Exploring Census Data Webinar Series: Webinar #1

Census Data for the Transportation and Warehousing Sector For audio, dial: 800-621-3587

Passcode: 8934821#

March 31st, 2020

Presented by:

Barbara Zamora-Appel and Charles Gamble

US Census Bureau





Exploring Census Data Webinar Series

- Monthly webinars on key topics
- Follows real-life use cases
- Presented by Census subject matter experts
- Includes Q&A
- Recorded and posted for later reference
- Learn more at: https://www.census.gov/academy
- View 2019 webinar series materials at: https://www.census.gov/data/academy/webinars.html

Exploring Census Data Webinar Series

<u>Topic</u>: <u>Date</u>:

Transportation March 31, 2020

Finance April 28, 2020

Education May 27, 2020

Economic Geography June 16, 2020

Emerging Technologies July 21, 2020

New Businesses August 11, 2020

Hidden Gems September 22, 2020

SAVE THE DATE: All webinars are FREE and start 2:00pm, ET.

No registration required – Log in details will be provided 24-48 hours prior to the event. For more information, please contact the Data User & Trade Outreach Branch at 800-242-2184 or ewd.outreach@census.gov



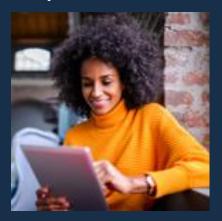
Objectives

Raise awareness of the wealth of data available to help users better understand the Transportation and Warehousing sector (NAICS 48-49)

Train users on how best to access these valuable data using key Census Bureau data tools

census.gov

- To obtain an archived copy, visit <u>census.gov</u> / Explore Data / Census Academy
- Find stories and free visualizations under 'Library'





Outline

About the Census Bureau

II. Data Sources:

- Quarterly Services Survey (QSS)
- County Business Patterns (CBP)
- Economic Census (EC)
- Annual Business Survey (ABS)
- American Community Survey (ACS)

III. Accessing our statistics:

- data.census.gov
- Census Business Builder (CBB)
- Other methods



Check Out Census Data in Action!

America Counts: Stories Behind the Numbers

We feature stories on various topics such as families, housing, employment, business, education, the economy, emergency preparedness, and population.

America Counts: Stories Behind the Numbers – https://www.census.gov/library/stories.html



Changing America

More Children Live With Half Siblings Than Previously Thought

About the Census Bureau

- The U.S. Census Bureau is the federal government's largest statistical agency.
- We conduct more than 130 censuses and surveys each year, including
 - The Decennial Census the once-a-decade population and housing count of the United States
 - The American Community Survey the ongoing annual survey of the nation's population
 - The Economic Census the official five-year measure of American business
 - The Census of Governments identifies the scope and nature of the nation's state and local government sector
- Our mission is to serve as the leading source of quality data about America's people, places, and economy.

Decennial Population and Housing Census
Every 10 years

Economic Census
Every 5 years

Census of Governments
Every 5 years

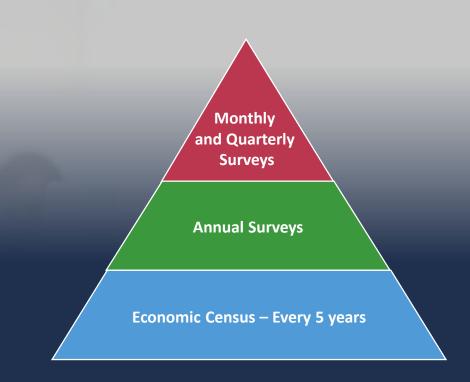
American Community Survey
Annual

Annual Retail Trade
Annual

Plus more than 130 demographic and economic surveys every year







Census Economic Surveys

- Census Bureau Economic Surveys are a key source for official statistics companies can use:
 - Monthly and Quarterly are small sample surveys that provide the most TIMELY data available
 - Annual surveys have larger samples and provide the most up-to-date TREND data available
 - Every 5 years, the Economic Census measures all businesses and provides the most COMPREHENSIVE data available
- These surveys set the standard for U.S. economic statistics, and are fueled by the data provided by individual businesses



Key Census Bureau Terms

- NAICS (North American Industry Classification System)
 - Our primary data dimension
- Establishments (vs. Companies, Firms, etc.)
 - Our collection/tabulation level
- Employers (vs. Nonemployers)
 - Most programs only cover employer businesses
 - Nonemployers: self-employed individuals
- U.S. Code Title 13 and 26
 - Protects business privacy and confidentiality





The Transportation and Warehousing Sector

Transportation and Warehousing sector (sector 48-49) includes industries providing

- Transportation of passengers and cargo
- Warehousing and storage for goods
- Scenic and sightseeing transportation
- Support activities related to modes of transportation

Businesses in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline.

It includes:

481	Air Transportation	487	Scenic and Sightseeing Transportation
482	Rail Transportation	488	Support Activities for Transportation
483	Water Transportation	491	Postal Service (Federal Government)
484	Truck Transportation	492	Couriers and Messengers
485	Transit and Ground Passenger Transportation	493	Warehousing and Storage
486	Pipeline Transportation		



Transportation Data Sources and Data Tools

Periodic Surveys

- Job to Job Explorer
- **Quarterly Services Survey (QSS)**
- Quarterly Workforce Indicators (QWI)
- **County Business Patterns (CBP)**
- Nonemployer Statistics (NES)
- Service Annual Survey (SAS)
- Annual Capital Expenditure Survey (ACES)
- **Business Dynamic Statistics (BDS)**
- Statistics of US Businesses (SUSB)
- Survey of Business Owners (SBO)
- Annual Survey of Entrepreneurs (ASE)
- LEHD Origin-Destination Employment Statistics (LODES)
- **Economic Census**

Quarterly **Programs**

> Annual **Programs**





Quarterly Services Survey (QSS)



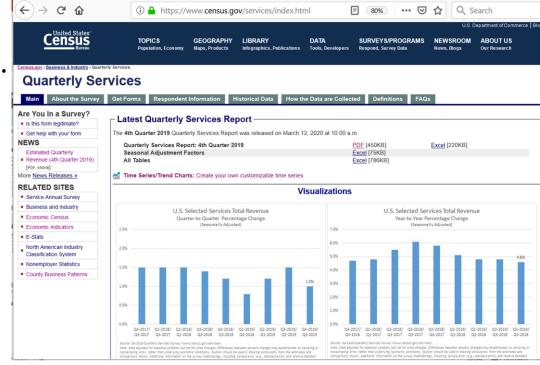
The Quarterly Services Survey (QSS) is the only source of service industry indicator performance providing timely estimates of revenue and expenses for selected service industries. The QSS is a sub-sample of the Service Annual Survey (SAS).

