

National Transportation Library: Virtual Reference, Digital Collections, and Data Services

2016 Federal Depository Library Conference Arlington, VA October 18, 2016



1998

Transportation Equity Act for the 21st Century (1998)

- "(e) NATIONAL TRANSPORTATION LIBRARY.—
 - "(1) IN GENERAL.—The Director shall establish and maintain a National Transportation Library, which shall contain a collection of statistical and other information needed for transportation decisionmaking at the Federal, State, and local levels.
 - "(2) ACCESS.—The Director shall facilitate and promote access to the Library, with the goal of improving the ability of the transportation community to share information and the ability of the Director to make statistics readily accessible under subsection (c)(5).
 - "(3) COORDINATION.—The Director shall work with other transportation libraries and other transportation information providers, both public and private, to achieve the goal specified in paragraph (2).

2012

MAP-21 & NTL summary

 NTL's authorized role is expanded and more in line with the 4 other national libraries

	National Transportation Library functions:
	☐ Services to DOT, other Federal agencies, public and private organizations, and
	individuals within the U.S. and internationally
	☐ Set specific requirements for the NTL Director's position
	☐ Acquire, preserve and manage transportation information and information
	products and services for use by DOT, other Federal agencies, and the public
	☐ Provide reference and research services
	☐ Central repository for DOT research results and technical publications
	☐ Central clearinghouse for transportation data and information of the Federal
	Government
	☐ Serve as coordinator and policy lead for transportation information access
	☐ Coordinate among and cooperate with multiple external parties to develop a
	"comprehensive transportation information and knowledge network" to support
	the I-XI list [information required of BTS at 49 USC 6302((b)(3)(B)(vi)]
	☐ Publicize, facilitate and promote access to information products and services
	☐ Receives contract, grant and agreement authority to support these goals
ı	BTS contract authority reduced from \$27M to \$26M FY 13 – 14

Public Access: Increasing Profile and Visibility of NTL and LIS Skillset

 February 22, 2013 – The White House Office of Science and Technology Policy released a memorandum requiring all Executive Departments and Agencies spending more than \$100 million/year on R&D to ensure public access to peerreviewed publications and digital datasets arising from federally-funded scientific research

More information:

https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp public access memo 2013.pdf

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
WASHINGTON, D.C. 20502

February 22, 2013

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: John P. Holdren

SUBJECT: Increasing Access to the Results of Federally Funded Scientific Research

1. Policy Principles

The Administration is committed to ensuring that, to the greatest extent and with the fewest constraints possible and consistent with law and the objectives set out below, the direct results of federally funded scientific research are made available to and useful for the public, industry, and the scientific community. Such results include peer-reviewed publications and digital data.

Scientific research supported by the Federal Government catalyzes innovative breakthroughs that drive our economy. The results of that research become the grist for new insights and are assets for progress in areas such as health, energy, the environment, agriculture, and national security.

Access to digital data sets resulting from federally funded research allows companies to focus resources and efforts on understanding and exploiting discoveries. For example, open weather data underpins the forecasting industry, and making genome sequences publicly available has spawned many biotechnology innovations. In addition, wider availability of peer-reviewed

NTL Partners





FEDLINK











MIDWEST TRANSPORTATION KNOWLEDGE NETWORK



















National Transportation Library Digital Repository Initiatives

Mary Moulton
Digital Librarian
National Transportation Library



Agenda

- About NTL's Digital Repository
- Collections
- Digitization
- Services
- Assessment
- Outreach

NTL Digital Repository and Services

Digital Repository

- Purpose: serve as central clearinghouse and archive for public access transportation information
- 50,000+ items
- Special features: access to specialized collections and integration of USDOT repositories in our platform
 - Volpe Reports
 - Directory of Transportation Data Sources
 - NHTSA Behavioral Safety
 - ITS JPO Electronic Library
- Services: digitization activities, preservation & ensuring perpetual access; permanent URLs, links incorporated into TRID records
- NTL Digital Repository: http://ntlsearch.bts.gov/repository/index.do



NTL Digital Repository Migration

Current

- Homegrown OAI-PMH compliant repository (Open Archives Initiative Protocol for Metadata Harvesting)
- In-house hardware
- Manual analysis and application of metadata
- Repository search
- Self governance using OAIS model

Future

- Open source platform
 - Currently migrating to CDC Stacks platform (Islandora/Drupal/Fedora)
- Cloud hosting
- Processing enhanced with autoindexing
- Federated search and discovery
- Compliance with guidelines for Federal Repositories

For additional information regarding Trusted Digital Repositories, see December 2014 Transportation Librarians Roundtable http://ntl.bts.gov/networking/roundtable.html



NTL Partnerships

- Transportation Research Board
 - TRID and the National Transportation Library Digital Repository
 - Transportation Research Thesaurus
 - Other TRB Committees and Task Forces



- Federal Libraries
 - Federal Agencies Digitization Guidelines Initiative

LIBRARY OF CONGRESS FEDLINK

- Federal Library and Information Centers Committee
- CENDI (Federal Science and Technology Information Mangers)







Collection Policy

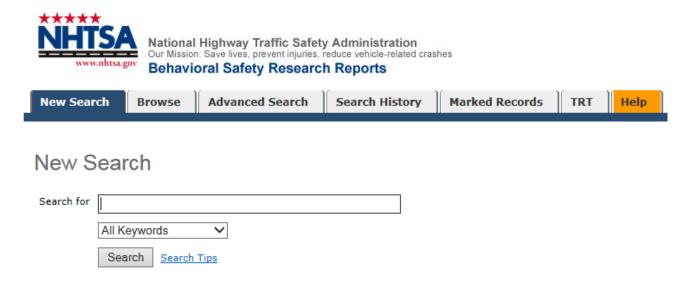
- NTL collects and maintains significant research and statistical publications in its Digital Repository
- Resources in the collection have value to federal, state, and local transportation decision makers, transportation analysts, and researchers

Collections

 NTL serves as a permanent archive for statistical, technical, research and policy documents required by researchers and decision makers and provided to NTL by federal, state, local, tribal and other government agencies

