



U.S. Department of Transportation  
Bureau of Transportation Statistics

# **Freight Logistics Optimization Works (FLOW): Innovative Data Sharing Partnership**

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# Presentation Outline

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- **What is Freight Logistics Optimization Works (FLOW)?**
- **Why is FLOW an unprecedented, innovative data sharing partnership?**
- **What made FLOW possible?**



# Freight Logistics Optimization Works (FLOW)

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- Initiated by the the Biden-Harris Administration in May 2022 to “...*Speed Up Delivery Times and Reduce Consumer Costs*” through data exchange;
- Is a government/industry partnership to exchange information between supply chain stakeholders;
- Made possible by USDOT/Bureau of Transportation Statistics serving as a secure independent steward of the shared data.

# What is FLOW?

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- Uses data provided by supply chain stakeholders to understand the relationship between the incoming containers (demand) and the available assets to move containers (supply) at a given node. For example,

$$\begin{aligned} \text{FLOW *Landside* Ratio} &= \frac{\text{Aggregate demand at node}}{\text{Aggregate supply at node}} \\ &= \frac{\text{Containers discharged from vessels}}{\text{Chassis or drayage trucks available to move containers}} \end{aligned}$$

- Focuses on imported containers for now

# FLOW Principles

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1. FLOW is a voluntary, secure national exchange for operational freight information
2. FLOW analysis is available only to stakeholders who participate and share data
3. FLOW is sustained by benefit to the stakeholders

# What made FLOW possible?

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1. **There is buy-in among supply chain participants on the benefits of providing data, e.g.,:**
  - The ability to understand the health of the supply chain
  - A ability to look ahead or look around the corner
2. **Data will be protected absolutely by the Bureau of Transportation Statistics.**

# What is Bureau of Transportation Statistics (BTS)?

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- In 1991, the [Intermodal Surface Transportation Efficiency Act \(ISTEA\)](#) created BTS.
- One of the 13 Principal Statistical Agencies (PSA) with legal authorities to
  1. Be independent (49 USC § 6302 (d))
  2. Protect data not only from FOIA but also from subpoena/legal discovery (44 USC § 3563).



# BTS Data Protection is Absolute

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- **Legal Authority: Confidential Information Protection and Statistical Efficiency Act (CIPSEA).**
- **Anyone working on data processing and analysis subject to confidentiality training and non-disclosure agreement -- applying to all federal employees, contractors, and agents**
- **Willful disclosure of confidential information may incur sanctions and penalties**
  - Disclosure is the unauthorized release of confidential information
  - Penalties may include removal from office, fines (up to \$250,000), and/or imprisonment (possible felony conviction, up to 5 years)





# BTS Data Protection is Absolute (cont'd)

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- **Agreements between BTS and individual data providers are executed to guide the treatment of FLOW data.**
- **Only staff working on FLOW have access to any FLOW information**
- **BTS private network guarantees secure data exchange**
  - Separate servers within the private network
  - No sharing of files between DOT main network and BTS private network
  - No direct access to internet
  - Analysis software to allow data analysis within the private network
  - Backups maintained within the private network