- Is a principal economic indicator that produces, for selected service industries, quarterly estimates of total operating revenue and the percentage of revenue by class of customer (government, businesses, and household consumers/individual users)
- Also produces estimates of total operating expenses from tax-exempt firms in industries
 that have a large not-for-profit component. In addition, for hospital services, the survey
 estimates the number of inpatient days and discharges
- Developed to address critical gaps in federal statistics covering the service economy
- Both seasonally-adjusted and not-adjusted data
- Data are published at the National level only



Quarterly Services Survey (QSS) Cont'd

- Produces quarterly estimates of revenue and expenses for service industries
- Conducted quarterly with the mail-out occurring at the end of each calendar quarter.
 Last survey period available is from 4th Quarter 2019
- Advance Quarterly Services Report released online approx. 50 days after the calendar quarter ends.
- Quarterly Services Report released online approx. 75 days after the calendar quarter ends.
 Data can be accessed here:
- https://www.census.gov/services/index.html





Industry Coverage

Quarterly Services Survey covers the following NAICS Codes for the Transportation and Warehousing sector:

48pt-49: Transportation and Warehousing

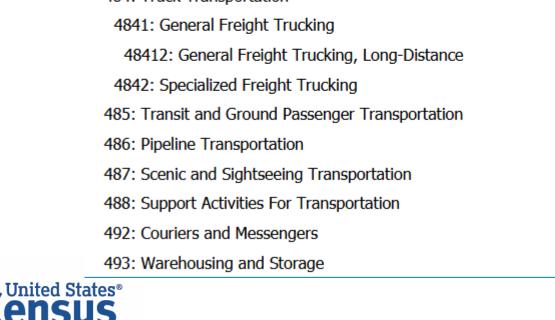
481: Air Transportation

483: Water Transportation

4831: Deep Sea, Coastal, and Great Lakes Water Transportation

4832: Inland Water Transportation

484: Truck Transportation

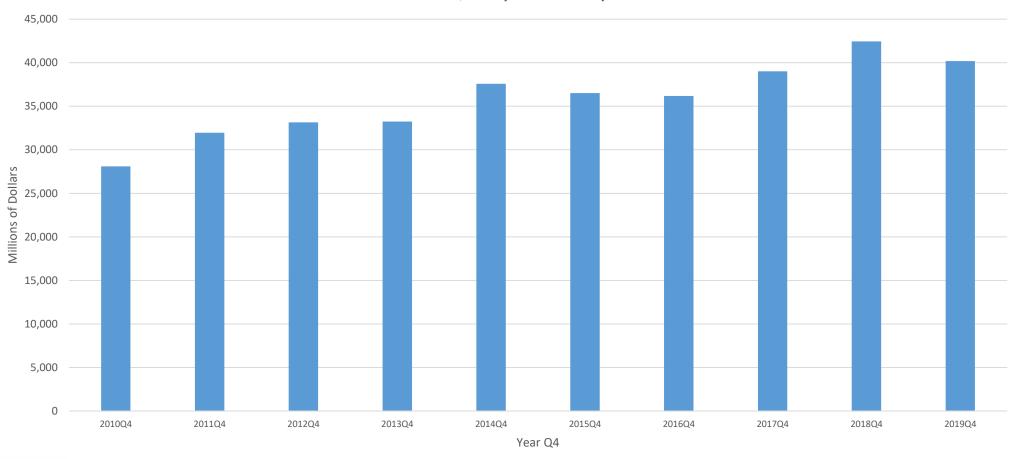


NAICS Sector Coverage in QSS					
22	Utilities				
48-49	Transportation and Warehousing				
51	Information				
52	Finance and Insurance				
53	Real estate and rental leasing				
54	Professional, scientific, and technical services				
56	Administrative and support and waste management and remediation services				
61	Educational Services				
62	Health care and social assistance				
71	Arts, entertainment, and recreation				
721	Accommodation				
81	Other Services (except public administration)				



Not Seasonally Adjusted Total Revenue (Millions of Dollars) NAICS 48412: General Freight Trucking, Long-Distance: U.S. Total Q4-2010 to Q4-2019