Collections

- NTL partners with administrative offices within US
 DOT to create collection views for search
- Example: NHTSA Behavioral Safety Research Reports



Repository Work Process

- NTL ingests submitted documents, creating unique persistent URLs to full text in NTL digital repository
- NTL reports URLs to TRB for inclusion in indexing records https://trid.trb.org/
- NTL creates minimal catalog record for each report, records uploaded to OCLC Gateway
- NTL maintains long term access and storage

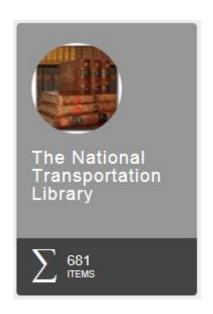
Cataloging Policy

- NTL catalog is structured around a modified Dublin Core metadata schema. A minimal cataloging standard was adopted in 2013 that satisfies OCLC K-level standard.
- Drivers
 - Searchable full text repository
 - Reduced staffing level due to sequestration
 - Government mandates
 - Opportunity to leverage existing bibliographic tools (TRID, TRT)
- Goal: Improve cataloging efficiency while maintaining consistent and accurate metadata in NTL's digital collections
 - Identify minimum requirements for functionality and interoperability amongst NTL's user interfaces and digital content platforms (current and future)
 - Meet our legislative mandates
 - Eliminate duplication of effort
 - Develop new cataloging guidelines for NTL's digital repository

FEDLINK / Internet Archive

- NTL supplies barcode
- Using Z39.50, IA pulls catalog record from ILS
- IA gives us:
 - Digitized copy @ 300 dpi
 - Metadata
 - OCR
 - A searchable copy archived on IA site







National Transportation Library

FEDLINK / Internet Archive

Internet Archive supplies basic metadata

Alternatives Analysis/Draft Environmental Impact Statement for the Queens Subway Options Study: Borough of Queens, New York, New York - U.S. Department of Transportation Urban Mass Transportation Administration, Metropolitan Transportation Authority State of New York

by Hiram J. Walker and Robert R. Kiley

Published May 1984

Publisher Federal Transit Administration/US Department of Transportation Pages 652

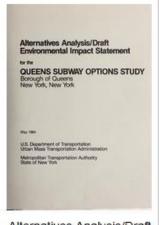
Possible copyright status The library is unaware of any copyright restrictions for this item.

Language English

Digitizing sponsor Federal Transit Administration

Book contributor Federal Transit Administration - 50th Anniversary Document

Collection fta50thanniversary; federaltransitadministration; fedlink; americana



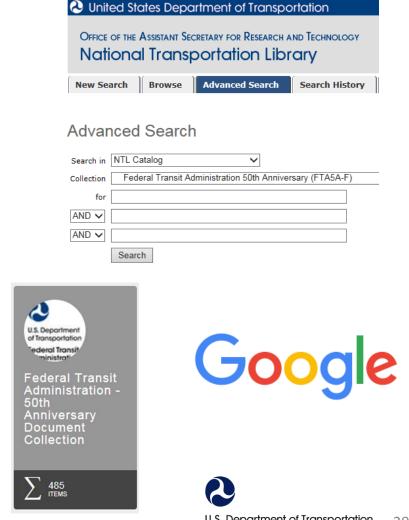
Alternatives Analysis/Draft Environmental Impact

by Hiram J. Walker and Robert R. Kilev

National Transportation Library

FTA Collection

- NTL ingests digital copies and metadata, creates collection view, sends monthly report to TRID
- Internet Archive keeps digital copy in special collection
- All copies searchable with Google



Consulting Services

- Taxonomy and Ontology development for DOT intranet projects
- Transportation Research Thesaurus development and maintenance
- Digitization services
 - NTL advises and facilitates digitization for DOT administrative offices

Assessment: NTL physical collection

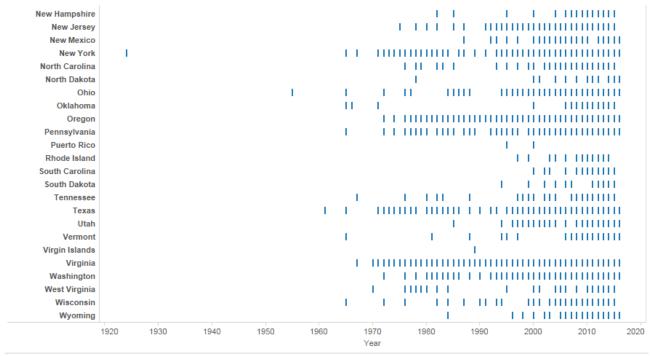
- NTL physical library downsizing in 2015
- OCLC Strategic Collection Services employed to quickly understand NTL collection
- NTL holdings compared to other federal libraries, state DOT libraries and Hathi Trust (custom groups)
- Report used to select candidates for digitization

Assessment: USDOT publications

- 4000+ publications and orders (part of a larger collection)
 - TIFF and PDF formats
- All metadata downloaded into spreadsheet
- Every item in spreadsheet checked for copy quality, adequate metadata, broken url
 - Poor quality scans will be re-digitized
 - Metadata will be repaired in spreadsheet
 - Batch ingestion

Repository Assessment

 Currently evaluating Tableau as a tool for analyzing metadata to visualize collections



Networking and Outreach

- Transportation Knowledge Networks
- Transportation Librarians Roundtable
 http://ntl.bts.gov/networking/roundtable.html
- Science.gov Alliance

Thank you!

Questions or comments?

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http://ntl.bts.gov/
@NatTransLib





Reference Sources and Services for Transportation

David W. Martin
Reference Librarian
National Transportation Library



How do customers contact us?

Ask a Librarian

iswers Ask a	Librarian			Log In Sigr
		Search	Browse]
Email Address *				
Subject *				

"Ask A Librarian" page under "Contact Us" allows customer to submit question and attach related documents



23% come from For-Profit



13% are Academia



4% are international



A few each month are from the media



Who uses the reference services of the NTL?



