

# **2007 Economic Census User Guide**

2007 Economic Census Web site:  
[www.census.gov/econ/census07/](http://www.census.gov/econ/census07/)

American FactFinder:  
[factfinder.census.gov](http://factfinder.census.gov)

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# New to the Economic Census?

## About the Economic Census

- The economic census provides a detailed portrait of the United States' economy once every five years, from the national to the local level.
- It covers most of the U.S. economy in its basic collection of establishment statistics. There also are several related programs, including statistics on minority- and women-owned businesses.
- Business establishments in the economic census are grouped into industries based on the similarity of their production processes. These industries are coded according to the North American Industry Classification System (NAICS).
- 2007 Economic Census data sets are being released over time, from December 2008 through late 2011.

## About American FactFinder

- American FactFinder is the dissemination vehicle for certain economic and demographic data produced by the Census Bureau.
- These data are provided in the form of tables, data sets, reports and maps.
- American FactFinder can be found at [factfinder.census.gov](http://factfinder.census.gov).

# What's New for 2007

## Change in Publication Formats

The 2007 Economic Census will only be disseminated through American FactFinder.

American FactFinder features:

- **More frequent** electronic releases.
- **Easier downloads**, allowing the ability to download more records than in previous economic censuses. A file transfer protocol (FTP) site also allows for the downloading of entire databases.
- **Better integration** with other data on the Census Bureau's Web site.

American FactFinder can be found at [factfinder.census.gov](http://factfinder.census.gov).

## ***No More PDFs, DVD-ROMs or CD-ROMs***

To expedite the release of data in American FactFinder, no data sets will be released in portable document format (PDF).

Also, given expanded capabilities within American FactFinder, there will be no DVD-ROM or CD-ROM products.

## Changes to Small Geographic Area Definitions

For the first time, economic census tabulations will include Census Designated Places (CDPs) with 5,000 or more inhabitants or 5,000 or more workers. CDPs are often referred to as "unincorporated places". Some CDPs, such as East Los Angeles, are quite large. The same 5,000 population/worker minimum will apply for all places.

This is the first time that the number of workers has been introduced into the criterion, and helps ensure that economically important places are published, even if they have few residents.

**Example:** An area near Orlando, Florida has thousands of workers, but had only 16 residents in 2000. Worker data are primarily from the Census 2000 and are tabulated by place of work so that all sectors can be included.

The 5,000 population/worker minimum has had an impact on the valid places for data dissemination.

## Nonemployers to be Included with Employer Data

The Economy-Wide Key Statistics (EWKS) data set presents common statistics for every available industry and geographic area published.

In late 2009, 2007 nonemployer establishments and receipt columns will be added to the EWKS data set to complement the establishments, receipts/sales, payroll and employment data for businesses with paid employees.

**Note:** Nonemployers account for less than four percent of all receipts across all industries. **They also represent about three-fourths of all businesses.** For some industries, nonemployers make up a significant portion of the economic activity.

**Note:** While employer and nonemployer data items will be separate, it is possible to add them together to get totals using a third-party software application (e.g., spreadsheet program).

## Revised Industry Classification System

The 2007 Economic Census will publish data primarily on the basis of the 2007 North American Industry Classification System (NAICS).

Changes between 2002 NAICS and 2007 NAICS are relatively minor, but do affect totals of sectors 52, 53, 54 and 56. Nearly all industries are comparable from 2002 to 2007 NAICS classifications. Year-to-year comparisons should be easy to make.

Selected data will be published according to the 2002 NAICS to allow precise comparisons between 2002 and 2007 data in the following reports:

- *Advance Report* - includes preliminary data for broad NAICS categories. Its data will be replaced by subsequent reports.
- *Bridge Between 2007 NAICS and 2002 NAICS* - shows the relationships between 2007 NAICS and 2002 NAICS categories in detail and where they have changed.
- *Comparative Statistics* - shows U.S. and State totals classified by 2002 NAICS for both 2002 and 2007.

## New and Changing Industries

2007 North American Industry Classification System (NAICS) introduces two new industries: *Research and Development in Biotechnology* (541711) and *Executive Search Services* (561312).