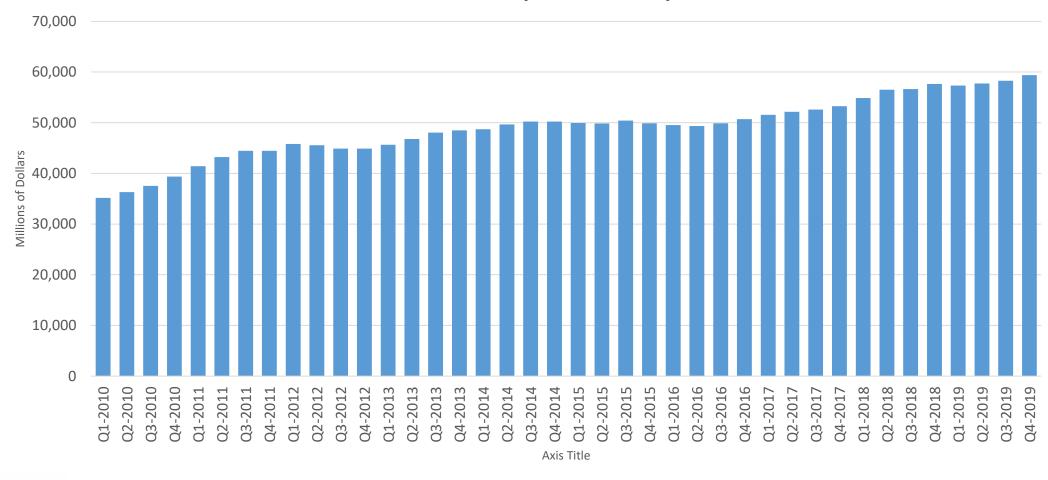
Source: Quarterly Services Survey





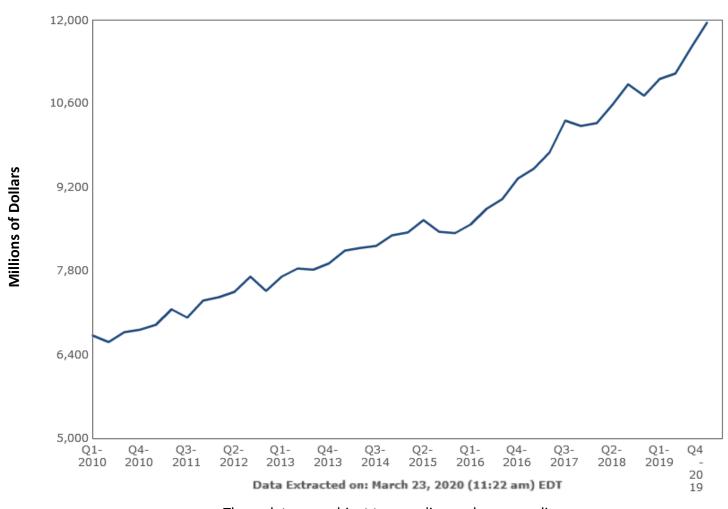
NAICS 481: Air Transportation: U.S. Total [Millions of Dollars] Period: 2010 to 2019 Seasonally Adjusted Total Revenue

Source: Quarterly Services Survey





Source: Quarterly Services Survey
NAICS 485: Transit and Ground Passenger Transportation: U.S. Total
Q1-2010 to Q4-2019
Seasonally Adjusted Total Revenue





These data are subject to sampling and nonsampling error.

County Business Patterns



The County Business Patterns (CBP) is an Annual series that provides subnational economic data by industry for most businesses with paid employees.

- Includes the number of establishments, employment during the week of March 12, first quarter payroll, and annual payroll.
- Data originates from administrative records received from the Internal Revenue Service, Social Security Administration, and Bureau of Labor Statistics, as well as from the Economic Census & Company Organization Survey data collections

Our industry: Transportation, NAICS 481, 484, 485



Key Stats for selected transportation sectors

Air Transportation, NAICS 481 Number of Establishments: 4,441

Employment: 470,353

Annual Payroll: \$39,965,954,000

Truck Transportation, NAICS 484

Number of Establishments: 126,986

Employment : 1,465,040

Annual Payroll: \$71,922,651,000

Transit Ground Passenger Transportation,

NAICS 485

Number of Establishments: 20,397

Employment: 514,615

Annual Payroll: \$15,188,602,000

(Source: 2017 County Business Patterns)

County Business Patterns (CBP) Cont'd

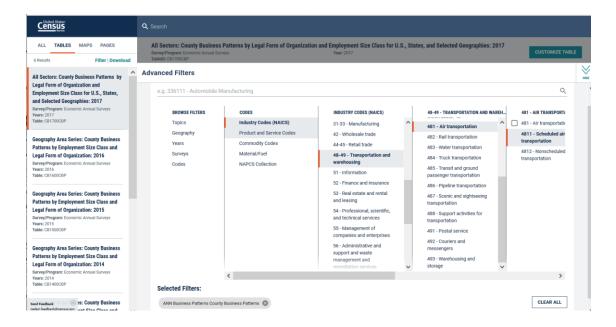
Data for establishments are presented by geographic area, 2- thru 6-digit NAICS industry, legal form of organization (U.S. and state only), and employment size classes.

 Only annual source of complete and consistent county-level data for U.S., Puerto Rico, and Island Areas business establishments with industry detail.

By U.S. level and by State, County, Metropolitan area, ZIP Code, and Congressional

District

Data.census.gov





County Business Patterns (CBP) Cont'd

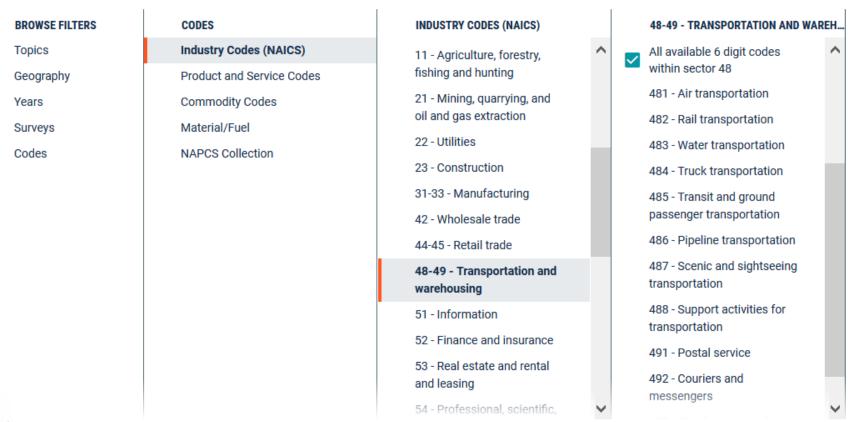
CBP data tables are available on data.census.gov from 2012-present, in American Factfinder from 2004-2016, and in print publication from 1997-2004.

- CBP Datasets
 - ➤ CBP data are available in downloadable CSV format, along with record layouts and reference guides, from 1986-present.
 - > CBP by Congressional District
- My Congressional District tool allows data users to view the most recent CBP data and American Community Survey data by congressional district.
- API
 - ➤ The Census Bureau's Application Programming Interface allows developers to create custom queries. Users can embed these statistics into web or mobile apps.
- Visit The National Archives to find files for years prior to 1986.