2.5% come from other Federal Agencies

1.3% are from local governments



1.8% are from State governments



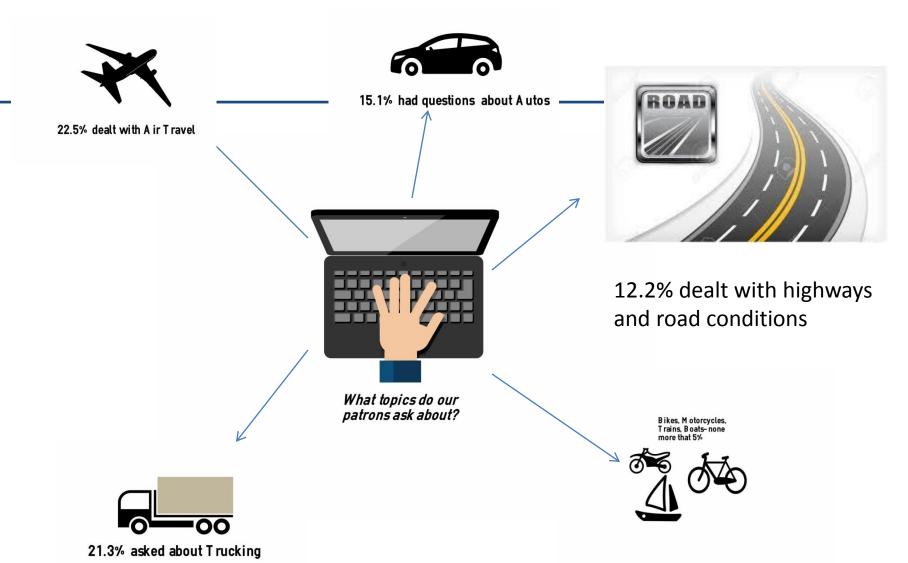
U.S. Department of Transportation

National Transportation Library

Who Is Our Audience?

More than half of the requests received each month (59%) come from the General Public













2%

Federal Transit Administration



9%









3.6%

Federal Aviation Administration

3.7%



U.S. Department of Transportation

National Transportation Library





Problems with local roads or infrastructure

Complaints about air travel, service, lost luggage, etc.





When people contact you – what do they ask?

Ideas and suggestions for auto parts, new technologies, etc.



Questions about drug & alcohol policies



Office of the Assistant Secretary for Research and Technology Bureau of Transportation Statistics

13% of all "incidents " received are resolved using the resources of the BTS

As a statistical agency, BTS:

- is policy-neutral-an objective broker for the facts
- covers all of transportation; BTS is cross-modal in nearly everything we do
- does independent data collection and analysis, but BTS also serves all the other modes to help them be more effective and efficient
- sets standards for transportation data
- has special statutory protections (essentially the same as those for Census Bureau and Bureau of Labor Statistics) for the confidentiality of data we collect
- has unique competencies in statistics, economics, information technology, geographic information systems, and transportation

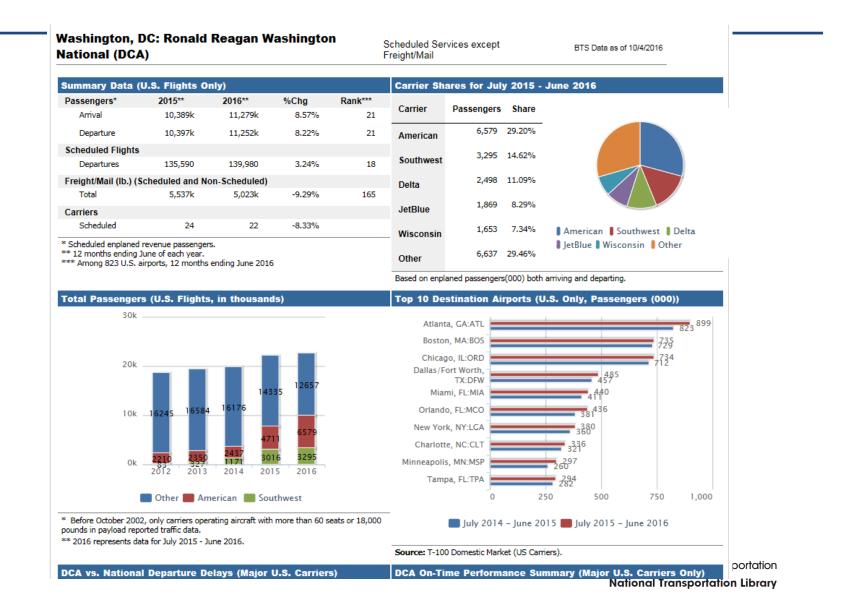
TranStats

TranStats is a central access point to a broad collection of intermodal transportation data. These data have been collected by various agencies within the U.S. Department of Transportation or by other federal agencies, such as the U.S. Bureau of the Census.





Airport Snapshot Data for every major airport in every market



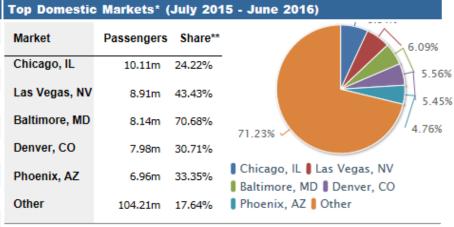
Enplanement data and Market Share for all US Airlines with more than \$20m in annual revenue

Southwest Airlines (WN)

Scheduled Services Only

BTS Data as of 10/4/2016

Summary Da	ta (U.S. Airp	orts, 12 Mo	nths Ending	g June)
	2015	2016	%Chg	Rank ¹
Passengers	134,446k	146,295k	8.81%	1
Departures	1,205k	1,271k	5.43%	1
RPM ²	107,622m	118,482m	10.09%	2
ASM ³	129,686m	141,003m	8.73%	2
Loadfactor	83.0%	84.0%	1.00 pts	11
Air Cargo ⁴	288m	214m	-25.66%	4
Markets Served	88	96	9.09%	
Share ⁵	17.67%	18.27%	0.60 pts	2



The pie chart shows each market's share in the carrier's total air passengers.

⁵ Market share based on Revenue Passenger Miles.



