

## Bureau of Transportation Statistics (BTS): Programs and Career Opportunities

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# Agenda

## BTS overview

- Federal and DOT statistical systems
- Selected BTS programs
- Career opportunities

# **BTS Overview**

- Created in 1991's Intermodal Surface Transportation Efficiency Act (ISTEA)
- BTS activities are guided by Chapter 63 of Title 49 and OMB Statistical Policy Directives that assure objective, credible statistics for government, business, and the public
- Main BTS programs fill data gaps and transcend all transportation modes (e.g., air, surface, water)
  - The BTS Director
    - Serves as the Senior Advisor to the Secretary on data and statistics (49 USC 6302)
    - Is USDOT Statistical Official under the Evidence Act.

## BTS Organization based on Statistics Life-Cycle



Offices of Data Development, Airline Information and Safety Data and Analysis

#### Data Curation and Dissemination

Office of Information and Library Sciences

#### **Departmental Responsibilities**

- Senior Advisor to the Secretary on Statistics and Data
- Statistical policy development

#### Modeling and Estimation

Office of Statistical & Economic Analysis

#### **Visual Analytics**

Office of Spatial Statistics and Visualization

#### **Data Analysis**

Offices of Transportation Analysis and Safety Data and Analysis

## **Federal Statistical System**

## Consists of:

- 13 principal statistical agencies
- In addition, 90+ agencies and units engaged in statistical activities (including 7 in USDOT)
- Statistical and Science Policy Office, OMB

## **Legislative Mandates**

#### Transportation Performance and Impacts

 The extent, connectivity, condition, economic efficiency, safety, and consequences for human and natural environment of the transportation system

#### Intermodal Transportation Data

- Passenger and freight flows
- Intermodal connections

### Transportation and Relevant Geospatial Data

- Transportation infrastructure, enabling network assignment of passenger and freight flows by all modes
- Detailed transportation network to measure conditions and performance
- Linked to social, economic and environmental data

## Legislative Mandates (cont'd)

## Contribution to the Economy

- Transportation Services index
- Transportation Satellite Accounts

## **Airline Information**

- Passenger origin-destination and freight volume by segment
- On-time performance
- Financial and employment data on air carriers

#### Safety Data Program

- Methods for integrating key safety variables across data sources
- Identify and address data gaps

### National Transportation (Digital) Library

- Created by the government to be the nation's preeminent repository of transportation information
- Monitor usage of DOT-funded research results

# **COVID-19 Impacts on Passenger Travel**





# The difference in the percentages of people staying at home varies greatly from county to county, from state to state.



Notes: A person is classified as staying at home if they make no trips with a trip end more than one mile away from home. Trips are movements that include a stay of longer than 10 minutes at an anonymized location away from home.

Source: Bureau of Transportation Statistics, Trips by Distance, https://data.bts.gov/Research-and-Statistics/Trips-by-Distance/w96p-f2qv

# The U.S. transportation system moves 55 tons of freight per year for every man, woman and child



source: Bureau of Transportation Statistics, U. S. Department of Transportation

U.S. Department of Transportation Office of the Secretary of Transportation Bureau of Transportation Statistics

## Freight flow database based on:

- Commodity Flow Survey
- Integration with multiple other data
- Geospatial data
- Network assignment model

Freight

# One contributing factor to supply chain challenge is the higher demand on <u>imported</u> goods, imposing

### greater stress on ports.



Source: U.S. Census Bureau and U.S. Bureau of Economic Analysis, U.S. Imports of Goods by Customs Basis from World

**Geospatial Data** 

## Geospatial data on emerging travel modes



## **Spatial Analysis and Visualization**

National Transportation Noise Map



source: Bureau of Transportation Statistics, U. S. Department of Transportation

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## Navigating **BTS Website**

Drop down menus include:

- major topics if you are not sure what you are looking for
- statistical products if you know the program
- Job and Internship opportunities



What statistics does BTS have, and where can I find what I'm looking for? 🕻



#### Data Highlights

Freight Transportation Services Index 135.8 September 2021, + 3.2 pts from September 2020

Spending on Transportation Services \$397B 3rd Quarter 2021, + \$76B from Q3 2020

Truck Transportation Employees 1.53M October 2021, +60K from Oct. 2020

Vehicle Miles Traveled 267B September 2021, +20B from September 2020

Air Transportation Employees 465K October 2021, +74K from October 2020

Bus Transit Passenger Trips 234M September 2021, +52M from September 2020

## **Career Opportunities at BTS**

- Mathematical Statistician
- Spatial Statistician
- Modeler on decision system modeling
- Econometrians
- Data Scientist
- Experts on Specific Topics
  - Freight/Supply Chain
  - Equity
  - Finance