Industry Coverage

- More than 1,000 industries are covered at the 6-digit NAICS level by Employment Size and Legal Form of Organization.
 - •2- thru 6-digit NAICS detail is available for the Transportation and Warehousing sector





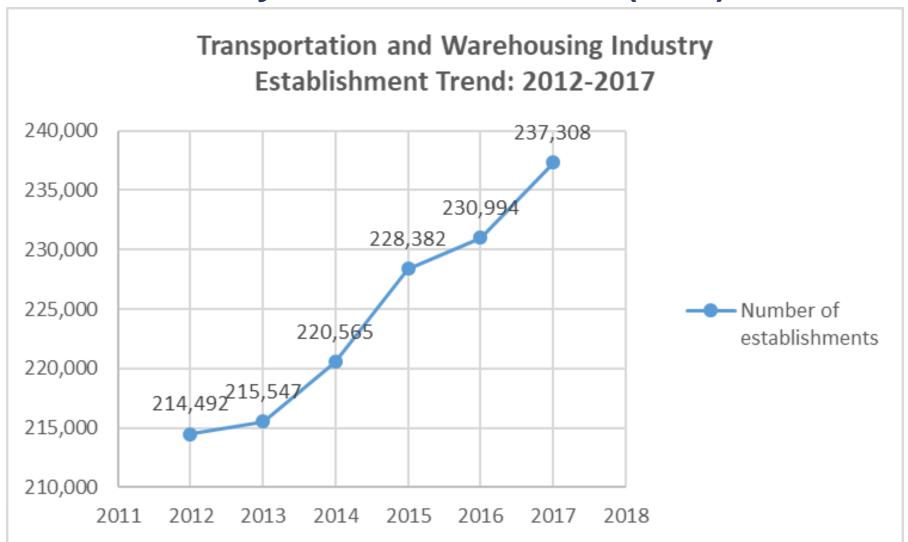
Transportation and Warehousing (NAICS 48-49) Number of Establishments by Sub-Sector: 2017





Source: 2017 County Business Patterns

County Business Patterns (CBP)





Economic Census



2017 Economic Census

- •NAICS: Nearly every 2- thru 6-digit code covered by the Census Bureau
 - •Excludes Agriculture (NAICS 11) and other selected types of business (see https://www.census.gov/programs-surveys/economic-census/guidance/understanding-naics.html#par_textimage for full list of exclusions)
- •Geography: National, state, metro and other lower geographies (areas shown vary by sector)
- •Other Dimensions: Data by business size (establishment and firm; employment and revenue), Legal Form of Organization, Franchise status, etc.
- •Over 200 data variables shown, including number of establishments, employment, payroll and "sales" plus sector-specific variables (inventories, assets, expenses, etc.)
- •As of March 17th, have released data for this sector for 22 states (43% complete)



DATA FROM THE NATION'S BUSINESSES

+

STATS ON EVERY INDUSTRY AND GEOGRAPHY

=

ONE VALUABLE RESOURCE FOR YOUR BUSINESS

THE ECONOMIC CENSUS. SEE HOW IT ALL ADDS UP

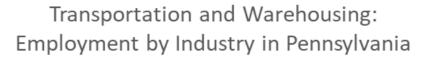
Learn more at census.gov/EconomicCensu

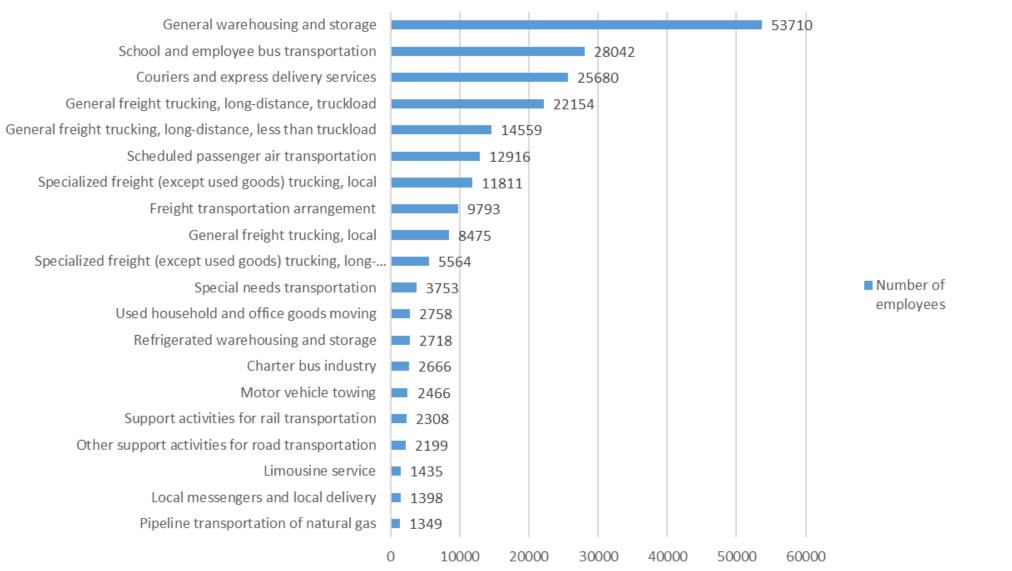
2017 Economic Census Geography Releases – Transportation and Warehousing for Pennsylvania

- General freight trucking, long-distance, truckload: (NAICS code 484121)
 - Number of firms = 1,214
 - Number of establishments = 1,415
 - Sales, value of shipments, or revenue (\$1,000) = \$4,757,928
 - Number of employees = 22,154
- All other transit and ground passenger transportation: (NAICS code 485999)
 - Number of firms = 38
 - Number of establishments = 39
 - Sales, value of shipments, or revenue (\$1,000) = \$29,291
 - Number of employees = 394

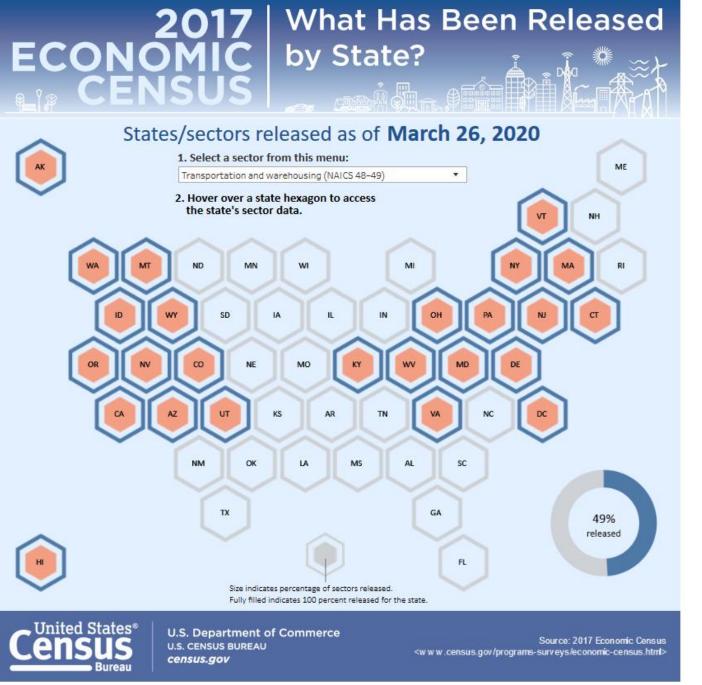
(Source: 2017 Economic Census, TableID: EC1748BASIC)