Revenues and Costs

2015 vs. 2016 (4 quarters ending Q2 of each year)

	,	•	
	2015	2016	%Chg ¹
Operating Revenue (millions)	18,952	20,506	8.20%
Operating Cost (millions)	15,853	16,035	1.15%
Operating Profit/Loss (millions)	3,100	4,471	44.23%
Net Income (millions)	1,580	2,452	55.19%
Passenger Yield (cents) ²	16.40	15.22	-7.20%
Revenue per ASM (cents) ³	14.30	14.10	-1.40%
Cost per ASM (cents) ⁴	11.96	11.03	-7.78%

^{*} Based on total enplaned passengers at all airports in a city.

1 Among 86 passenger carriers for 2016

** The table shows the carrier's share in each of the markets.

² Revenue Passenger Miles

³ Available Seat Miles

⁴ Air Cargo is the sum of Freight and Mail in pounds.

eparture Performance	2	
CRSDepTime	CRS Departure Time (local time: hhmm)	
DepTime	Actual Departure Time (local time: hhmm)	
DepDelay	Difference in minutes between scheduled and actual departure time. Early departures show negative numbers.	
DepDelayMinutes	Difference in minutes between scheduled and actual departure time. Early departures set to 0.	
DepDel15	Departure Delay Indicator, 15 Minutes or More (1=Yes)	Get Lookup Tabl
DepartureDelayGroups	Departure Delay intervals, every (15 minutes from <-15 to >180)	Get Lookup Tabl
DepTimeBlk	CRS Departure Time Block, Hourly Intervals	Get Lookup Tabl
TaxiOut	Taxi Out Time, in Minutes	
WheelsOff	Wheels Off Time (local time: hhmm)	
Arrival Performance		
WheelsOn	Wheels On Time (local time: hhmm)	
TaxiIn	Taxi In Time, in Minutes	
CRSArrTime	CRS Arrival Time (local time: hhmm)	
ArrTime	Actual Arrival Time (local time: hhmm)	
ArrDelay	Difference in minutes between scheduled and actual arrival time. Early arrivals show negative numbers.	
ArrDelayMinutes	Difference in minutes between scheduled and actual arrival time. Early arrivals set to 0.	
ArrDel15	Arrival Delay Indicator, 15 Minutes or More (1=Yes)	Get Lookup Tabl
ArrivalDelayGroups	Arrival Delay intervals, every (15- minutes from <-15 to >180)	Get Lookup Tabl
ArrTimeBlk	CRS Arrival Time Block, Hourly Intervals	Get Lookup Tabl
ancellations and Dive	ersions	
Cancelled	Cancelled Flight Indicator (1=Yes)	Get Lookup Tabl
CancellationCode	Specifies The Reason For Cancellation	Get Lookup Tabl
Diverted	Diverted Flight Indicator (1=Yes)	Get Lookup Tabl
light Summaries		
CRSElapsedTime	CRS Elapsed Time of Flight, in Minutes	

The various data tables within the TRANSTATS database will allow you to perform specific and intricate searches depending on how much - or how little – you feel you need to solve the patron request.



U.S. Department of Transportation National Transportation Library

North American Transborder Freight Data: Main Search Page

North American Transborder Freight Data, including Port, Commodity, or State Origin/Destination

Use this North American Transborder Freight Data, including Port, Commodity, or State Origin/Destination page to find the following Transborder freight data:

- Total(Measure): U.S. Transborder freight by dollar value and export weight (see NOTES below for exceptions)
- State: Freight value by state of origin/destination and Mexican state or Canadian province of origin/destination
- Border(Trading Partner): Canadian or Mexican border
- Annual(Year): Land modes since 1994 and air/vessel since 2004
- Monthly(Month): Land modes since 1994 and air/vessel since 2004
- Modal(Mode): Land modes since 1994 and air/vessel since 2004
- 7. Direction(Trade Type): Exports (value only) or imports (weight or value)
- 8. Customs Port: Import/export data for land ports, airports, seaports, for each border, for one or more state and for one or more Customs Port
- Commodity: National, border or state level only. For commodity data by port, see the North American Transborder Freight Data, including Port and Commodity
 page. Data by state of origin/destination and Mexican state or Canadian province of origin/destination are not available on the port data page (see NOTES below).

U.S. State	Trading Partner	Year	Month
Aggregate all U.S. States All US States Detail Alabama (AL) Alaska (AK) Arkansas (AR) Arizona (AZ) California (CA)	NAFTA (Canada and Mexico) Canada Mexico All Canada Provinces Detail All Mexico States Detail Alberta (CAN) British Columbia (CAN)	All Years Detail 2016 (Jan-Jul) 2015 2014 2013 2012 2011	Annual Summary All 12 Months Detail January February March April May
Colorado (CO) Customs Port	Manitoba (CAN) Mode	2010	June
Aggregate all Ports Ports by Name Land Ports Airports Sea Ports Ports by Code Northern Border Ports Southern Border Ports Ports by State Order Alaska (AK) Alabama (AL) Arkansas (AR) Arizona (AZ)	Aggregate All Modes Aggregate All Except AV Aggregate All Surface Modes (TRTruck (T)Rail (R)Pipeline (P) Aggregate All AV ModesAir (A)Vessel (V) Aggregate MOF ModesMail (M)Other (O)Foreign Trade Zones (F)	Measure Value (in US Dollars) Weight (in Pounds) Weight (in Kilograms) Weight (in US Short Tons) Weight (in Metric Tons) Trade Type Total Trade ExportsImports	Data Display Actual In Thousands In Millions In Billions Output Option Table w/o % Chanage Table w/ % Change Other Options Suppress Zero and NA Show Commodity Desc
Port Name, Code and Type		Commodity	
~Make Customs Port Selection First~		~Make Customs Port Selection F	irst *

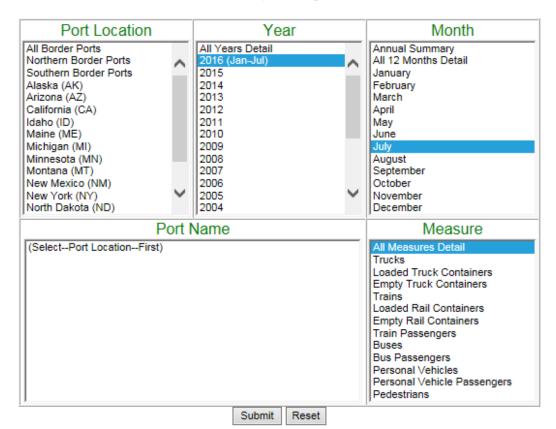
Border Crossing/Entry Data: Query Detailed Statistics

NOTE: The most recent data are from January - July 2016.