Several industries in the *Information* sector have been consolidated:

- *Paging* is now included in *Wireless Telecommunication Carriers (except Satellite)*.
- *Cable and Other Program Distribution* and most of *Internet Service Providers* are now included in *Wired Telecommunication Carriers*.
- *Web Search Portals* are now included in *Internet Publishing and Broadcasting and Web Search Portals*.

Also, *Real Estate Investment Trusts* are dispersed and mostly moved from the *Finance and Insurance* sector to the *Real Estate and Rental and Leasing* sector.

For the 2007 Economic Census, data on large certificated air carriers will be released. Large certificated air carriers were out of scope for the previous economic censuses.

## Product Classification Expands to All Service Sectors

The Census Bureau has a long history of providing data on thousands of manufactured products, and also has published data on hundreds of product lines in wholesale and retail trades, and types of services provided by other service companies.

In 2002, product lines in four service sectors (51, 52, 54 and 56) were classified consistent with a new international agreement with Canada and Mexico, as the first phase in implementing the new North American Product Classification System (NAPCS).

For 2007, all remaining product lines for "service" industries (sectors 51 to 81) will be based on NAPCS. These data will be published in Product Lines data sets. In most cases, more product categories will be shown in the affected industries, although there will be some loss of comparability to prior census product line data.

## New Data on Pension and Other Fringe Benefits

Data on costs for fringe benefits will be published at the U.S. level for Manufacturing in the Industry and Summary Series, and for Retail Trade, Wholesale Trade and service industries in related economic surveys.

The fringe benefits covered include health insurance, defined-benefit pensions, defined-contribution plans and others.

The Survey of Business Owners will identify the number of businesses providing various fringe benefits across all sectors.

## Data on Franchising for More Industries

In previous economic censuses, a question on franchising was included on a small number of forms, mostly in Accommodation and Food Services.

For the 2007 Economic Census, a question on franchising is asked on 81 of the 530 variants of the census form. These data will provide information on the economic impact of franchising across many industries.

The data set, entitled Franchising Report, will be released in March 2011.

## More Data in Survey of Business Owners Reports

Totals for minority business owners, omitted in 2002, will be reinstated for 2007. New data on **owner characteristics** will include:

- whether the owner was born in the U.S.,
- the year the owner acquired the business
- and how the business was acquired.

New data on **business characteristics** will include:

- language(s) used for business transactions with customers,
- percent of sales outside the United States,
- outsourcing to businesses outside the United States,
- use of the Internet and e-commerce
- and presence of different employee fringe benefits (e.g., healthcare, retirement, defined contribution plans and vacation/holiday pay).

New to American FactFinder, Characteristics of Veteran-Owned Businesses and Characteristics of Veteran Business Owners reports will be available in June 2011.

## **Business Expenses Data Moved to Other Series**

2007 data corresponding to business expenses in previous economic censuses will be published as part of the following:

- *Industry Series* for Manufacturing,
- *Industry Series* for Construction,
- *Industry Series* for Mining,
- Annual Retail Trade Survey,
- Annual Wholesale Trade Survey
- and the Service Annual Survey.

## **Metropolitan and Micropolitan Statistical Areas Boundary Changes**

A small number of Metropolitan and Micropolitan Areas changed boundaries between 2002 and 2007. Also, a number of new areas were identified for areas that grew to meet population thresholds.

**Note:** Data is tabulated for Metropolitan and Micropolitan areas defined by the Office of Management and Budget as of December 2006.

# Finding Data

The Census Bureau collects a wide variety of data on U.S. businesses. To find the data you are interested in, you should begin your search by identifying most or all of the following 5 items.

## **1. Industry**

Data are classified according to the North American Industry Classification System (NAICS).

## **2. Geographic Area**

The economic census presents statistics for the Nation, States, Metropolitan Areas, Counties, Places and ZIP Codes. However, geographic coverage varies from sector to sector.

The greatest variety of statistics and the most detailed classifications usually are published at the national level.

**Note:** Data for some industries are not collected at the establishment level, and therefore data are not available for every geographic level.

## **3. Data Items**

See a list of data items by sector at

[http://www.census.gov/econ/census07/www/understanding\\_data\\_sets/012236.html](http://www.census.gov/econ/census07/www/understanding_data_sets/012236.html).

## **4. Business Unit**

Most statistics are published in terms of establishments. There are a few data sets that show firms or enterprises in the Establishment and Firm Size data sets, as well as in ancillary programs, including the Survey of Business Owners and the Statistics of U.S. Businesses.