What's New for 2017

- Geographic Areas (Learn more at <u>https://www.census.gov/programs-surveys/economic-census/geographies.html</u>)
- NAICS updates (none for the Transportation and Warehousing sector for 2017)
- NAPCS (Learn more at <u>https://www.census.gov/programs-surveys/economic-census/guidance/understanding-napcs.html</u>)
- New disclosure rules
- Data.census.gov platform

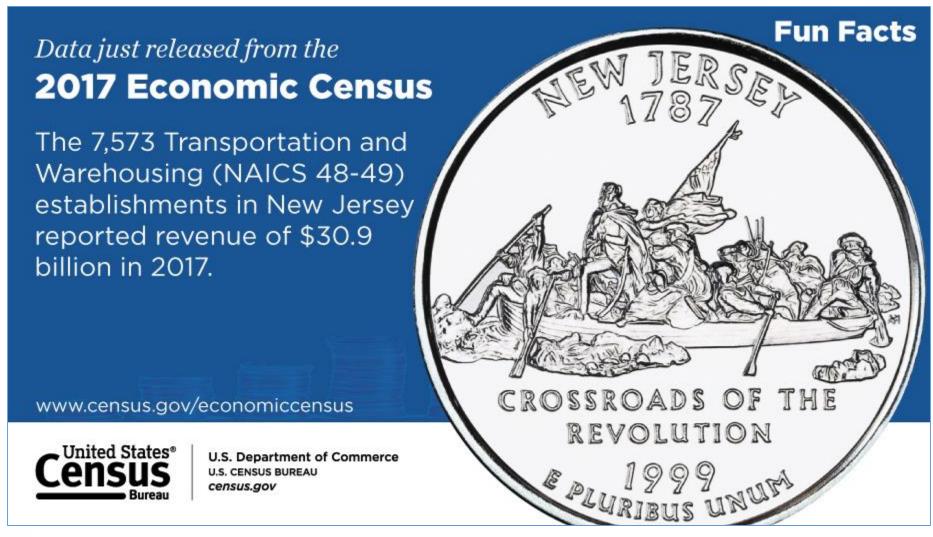


Presenting... Your 2017 Economic Census Data!



Found on data.census.gov

Fun Facts & More... Connect With Us on Social Media





2017 Economic Census Planned Data Product Releases						
Statistics Set	Report Title	Planned Release Date or Date Range				
	Economy Wide Business Statistics for the U.S First Look	Sep-19				
Core Business Statistics	Comparative Statistics for the U.S. (2012 NAICS Basis): 2017 and 2012	Dec-21				
	Bridge Statistics for the U.S. (2012 NAICS Basis): 2017 and 2012	Dec-21				
	Franchise	Dec-21				
	Mining: Geographic Area Statistics	January 2020 - November 2020				
Coographic Area	Construction: Geographic Area Statistics					
Geographic Area Statistics (U.S., States,	Manufacturing: Geographic Area Statistics					
and Selected	Wholesale Trade: Geographic Area Statistics					
Geographies)	Retail Trade: Geographic Area Statistics					
	Services: Geographic Area Statistics					
	Product Statistics: NAICS x NAPCS for the	Nov-20				
Product Statistics	U.S. and States where applicable					
Product Statistics	Product Statistics: NAPCS x NAICS for the					

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Establishment and Firm Size Statistics	Estab & Firm Size Summary Statistics by Revenue Size of Establishments	November 2020 - September 2021	
	Estab & Firm Size Summary Statistics by		
	Employment Size of Establishments		
	Estab & Firm Size Summary Statistics for		
	Single Unit and Multiunit Firms		
	Estab & Firm Size Summary Statistics by Revenue Size of Firms		
	Estab & Firm Size Summary Statistics by		
	Employment Size of Firms	Commodity Flow Surve	
	Estab & Firm Size Summary Statistics by	commounty riow surv	
	Concentration of Largest Firms		
	Estab & Firm Size Summary Statistics by	Annual Survey of Manufactures	
	Legal Form of Organization		
	Manufacturing: Detailed Statistics for the U.S.		
	Construction: Detailed Statistics for the U.S., Regions, and States		
	Mining: Detailed Statistics for the U.S.	Island Areas: Geograp	
	Mining: Miscellaneous Subjects	Area Statistics	
	Construction: Miscellaneous Subjects		
	Manufacturing: Miscellaneous Subjects		
	Services: Miscellaneous Subjects		
	Wholesale Trade: Miscellaneous Subjects	Island Areas : Subject	
	Retail Trade: Miscellaneous Subjects	Statistics	

-		
Commodity Flow Survey	Preliminary	Dec-18
	GAS, Hazardous Materials, Exports	Jul-20
	ASM 2018	Apr-20
A	ASM 2019	Feb-21
Annual Survey of Manufactures	ASM Benchmark	Jun-21
Manufactures	ASM 2020	Dec-21
	ASM 2021	Dec-22
	American Samoa	Jan-20
I-l	CNMI	Jan-20
Island Areas: Geographic Area Statistics	Guam	Jan-20
Area Statistics	Puerto Rico	Dec-20
	US Virgin Islands	Jan-20
	American Samoa	Jan-20
Island Areas Cubiast	CNMI	Jan-20
Island Areas : Subject Statistics	Guam	Jan-20
Statistics	Puerto Rico	Dec-20
	US Virgin Islands	Jan-20
	American Samoa	Jan-20
Island Areas : Product	CNMI	Jan-20
Statistics	Guam	Jan-20
Statistics	Puerto Rico	Dec-20
	US Virgin Islands	Jan-20
Island Areas : Industry Series	Puerto Rico	Dec-20







Annual Business Survey (ABS)