Click here to go home Click here to quick search by rankings Click here to do time series analysis

INSTRUCTIONS: You can make multiple selections in the boxes (except for the "Port Location" box) by clicking on selections w holding down the Shift key (contiguous) or the Ctrl key (discontinuous). You can select "All Border Ports" or "Northern Border Ports" or "Southern Border Ports" in the "Port Location" box if you wish to choose ports in multiple states. Use the scroll bar or mouse wheel to page down to see the results. The system will retain your selections in order to speed up the process if you was change one or more items for another query. When querying monthly data, the interface will only work when querying 11 years data or less.

Note: Loaded and empty truck container data are not available for Blaine, Washington for October-December 2015 and June-July 2016.



Highway Statistics Series

motor fuel, motor vehicle registrations, driver licenses, highway user taxation, highway mileage, travel, and highway finance

Highway Statistics Series Publications

Highway Statistics 2014





HIGHWAY STATISTICS

Guide to Reporting Highway Statistics

HPMS Field Manual

Traffic Monitoring Guide

Public Roads: What's in the Numbers - article

6. Travelers (or System Users)

- 6.1. Overview
- 6.2. National tables
- 6.2.1. Licensed drivers, vehicle registrations, and resident population Chart
- 6.3. State tables
 - 6.3.1. Licensed drivers--Ratio of licensed drivers to population
 - 6.3.2. Licensed drivers, by sex and percentage in each age group
 - 6.3.3. Licensed drivers, by State, sex, and age group

7. Vehicles

- 7.1. Overview
- 7.2. National tables
- 7.2.1. Vehicle registrations, fuel consumption, and vehicle miles of travel Chart
- 7.3. State tables
 - 7.3.1. State motor-vehicle registrations
 - 7.3.2. Publicly owned vehicles
 - 7.3.3. Truck and truck-tractor registrations
 - 7.3.4. Bus registrations
 - 7.3.5. Trailer and semi-trailer registrations
 - 7.3.6. State motor-vehicle and motor-carrier tax receipts
 - 7.3.7. Disposition of State motor-vehicle and motor-carrier tax receipts



Traffic Volume Trends

Traffic Volume Trends



Traffic Volume Trends is a monthly report based on hourly traffic count data reported by the States. These data are collected at approximately 4,000 continuous traffic counting locations nationwide and are used to estimate the percent change in traffic for the current month compared with the same month in the previous year. Estimates are re-adjusted annually to match the vehicle miles of travel from the Highway Performance Monitoring System and are continually updated with additional data.

See our Frequently Asked Questions (FAQ's) to find more information on the Traffic Volume Trends report.



To view PDF files, you can use the Acrobat® Reader®. To view XLS files, you can use the Excel Viewer



Monthly Report	PDF Version	XLS Version
July 2016	PDF (390 KB)	XLS (464 KB)
June 2016	PDF (411 KB)	XLS (475 KB)
May 2016	PDF (403 KB)	XLS (458 KB)

Railroad Crossing Accident Database



You are Visitor# 12416151

Home What's New

v Cr

Crossing Forms/Publications

D<u>o</u>wnloads*

Data* Documents*

Policies*

Support*

Last update: Tuesday, October 04, 2016

Home

Welcome to the FRA Office of Safety Analysis Web Site. The purpose of this site is to make railroad safety information including accidents and incidents, inventory and highway-rail crossing data readily available to the public.

Site users can run dynamic queries, download a variety of safety database files, publications and forms, and view current statistical information on railroad safety. TO SEARCH, a PDF or WORD formatted "Table of Contents" list is available. To search by key word among queries, tables and output table fields, click on the link and then search using the application search feature (Control F).

- ** Accident/Incident Recordkeeping and Reporting Reference Links **
- ** New email address for Railroad Accident/Incident Reporting **
- ** New mailing address for Railroad Accident Incident Reporting **

Definition of Individual, System and Consolidated Railroads

** Submit Highway-Rail Crossing Inventory Data with the NEW Grade Crossing Inventory System (GCIS) **

1 - Overview

- 1.02 Operational Data Tables
- 1.03 Overview Charts By Railroad
- 1.04 Overview Charts By State
- 1.11 One Year Accident/Incident Overview Combined



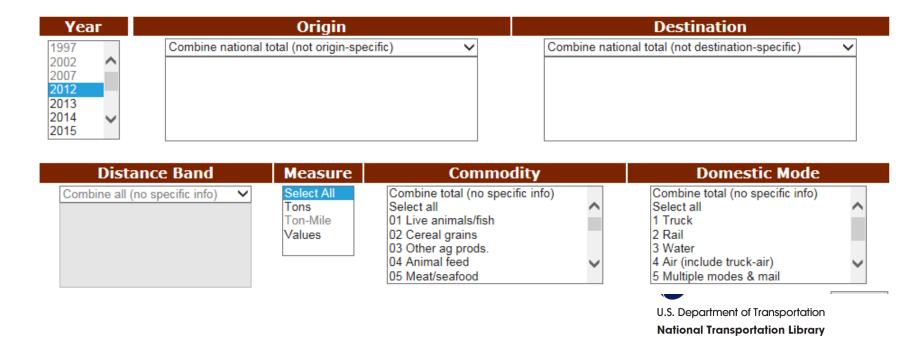
Tracking freight movement by commodity, origin, and destination

Freight Analysis Framework Data Tabulation Tool (FAF4)

Total Flows Domestic Flows Import Flows Export Flows

This option is provided for users interested in tabulating FAF⁴ data to examine total flows moved between domestic origins and destinations and includes both domestic and foreign shipments. For import shipments, the origin of the flow is the zone (state or region) of entry, and for export shipments the destination of the flow is the zone (state or region) of exit. Mode of transportation for this tabulation is the mode used from zone of entry to the domestic destination, domestic origin to domestic destination, and domestic origin to zone of exit.