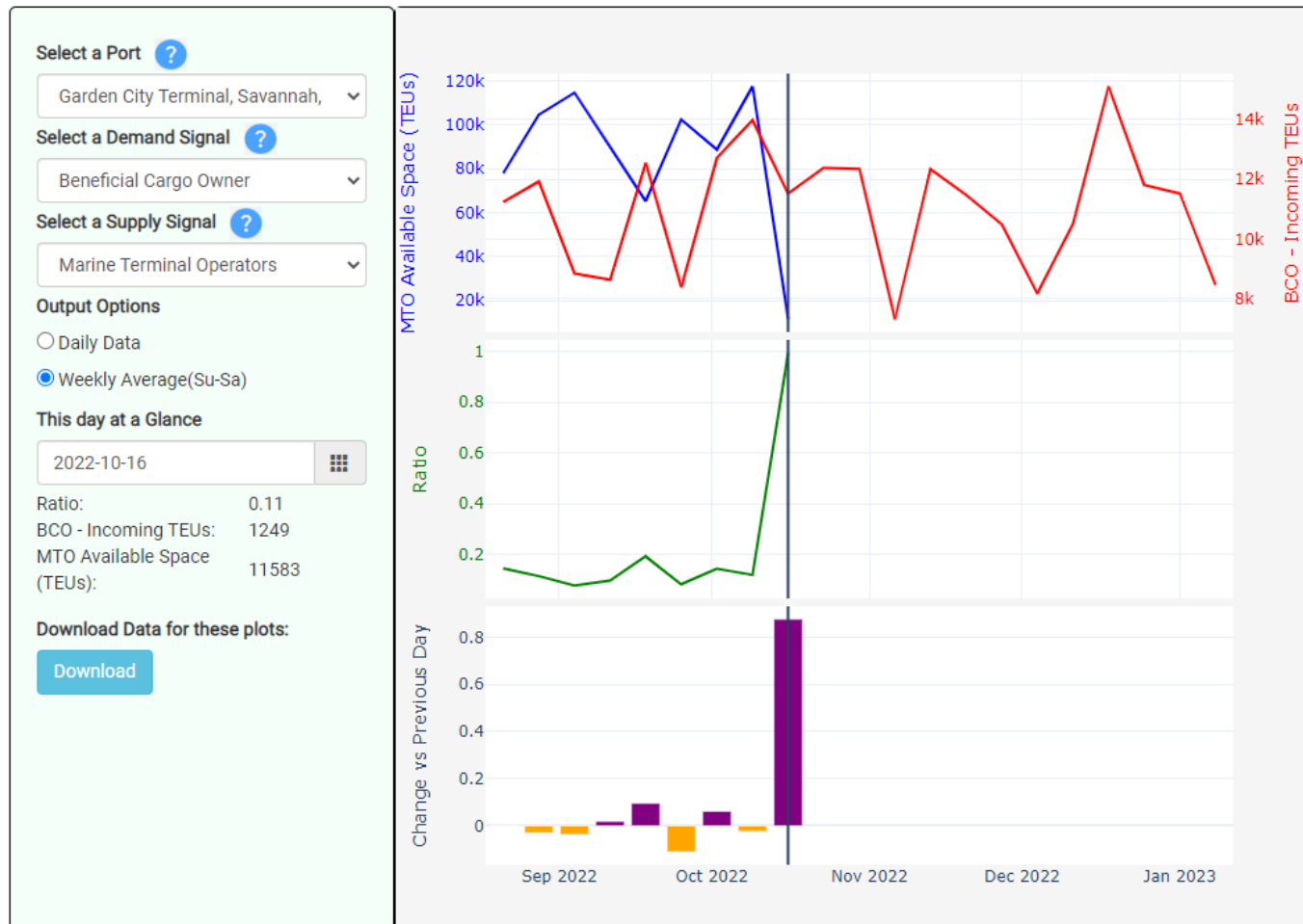


# Current FLOW Participants by Supply Chain Components

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- Beneficial Cargo Owner (BCO): 11
- Intermodal Equipment Provider (IEP): 4
- 3<sup>rd</sup> Party Logistics (3PL): 8
- Ocean Carrier: 4
- Marine Terminal Operator: 12
- Motor Carrier: 6
- Logistics Real Estate: 1
- Class 1 Rail Carrier: 2

# A FLOW Product - Dashboard



# Learn more about FLOW Program

The screenshot shows the Bureau of Transportation Statistics website. The header includes the title "Bureau of Transportation Statistics" and navigation links for "Ask-A-Librarian", "A-Z Index", and a search bar. Below the header, there are links for "Topics and Geography", "Statistical Products and Data", "National Transportation Library", "Newsroom", and "About BTS". The main content area has a blue background with a network diagram and icons representing various transportation modes. A dark blue box contains the title "About the FLOW Program" and a paragraph describing the program as a government/industry partnership for exchanging freight information.

**Bureau of Transportation Statistics**

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## About the FLOW Program

Freight Logistics Optimization Works ("FLOW") is a government/industry partnership to exchange information between supply chain stakeholders within the United States, where USDOT serves as a secure independent steward of participant information. The exchange aims to provide forward looking and near-time international intermodal freight information for a common picture of goods movement throughout the supply chain. Participants currently include marine and surface transportation carriers, terminal operators, and warehouse operators.