- Frequency annually
- ABS first released estimates last September as an infographic.
 It included the number of minority-owned, women-owned,
 Hispanic-owned, and veteran-owned businesses accessible from census.gov and linked here
 (https://www.census.gov/programs-surveys/abs/library/visualizations.html).
- Detailed tables for ABS are scheduled for release May 19, 2020
- Includes Economic and Demographic characteristics
- Business Characteristics of businesses and business owners by sex, ethnicity, race, and veteran status
- Content incorporates a new set of questions each survey year
- Access to data –



data.census.gov

https://www.census.gov/programs-surveys/abs.html

Access to the Annual Business Survey data



- data.census.gov
- https://www.census. gov/programssurveys/abs.html

ABS Background

- Joint project between the Census Bureau and the National Science Foundation's (NSF) National Center for Science and Engineering Statistics (NCSES)
- Conducted annually as mandatory under Title 13
- Replaces Survey of Business Owners (SBO), Annual Survey of Entrepreneurs (ASE), and the Business R&D and Innovation Survey for Microbusinesses (BRDI-M)
- Also replaces the Innovation part of the Business R&D and Innovation Survey (BRDIS)





ABS Content

- Collects data on owner demographics
 - Ask questions about the owner's sex, race, ethnicity, and military status
- Collects data on research and development activity and cost for businesses with 1-9 employees
- Designed to introduce a new business topic each survey year
 - ➤Innovation
 - ➤ Technology
- Core content maintained each survey year
- Use administrative data where feasible





Five-Year ABS Content Plan



- Business Structure
- Detailed Owner Characteristics
- Detailed Innovation
- R&D (1-9 emp)
- · Digital Technology
- Financing

- Business Structure
- Reduced Owner Characteristics
- Reduced Innovation
- R&D (1-9 emp)
- Automation Technology

- Business Structure
- Reduced Owner Characteristics
- Detailed Innovation
- R&D (1-9 emp)
- Technology (tbd)
- Globalization

- Business Structure
- Detailed Owner Characteristics
- R&D (1-9 emp)
- Digital Technology
- Financing

- Business Structure
- Reduced Owner Characteristics
- R&D (1-9 emp)
- Automation Technology



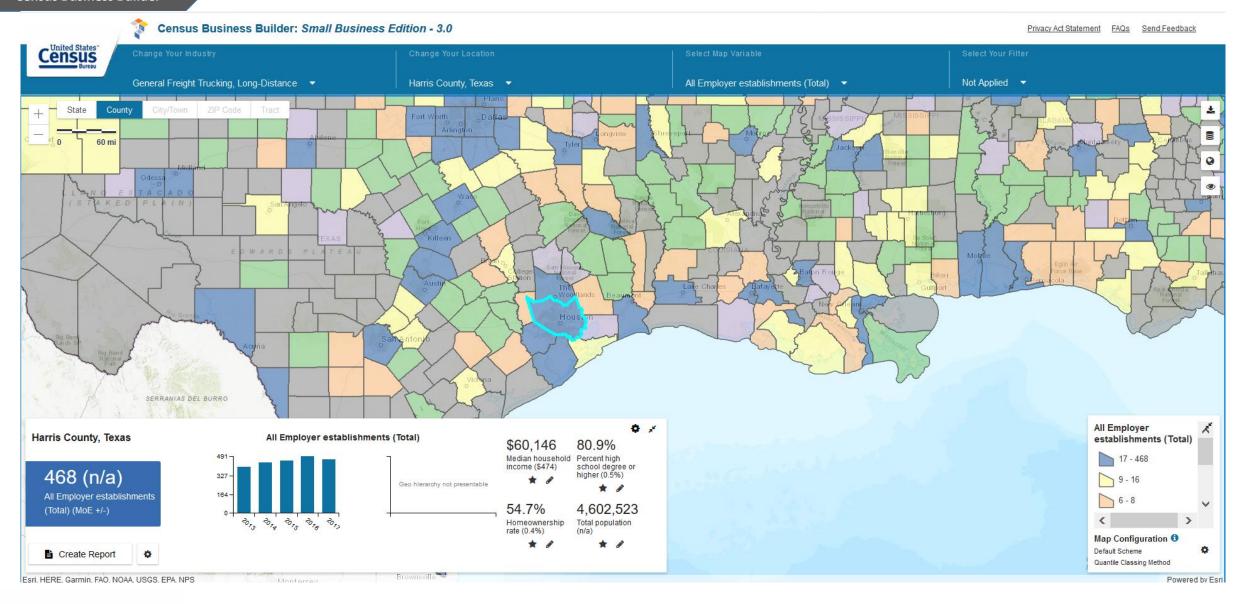


Exploring Our Data Tools



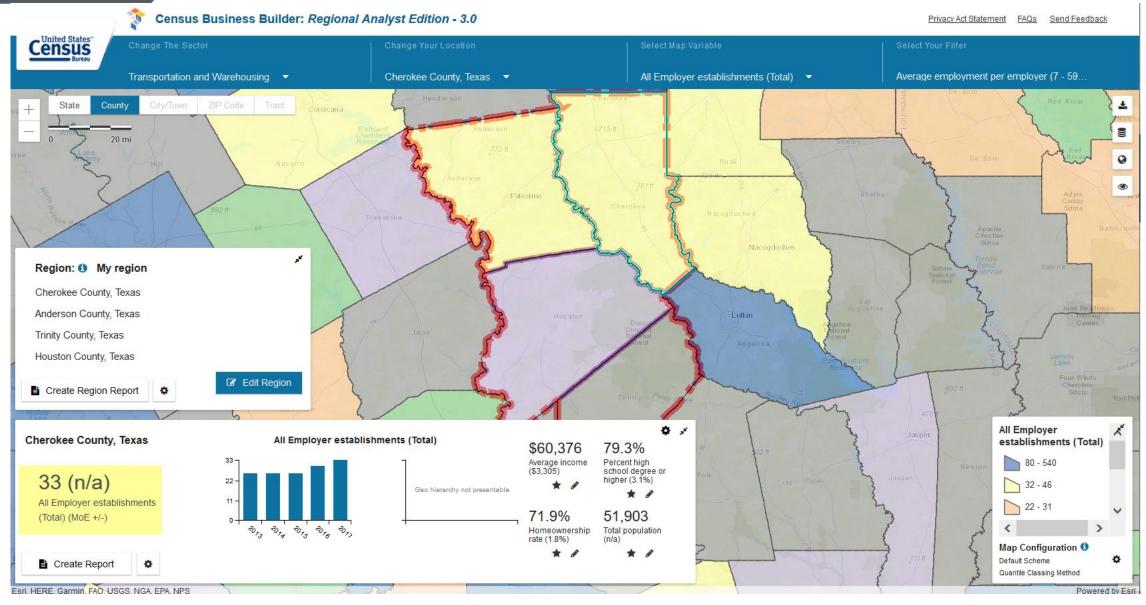
Census Business Builder







Cbb.census.gov





https://cbb.census.gov/rae/#view=map&industry0=48-49&geoType=county&dataVariable=33¢erX=-10616271¢erY=3666558&level=9&geoId=48073&dynHeader=My+region&dynGeo_county=48225-48455-48001-48073