Note: The units of measure are **thousands of tons** for weight, **millions dollars** for value, and millions for ton-miles. Forecasts for 2020 and beyond are for the baseline scenario.



Understanding Travel Behavior





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User's Guides

Summary of Travel Trends

Compendium of Uses

Add-on Program

Were you selected to be a survey participant?

National Household Travel Survey

Understanding How People Get from Place to Place



Stay Informed

Join the NHTS News mail list.

NHTS News is a light-traffic mail list with announcements and other information of interest to the Visit the <u>2016 NHTS Survey website</u> to **Take the Survey**, learn more **About the Survey**, get answers to frequently asked questions **(FAQs)**, and to **Contact Us**

If you have questions or comments for our **Survey Partners** (State DOTs, MPOs, and COGs), please click here.

Recent Publications

NHTS Compendium of Uses, 2016 (through June)

2016 Sample Design.

2016 Retrieval Questionnaire.

Trips to medical care among persons with disabilities: Evidence from the 2009 National Household Travel Survey DOI ➡

Are we there yet? 2016 NHTS announcement at transportation.gov

→.

CDC report <u>Active</u>
<u>Transportation Surveillance</u>
<u>— United States, 1999</u>
–2012 □→.



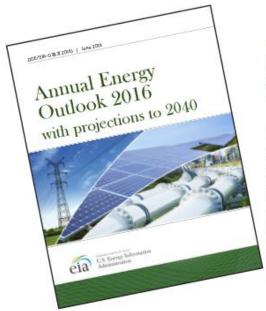
What kind of data does the National Household Travel Survey Capture?

- purpose of the trip (work, shopping, etc.);
- means of transportation used (car, bus, subway, walk, etc.);
- how long the trip took, i.e., travel time;
- time of day when the trip took place;
- day of week when the trip took place; and
- if a private vehicle trip:
 - number of people in the vehicle , i.e., vehicle occupancy;
 - driver characteristics (age, sex, worker status, education level, etc.); and
 - vehicle attributes (make, model, model year, amount of miles driven in a year).



U.S. Energy Information Administration – Alternative Fuel Vehicles





Annual Energy Outlook 2016

presents yearly projections and analysis of energy topics

Download the AEO2016 Report

Projections in the Annual Energy Outlook 2016 (AEO2016) focus on the factors expected to shape U.S. energy markets through 2040. The projections provide a basis for examination and discussion of energy market trends and serve as a starting point for analysis of potential changes in U.S. energy policies, rules, and regulations, as well as the potential role of advanced technologies.

By Section

Executive Summary

Preface

Market Trends

Issues in Focus

- Effects of the Clean Power Plan 6/20/16
- Fuel Consumption and Greenhouse Gas
 Emissions Phase 2 Standards for Medium- and
 Heavy-Duty Vehicles 6/23/16
- Extended Policies Case 6/27/16
- Hydrocarbon Gas Liquids Production and Related Industrial Development - 7/6/16
- Steel Industry Energy Consumption Sensitivity to Technology Choice, Fuel and Carbon Prices in the Industrial Demand Module - 7/7/16

Legislation & Regulations

Comparison with Other Projections

Commodity Flow Survey-partnership between the Census Bureau and the Bureau of Transportation **Statistics**

You are here: Census.gov > Business & Industry > Other Economic Programs > Commodity Flow Survey

Commodity Flow Survey



About the Survey

Forms

Historical How the Data Data are Collected Definitions

Public Use Microdata



Site Resources

Press Release

Are You In a Survey?

- Is this form legitimate?
- Get help with your form

Related Sites

- American FactFinder
- Business Help Site
- Economic Census
- NAICS
- Bureau of Transportation Statistics

North American

 Transportation Statistics Database

Commodity Flow Survey

The Commodity Flow Survey (CFS), undertaken through a partnership between the Census Bureau and the Bureau of Transportation Statistics (BTS) is conducted every 5 years (years ending in "2" and "7") as part of the Economic Census. The CFS produces data on the movement of goods in the United States. It provides information on commodities shipped, their value, weight, and mode of transportation, as well as the origin and destination of shipments of commodities from manufacturing, mining, wholesale, and selected retail and services establishments.

2012 Data

New The 2012 CFS Public Use Microdata file is now available through the Public Use Microdata tab on this page.

- 2012 CFS Final estimates are now available on the American FactFinder.
- For more information on metropolitan areas in the CFS, please visit the Economic Census CFS Areas
- For instructions on how to navigate through American FactFinder for the CFS: Navigate Through AFF for CFS [PDF, 2.7 MB]
- The 2012 CFS data are also available in a print report series:

U.S. Summary Report [PDF, 8.3 MB]

U.S. Hazardous Materials Report [PDF, 4.7 MB]

U.S. Exports Report [PDF, 3.5 MB]



Move to LibAnswers (SpringShare)

LibGuides -

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Content ▼

Discussions -

Statistics

Help

david.w.martin@dot.gov Logout

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LibGuides Home

Welcome to the Dashboard - your one stop shop for all things LibGuides!



Springy News

- Fall Friday Fun! A few LibGuides Updates
 September 30, 2016
- · LibWizard 1.7.5 Update Now Live!
- SpringyCamp Design September 30, 2016
 For Your Users: Registration Now Open!
 (Oct 5-7) September 27, 2016
- · LibCal Equipment Booking is Here!
- Search & A-Z September 13, 2016
 Management Release is Here!

Needs Your Attention

Hear that? Shhhh...all is quiet, nothing wanting your attention!