## **5. Employers, Nonemployers or Both**

Most data sets from the economic census only include data for establishments with paid employees. Data for establishments without paid employees, or nonemployers, are released separately.

One data set, Economy-Wide Key Statistics includes data for all employers, as well as all industry sectors by geographic area. Starting in late 2009, it will also include data for nonemployers.

## Search Tools

2007 Economic Census data are being disseminated industry-by-industry and geography-by-geography beginning in the first quarter of 2009. All data are published in American FactFinder.

Links to the following search tools and data are available at [http://www.census.gov/econ/census07/www/finding\\_data/012118.html](http://www.census.gov/econ/census07/www/finding_data/012118.html).

### **Primary Search Tools**

- [Find](#) a NAICS code.
- [Search](#) for data sets by keyword.
- [Filter](#) for data sets by Industry, Geography, Data Item and/or Other Dimension.

### **Quick Access to Data For an Industry or Geography**

#### [Economic Fact Sheet](#)

- Key data items across industry sectors for the United States.
- More complete industry or geographic detail can also be accessed from here.

#### [Fact Sheet for an Industry](#)

- Takes you directly to data for a selected industry.
- More complete geographic detail can also be accessed from here.

#### [Quick Reports](#)

- By industry: basic data and population estimate by State.
- By geographic area: basic data and population estimates by industry (2-through 6-digit level of detail) for the United States or a State, County, Place or Metropolitan Area.

#### [Industry Snapshots](#)

- Graphic presentation of selected data by industry; includes interactive tool to compare your business to industry averages (not limited to economic census data).

#### [County Business Patterns](#)

- Shows the number of employees for most industries below the U.S. level.

## Finding Common Statistics

### ***Total Establishments in an Area***

- Use the latest County Business Patterns data set for the total number of establishments for employers.
- Use the latest Nonemployer Statistics data set for the total number of establishments for nonemployers.
- Remember, not all industry sectors are tabulated at every level of geography, so adding the sectors shown may not be a true total.

### ***Total Sales of an Industry in an Area***

- Use the 2002 Economy-Wide Key Statistics (EWKS) data set to find total sales for employers.
- Use 2002 Nonemployer Statistics to find total sales for nonemployers.
- **Note:** The 2007 EWKS data set will be available in March 2009.

### ***Average Sales Per Capita for an Industry in an Area***

- Use the 2002 EWKS data set and population estimates data available in American FactFinder.

### ***Number of Establishments Over a Time Period***

- Use yearly County Business Patterns data sets for the number of establishments for employers.
- Use yearly Nonemployer Statistics data sets for the number of establishments for nonemployers.
- **Note:** Your industry of interest may have had classification changes. These should be taken into account when making year-to-year comparisons.

### ***Number of Employees in Small Businesses***

- Search for data sets with the word "size" in the title. These include establishment-size, employment-size, sales-size data sets.
- **Note:** The Census Bureau does not define "small" because it varies by industry and by use. Data users must define "small."

### ***Distribution of Sales by Product Lines in an Industry***

- Use *Industry Series* data sets for preliminary data, and *Subject Series* Product Lines data sets for final data.

## Things to Keep in Mind

### ***Each Data Set is Unique***

Data sets are increasingly detailed with each successive release. These releases of data sets often include different data items and tabulations by different characteristics, such as geography and industry level.

Data in the earliest data sets published (from the *Advance Report and Industry Series*) may be superseded in later data sets (e.g., *Geographic Area Series*). Be sure to watch for preliminary and revised data.

Data sets are organized by unique tabulated levels and share the same data items (columns). Dissimilar or incomparable data are never mixed into the same data set.

Most data sets include only establishments with paid employees.

Some data sets show data only for one industry sector or group of industries.

### ***Detailed Data May Not Add to a Higher Level Total***

Not all industries are shown at every level of detail because data may be subject to employment- and/or sales-size minimums for publication that vary by industry. However, the data are included in the higher levels of detail.

Data from suppressed cells are replaced by symbols, but are included in higher levels of data detail.

### ***Data Not Available for Individual Businesses***

Title 13, U.S. Code, prohibits release of information about individual businesses.