American Community Survey



The American Community Survey is on the leading edge of survey design, continuous improvement, and data quality

- The nation's most current, reliable, and accessible data source for local statistics on critical planning topics such as age, children, veterans, commuting, education, income, and employment
- Surveys 3.5 million addresses and informs over \$675 billion of Federal government spending each year
- Covers **40+ topics**, supports over **300** evidence-based Federal government uses, and produces **11 billion** estimates each year
- Three key annual data releases:
 - 1-year Estimates (for large populations)
 - 1-year Supplemental Estimates (for small populations)
 - 5-year Estimates (for very small populations)



Vehicles Used in Commuting:

Vehicles (Car, Truck, Van) used: 121,227,900

Male: 64,268,685

> Female: 56,959,215

Transportation Occupations:

Full-Time Employed: 4,022,139

Male: 3,609,389

Female: 412,750

Median Earnings in Past 12 Months: \$43,251

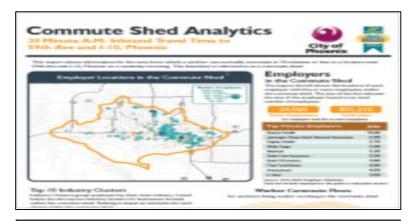


Content Overview: Topics

POPULATION		HOUSING
SOCIAL Ancestry Citizenship Citizen Voting Age Population Disability Educational Attainment Fertility Grandparents Language Marital Status Migration School Enrollment Veterans	DEMOGRAPHIC Age Hispanic Origin Race Relationship Sex ECONOMIC Class of Worker Commuting Employment Status Food Stamps (SNAP) Health Insurance Hours/Week, Weeks/Year Income Industry & Occupation	Computer & Internet Use Costs (Mortgage, Rent, Taxes, Insurance) Heating Fuel Home Value Occupancy Plumbing/Kitchen Facilities Structure Tenure (Own/Rent) Utilities Vehicles Year Built/ Year Moved In



ACS Data In Action



Commute Shed Reports - Phoenix

- Maricopa Association of Governments use ACS data to create Commute Shed Reports.
- Commute Shed Reports show:
 - Workers can commute 30 min.
 or less to select locations
 - Resident and Employer data within a shed (age, education attainment, private employers, top industries, etc.)
- ACS and regional employer data is a valuable tool to inform economic development opportunities.



Evacuteer – New Orleans

- Emergency Management Planning after Hurricane Katrina using ACS.
- Evacuteer used ACS data to plan locations for 17 evacuation points.
 - Measured social vulnerability:
 Public Transportation, vehicle availability, disability status, age, poverty status, etc.



ACS Data Products

Estimated Population of Geographic Area	1-Year Estimates	1-Year Supplemental Estimates	5-Year Estimates
65,000 or more	X	X	X
20,000 to 64,999		X	X
Less than 20,000			X
Planned Release Date	September 17, 2020	October 15, 2020	December 10, 2020



https://www.census.gov/programs-surveys/acs/news/data-releases/2019/release-schedule.html