Reference Librarian



David Martin

Email Me

Contact:

1200 New Jersey Ave SE

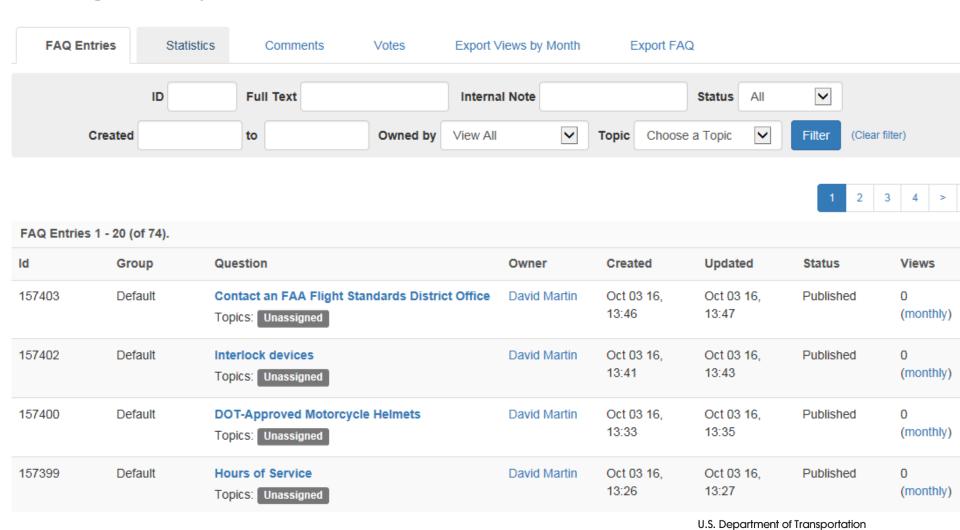
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Washington DC 20590

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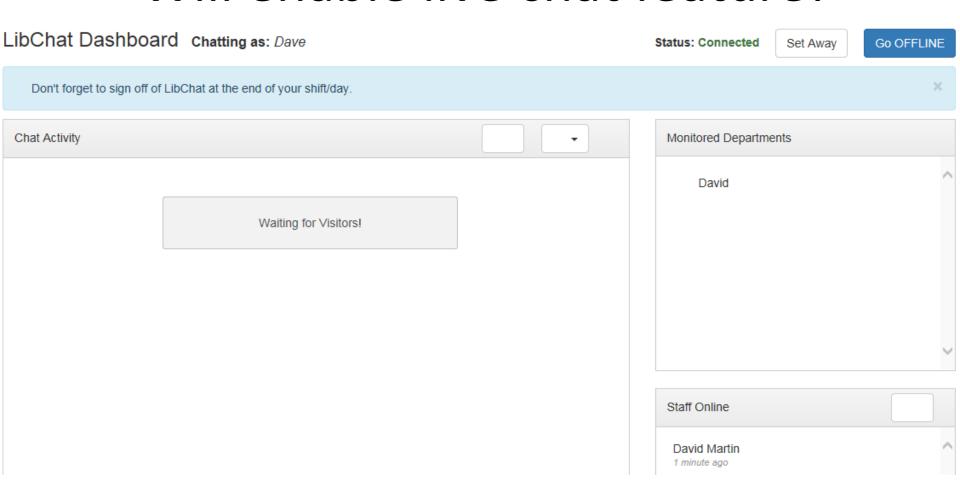
National Transportation Library

Knowledge Base Explorer: FAQ Entries



National Transportation Library

Will enable live chat feature!



Questions?



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U.S. Department of Transportation, National Transportation Library Data Services Update

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NTL Data Services

NTL Data Services include:

- Data Public Access Guidance & Advocacy
- Data Management Guidance & Training
- Best Practices Implementation
- Recommendations Creation
- Data Curation
- Data Access & Preservation
- & more to come

Some Key Terms

Data Management¹

 deliberate planning, creation, storage, access and preservation of data produced from a given investigation¹

• Data Curation²

 enables data discovery and retrieval, maintains data quality, adds value, and provides for re-use over time²

• Data Science³

 drawing useful conclusions from large and diverse data sets through exploration, prediction, and inference³

Linked Processes

Data Management ∈ Data Curation

Data Curation ⇒ Data Science

U.S. DOT Public Access Requirements

http://ntl.bts.gov/publicaccess/

Researchers and authors are subject to U.S. DOT Public Access requirements if:

- U.S. DOT funded scientific research;
- Newly funded or extended on or after January 1, 2016.

Researchers and authors will need to submit:

- ORCiDs
- 2 3 page Data Management Plan (with proposal);
- Final peer-reviewed manuscript;
- Final Digital Datasets; and,
- Any other written outputs (final reports, technical reports, tech summaries, etc.)

Public Access Guidance

http://ntl.bts.gov/publicaccess/creatingaDMP_extramural.html



Data Services:

Education & Cheerleading

- PA Compliance Guidance
- Data Management Planning training & consulting
- DMP Sufficiency Checklist and Training
- Data Citation Recommendations
- Best Practice sharing

Future Actions

- Data Curation & Preservation
- FAIR Data Principles
- Repository





NTLDataCurator@dot.gov (202) 366-DATA

DATA MANAGEMENT PLANNING "GREENOUT" BINGO SELF-ASSESSMENT TOOL

This tool is designed to help assess your current data management practices. Pick a dataset or research project, sit down with your data collection team, and discuss each prompt below. This tool can guide DMP improvement by revealing best practices that you are not using or information that you may not have gathered.

Dataset Name:	
Evaluators:	
Date:	

Using colored pencils, highlighters, or the highlighter tool in your document reader, shade your answer in each prompt-box as indicated. The greener the card, the better. But don't force it: Good data management is a process. NTL can help. Write your questions on the back, and contact us for help.



Red: Not current practice, Unknown, or No.

Yellow: We are planning on this or are working on it.

Green: Practice enacted, or Yes.

Blue: Not Applicable.