You cannot obtain data about individual businesses nor can you obtain a list of individual businesses.

## Data We Don't Have

The 2007 Economic Census does not provide information on the following items.

### ***Occupation Data***

The economic census publishes data on employees by occupation for selected industries as a special inquiry, but are not available for all industries.

The Bureau of Labor Statistics publishes data by occupation. The American Community Survey also publishes some labor force and occupation data.

## ***"Small business" Designation***

Users must define "small" for their purposes. There are employment- and receipt-size tables from the economic census as well as Statistics of U.S. Businesses, and County Business Patterns.

Information on small business size standards based on North American Industry Classification System (NAICS) classification codes may be obtained from the Small Business Administration (SBA).

## ***Projections***

The Census Bureau collects and publishes data about business activity. The Census Bureau does not forecast or project business activity nor trends.

## ***Business Failures***

There are data on births and deaths in Statistics of U.S. Businesses. However, "death" does not distinguish between closures and failures.

## ***Advice on Business Plans***

The Small Business Administration has resources for business planning.

## ***Lists of Businesses***

The Census Bureau is not permitted to release information about individual persons or businesses including name, address and industry classification.

The Center for Economic Studies does allow for some approved research projects using individual data records.

## ***Consumer Spending***

The Bureau of Labor Statistics releases information about consumer spending.

## ***Offshore Outsourcing***

The Census Bureau does not publish data on offshore outsourcing.

# Uses of the Data

## Develop Public Policy

- The Bureau of Economic Analysis uses data from the economic census to calculate key elements of Gross Domestic Product (GDP) both nationally and for individual states.
- The Bureau of Labor Statistics uses industry output measures from the economic census to calculate and publish productivity statistics.
- Federal and state agencies look to economic census data to gauge the effectiveness of programs such as minority contracting guidelines, trade policies and job retraining.

## Locate Business Markets

- A large retailing chain obtains information on the ZIP Codes of its customers from its credit card transactions. It then links that information with demographic census and economic data to analyze how far its customers are willing to come to shop at their stores and how that distance varies with the number of competing stores. It can then locate new clusters of ZIP Codes with favorable demographic and economic characteristics in which to locate new stores.
- A major food store chain uses economic census data and population figures to estimate potential weekly food store sales in the geographic areas for each of its stores. These estimates allow the company to calculate market share for each existing store and to evaluate prospective sites for new stores.
- The owner of a chain of auto accessory stores computes the ratio of accessory sales in the economic census to household income from the population census for several neighboring metropolitan areas. Finding his own area well above national averages, he infers that the local market for auto accessory stores might be already saturated. That contributes to his decision to expand into a nearby Metropolitan Area with a lower ratio instead of adding another store locally.

## Evaluate Industry Growth

- A recent engineering graduate examines economic census data about industries where he thought his skills could be used. After exploring the statistics, he concentrates his job search on the industries that had grown substantially in recent years. He also studies statistics about those industries in preparing for job interviews.
- An investor deciding what stocks to buy uses the economic census data to evaluate the growth rates of various industries and allocates her funds across a set of promising firms in fast growing sectors.
- An economic development commission of a major city attempts to attract new business to the city. The commission uses economic census data to identify industries growing nationally but not present locally and talk to companies in those sectors about their real estate and labor force needs.

## Assist Local Businesses

- A State economic development agency identifies industries with the most export activity using "Exports from Manufacturing Plants" data. The agency gives those industries top priority as it launches a program to assist companies in finding trade leads.
- A consultant uses economic census data from American FactFinder to compute business averages, such as sales per capita and establishments per 100,000 residents. She markets comparative summaries to shopping mall owners seeking business tenants and to prospective entrepreneurs. She advises them to look for opportunities in communities where an industry is underrepresented relative to state and national norms.
- Rising crude oil prices lead to higher energy costs and members of Congress use data from the economic census to find out what energy intensive industries are in their districts and what kinds of energy they use.
- Small Business Development Centers in many states help business owners assess their marketing and management challenges and become familiar with business data sources such as the economic census.

## Design Sales Territories

- An insurance company uses counts of establishments by kind of business to redesign sales territories for agents. By comparing economic census figures to their own records on customers, company executives found which kinds of businesses were better prospects than others.