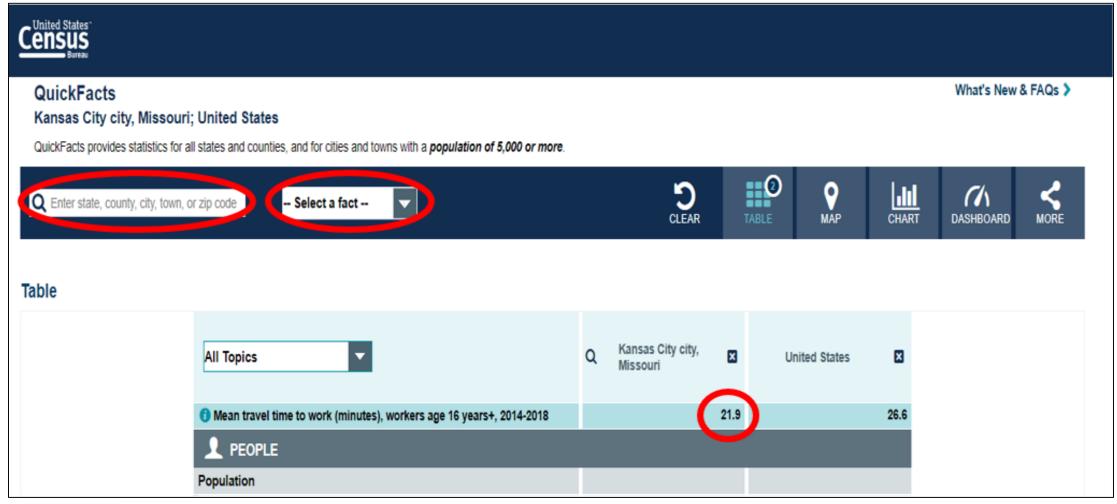
Exploring Our Data Tools



QuickFacts



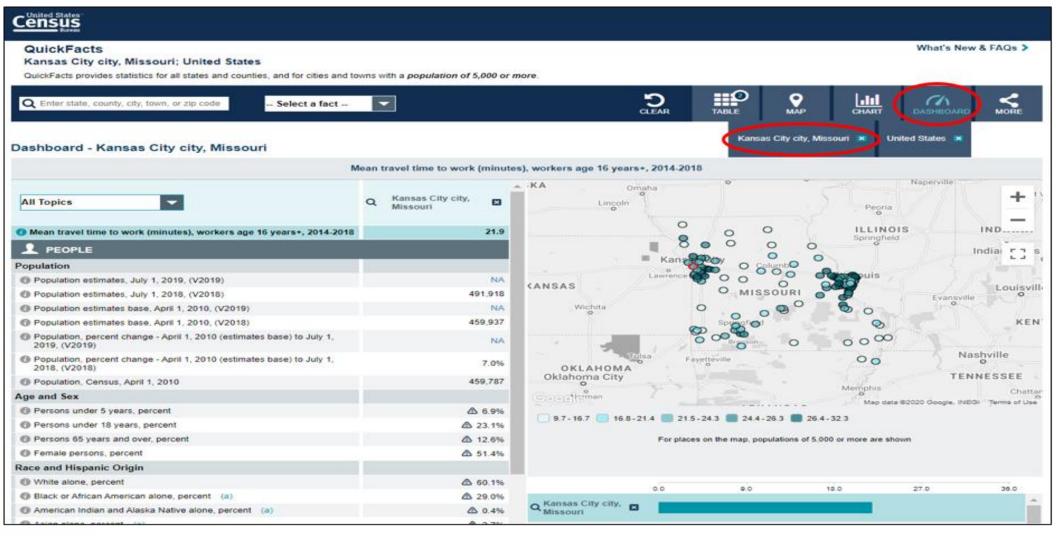
Example 1: Finding Commuting Times by Place Within a State





census.gov/quickfacts

Example 1: Finding Commuting Times by Place Within a State





Exploring Our Data Tools



data.census.gov



Example 2: Live Demo - Finding Transportation Occupation Data by Sex



Explore Census Data

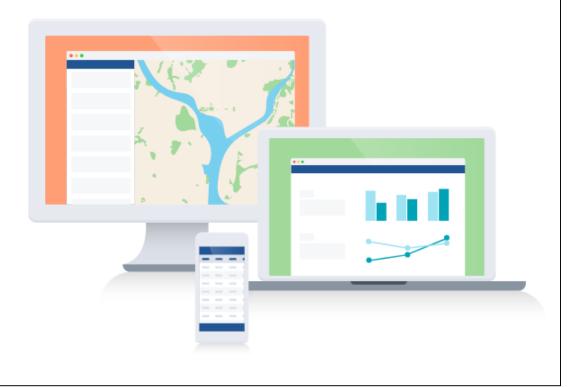
The Census Bureau is the leading source of quality data about the nation's people and economy.

Q I'm looking for ...

Advanced Search

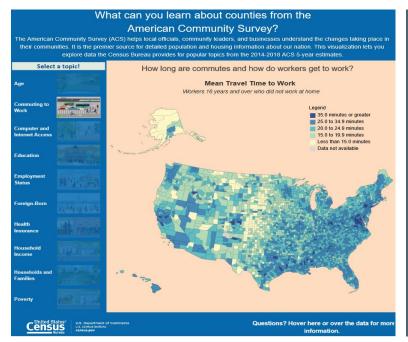
Send Feedback

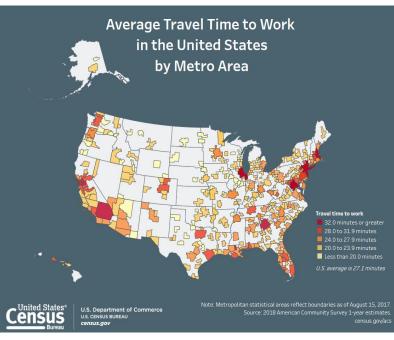
cedsci.feedback@census.gov





ACS Infographics & Visualizations







https://www.census.gov/programs-surveys/acs/library/infographics.html



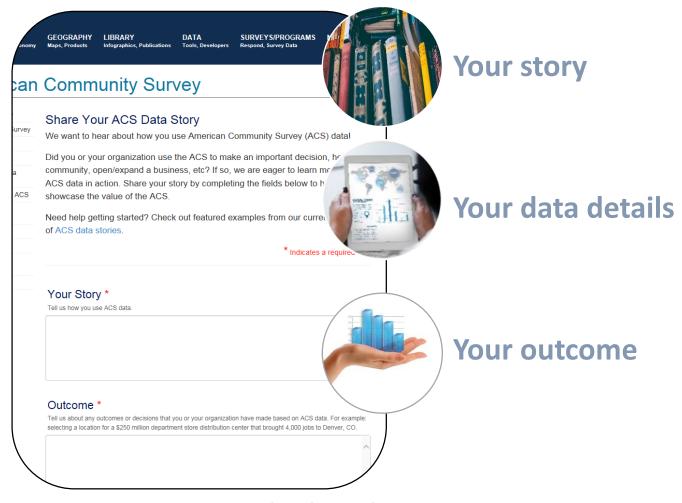


• Purpose:

- Improve understanding of the value and utility of ACS data.
- Promote information sharing among data users about key ACS data issues and applications.
- Includes users group website and online community
- ACS Data Users Conference
- Membership is free and open to all interested ACS data users

Census Bureau acsdatacommunity.prb.org

Data Tell Stories. Tell us Yours!



census.gov/acs/www/share-your-story



Q & A and Thank You!

Contact Information:

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301-763-4863

Barbara.g.zamora-appel@census.gov

American Community Survey Office

1-800-923-8282

Acso.users.support@census.gov

For detailed questions concerning the 2020 Decennial, contact:

301-763-INFO or 800-923-8282

To schedule additional training with a Census Data Dissemination

Specialist in your area, please call 844-Ask-Data

Or email us at: census.gov





Reference Materials



North American Industry Classification System (NAICS)

www.census.gov/eos/www/naics

- A hierarchical classification system that groups establishments into industries based on the business activities in which they are primarily engaged.
- A comprehensive system covering the entire field of business activities.
- Used to collect, tabulate, analyze, and disseminate statistics.
- A common language used among the United States, Canadian, and Mexican statistical agencies
- Updated every five years



NAICS Hierarchy

Level	Code	Description
Sector	51	Information
Subsector	515	Broadcasting (except Internet)
Industry Group	5151	Radio and Television Broadcasting
Industry	51511	Radio Broadcasting
U.S. Industry	515112	Radio Stations