Data Description	Standards Employed	Access Policies	Re-use & Derivative Policies	Archiving & Preservation Plans
Dataset is named, well described , and linked to a research project or data program.	If data is created in proprietary formats, copies in open formats are also provided.	Data is publicly accessible.	The intellectual property rights to this dataset have been established.	A data repository dedicated to long-term preservation has been chosen for this data.
The types of data generated by the research or program are known.	Data formats are standard for our field.	What data will be shared, and how, is known and recorded.	Data is licensed under the most open license possible, such as Public Domain or Creative Commons 0.	A minimum data retention period has been agreed upon with chosen archive.
The size of data is known and organization has capacity for files.	Directory and file naming conventions are documented & used at time of data collection.	Researchers have received training to protect PII and other rights.	If there is a data embargo period, it is as short as possible.	Persistent identifiers (such as DOIs) are used to link to the data.
Long-term value of the data to organization and public has been discussed.	Metadata is used to contextualize the data, making it comprehensible to us and others.	Personally Identifiable Information (PII) is protected or anonymized.	Possible reuse audiences for this data, now and later, have been considered.	Back-up and disaster recovery plans are in place.
Parties responsible for managing data are known and listed.	Published metadata schemas are employed, & are standard to the field.	Embargo periods to protect PII and business sensitive information have been established.	Special tools needed to work with the data are documented in metadata.	Staff has been assigned to migrate data files as data formats change over time.

Based on NTL's "Creating Data Management Plans" http://ntl.bts.gov/publicaccess/creatingaDMP.html

v.01, 2016-08-11

In-House Training

DMP Self-Assessment

- Gives visual feedback on current state of DMP best practices
- Tested with each BTS office
- Used to begin DMP process for 2 BTS datasets
 - Transborder Freight
 - State Transportation Stats



2. Data Description: Partially Explained nformation applicable **Data Description Narrative Evaluation Prompts** The DMP names the data, data collection project, or data producing 2.01 program. The DMP describes the purpose of the research or data collection. The DMP describes the data generated in terms of nature and scale (e.g., numerical data, image data, text sequences, video, audio, database, modeling data, source code, etc.). The DMP describe methods for creating the data (e.g., simulated; observed; experimental; software; physical collections; sensors; satellite; enforcement activities; researcher-generated databases. tables, and/or spreadsheets; digital data such as images and video; The DMP discusses the period of time data will be collected and 2.05 frequency of update. The DMP describes the relationship between the new data collected for this effort and any existing data also used... The DMP lists potential users of the data. The DMP discusses the potential value the data have over the long-2.08 term for not only U.S. DOT, but also for the public. If the DMP contains a request permission to not make the data publicly accessible, it explains the rationale for lack of public 2.09 access. The DMP indicates the party responsible for managing the data. The DMP describes how project leads will check for adherence to 2.11 this data management plan. 2 Total of checked boxes for each column, out of 11:

Evaluation questions:

- Did a majority of the prompts rate "Explained Fully"?
- Do you have a complete picture of: What the data will be gathered; How much data to expect; and, Who is responsible for managing data, and how the data will be managed?

If not, this section may not be sufficiently detailed.

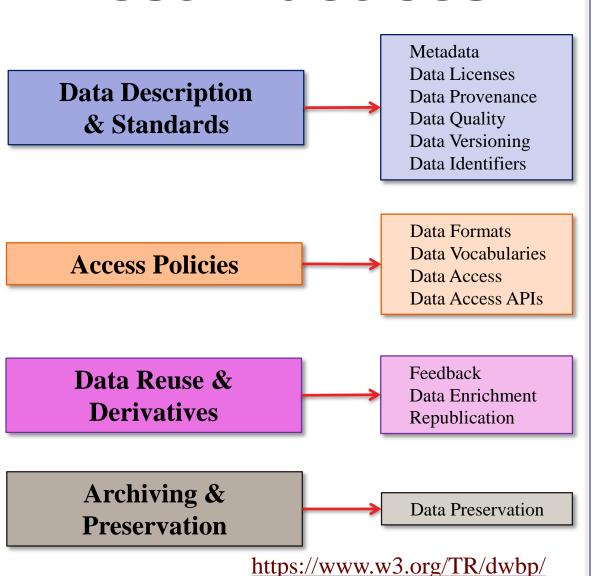
In-House Training

DMP Sufficiency Evaluation

- Gives quantitative feedback to bolster subjective judgement
- Precise feedback to researcher on what is missing
- Better DMPs improve likelihood of long-term data preservation for public reuse



Data on the Web Best Practices



Benefits Reuse Trust Comprehension Access Linkability Interoperability Discoverability

Processability

Citizen Science & Citizen Data Science



Students test water for FieldScope, a citizen science tool.

Photograph by Jackie Karsten, National Geographic

http://nationalgeographic.org/encyclopedia/citizen-science/





https://www.galaxyzoo.org/



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National Transportation Library

NTL's Repository & Open Science Access Portal (Rosa P)



Immediate Steps

- Launch in late 2016
- Based on the CDC Public Access platform, which hosts the CDC Stacks and NOAA Institutional Repository digital libraries
- AWS cloud storage
- Publications & Data
- DOIs

Future Steps

Trusted repository status



Community Involvement and Capacity Building

- NCHRP 20-110 "A Guide to Ensure Access to the Publications and Data of Federally Funded Transportation-Related Research"
- Data Curation Curriculum for Federal Employees development (FEDLINK)

- RDA/NTL relationship development
- NISO voting members
- Data curation discussion group (CENDI)
- Public Access Speed Dating Workshop TRB 2017 (LIST)

Questions?

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References

- 1. University Library, Texas A&M University. "Data Management Defined Research Data Management Guides at Texas A&M University." Research Data Management, October 1, 2013. http://guides.library.tamu.edu/DataManagement
- 2. Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign. "Specialization in Data Curation," 2013. http://www.lis.illinois.edu/academics/programs/specializations/data_curation
- 3. Definition based on Ani Adhikari and John DeNero, "The Foundations of Data Science" http://www.inferentialthinking.com/index.html "What is Data Science" http://www.inferentialthinking.com/chapter1/what-is-data-science.html
- 4. Adapted from: W3C. 2016. "Data on the Web Best Practices." https://www.w3.org/TR/dwbp/
- 5. National Geographic. "Citizen Science" [definition]. http://nationalgeographic.org/encyclopedia/citizen-science/