources are sought to ensure an effective and comprehensive designation process.

Section 70103(B)(2) Factor	Potential Data Sources
Factor 1: Origins and destinations of freight movement within, to, and from the United States	• Freight Analysis Framework. • TransBorder Freight Data. • Commodity Flow Survey. • U.S. Census Bureau U.S—Foreign Trade Data. • U.S. Customs and Border Protection. • National Automatic Identification System (NAIS) Data. • Energy Information Agency (EIA) Data. • AMS Data North American Rail Network (NARN).
Factor 2: volume, value, tonnage, and the strategic importance of freight	• Highway Performance Monitoring System (HPMS). • Freight Analysis Framework. • Carload Waybill data & FRA GIS Waybill Toolkit. • USACE Waterborne Commerce. • Air Carrier Activity Information System (ACAIS). • BTS-T-100. • St. Lawrence Seaway Annual Traffic Reports. • U.S. Census Bureau U.S—Foreign Trade Data. • U.S. Customs and Border Protection. • EIA Data. • AMS Data.
Factor 3: access to border crossings, airports, seaports, and pipelines	<ul> <li>National Transportation Atlas Database (NTAD).</li> <li>GIS mileage radius to border crossings, airports, seaports.</li> </ul>
Factor 4: economic factors, including balance of trade	• TradeStats. • Federal Reserve Board's Industrial Production Index Program. • Census Bureau Real Wholesale Trade Survey estimates. • BEA data on real retail trade sales.
Factor 5: access to major areas for manufacturing, agriculture, or natural resources	• Bureau of Economic Analysis: Real Manufacturing GDP by state. • Annual Survey of Manufacturer State-Level Value of Shipments at 4-Digit NAICS Level. • Quarterly Census of Employment and Wages data at the state level. • USDA Open Ag Data on Trucking.
Factor 6: access to energy exploration, development, installation, and production areas	<ul> <li>EIA energy infrastructure map.</li> <li>DOT hydrogen hubs map.</li> <li>Maps of ZEV charging/fueling infrastructure installed or planned.</li> </ul>



Section 70103(B)(2) Factor	Potential Data Sources
Factor 7: intermodal links and intersections that promote connectivity	<ul> <li>National Transportation Atlas Database (NTAD).</li> <li>GIS mileage radius to intermodal facilities.</li> <li>HPMS.</li> </ul>
Factor 8: freight choke points and other impediments contributing to significant measurable congestion, delay in freight movement, or inefficient modal connections	<ul> <li>Federal Highway Administration (FHWA) Freight Mobility Trends: Truck Hours of Delay.</li> <li>National Performance Management Research Data Set.</li> <li>GHG emissions reported from ports.</li> </ul>
Factor 9: impacts on all freight transportation modes and modes that share significant freight infrastructure	Commodity Flow Survey.    Freight Analysis Framework.
Factor 10: facilities and transportation corridors identified by a multi-State coalition, a State, a State freight advisory committee, or a metropolitan planning organization, using national or local data, as having critical freight importance to the region	Direct input from States.    Direct input from multi- State corridor coalitions.    Direct input from MPOs.    Direct input from local agencies and other stakeholders.
Factor 11: major distribution centers, inland intermodal facilities, and first- and last-mile facilities	• Quarterly census of employment and wages data at the MSA level. • NTAD. • Publicly available ZEV charging/fueling maps.
Factor 12: the significance of goods movement, including consideration of global and domestic supply chains	• Commodity Flow Survey. • Freight Analysis Framework.

Freight Professional Capacity Building Program - Data Library (dot.gov)