## Gauge Competitiveness

- A manager at a manufacturing firm became concerned when data from the economic census showed that her company's productivity (value added per employee) was lower than the industry average. She uses the information to convince the company's Board of Directors that it should adopt her proposal to upgrade their production technology.
- A soft drink bottler considers expanding into two related beverage-manufacturing operations: milk and alcoholic beverages. Economic census data sheds light on industry specialization, company size and the relationship of expenses to receipts. This information encourages the bottler to diversify.

## Research

- A professor at a university studies a series of votes in Congress related to free trade issues. He uses economic census data on manufacturing to explore the correlation between each state's industrial structure and the way that state's Congressional representatives voted on these issues.

## Business-to-Business

- A man who develops software for managing quality control operations makes a list of industries most likely to use his product, then ranks the top industries based on census figures on value added and growth. He customizes his software to appeal to those top prospects. Economic

census data in American FactFinder makes it easy to find areas where large plants in the target industries were located.

## **Entrepreneurship**

- An entrepreneur uses economic census data to support her loan application, as she sought financing to start a tailoring and alterations shop for women executives. She uses economic census data on her line of business in conjunction with data on women in managerial occupations from the census of population.
- An entrepreneur deciding where to locate a new laundromat evaluates a prospective market by using the demographic census data to determine the number of households of various income levels. He then uses industry guidelines to estimate the share of households of each income bracket that would use a laundromat. Given this information and an estimate of the average monthly laundry expenses for a household, he forecasts the total revenue available in the market. Then, by using economic census data, he determines how many other laundromats are in the market and whether or not average revenue per store is high or low.

## **Disaster Response**

- The Federal Emergency Management Agency (FEMA) uses the ZIP Code data to inventory manufacturing locations by industry and size. FEMA estimates potential losses to productive capacity that might result from a major flood or other disaster.

# Understanding Data Sets

Most economic census data are released over time in series of related data sets. In most cases, as more data are processed and released, the level of detail increases.

## Data series include:

- *Core Business Statistics Series* - data sets that cover multiple industries:
  - *Advance Report* - the first data released from the economic census. It shows preliminary data for 2- and 3-digit NAICS at the U.S. level. These data will be superseded by subsequent reports after additional review and analysis.
  - *Bridge Between 2007 NAICS and 2002 NAICS Reports* - shows the relationships between 2007 NAICS and 2002 NAICS categories in detail and where they have changed.
  - *Comparative Statistics Report* - shows U.S. and State totals classified by 2002 NAICS for both 2002 and 2007. Due to classification changes, these comparisons are not possible elsewhere for construction and wholesale trade industries.
  - *Franchising Report* - the first Census Bureau data available on franchising across multiple industries.
- *Industry Series* - data for individual industries and their products at the U.S. level only.
  - **Note:** The *Industry Series* is preliminary and is eventually replaced by the *Geographic Area Series* and later data sets.
- *Geographic Area Series* - data for individual industries at the U.S., state, county, place and metropolitan area levels. Coverage by geographic levels varies by economic census sector.
- *Subject and Summary Series* - summary data on special topics and industry-related data including Product Lines, Concentration Ratios, and Establishment and Firm Size at the U.S. level and in some data sets, at the state level.
- *ZIP Code Statistics Series* - counts of establishments by sales-size range by industry for 5-digit ZIP Codes (published for the Retail Trade and selected Services sectors).

## ***Economy-Wide Key Statistics***

*Economy-Wide Key Statistics (EWKS)* is a data set that is continually built as other data sets are released from March 2009 to October 2010.

- *EWKS* presents four key statistics for every available industry and geographic area published to date. The four key statistics are:
  - Number of establishments,
  - Value of sales, shipments, receipts, revenue or business done,
  - Annual payroll and
  - Number of employees.

- The 2007 *EWKS* will also include establishments and sales for nonemployers starting in late 2009.

## ***Other Economic Programs***

Special economic programs and surveys are also published in American FactFinder during the economic census.

### **Five-year programs:**

- *Commodity Flow Survey* - data on the movement of goods in the United States. Some exports data are also available.
- *Economic Census of Island Areas* - provides a detailed portrait of the economic structure and activity of Puerto Rico, American Samoa, Guam, the Northern Mariana Islands and the U.S. Virgin Islands every five years.
- *Survey of Business Owners* - data on U.S. business owners by gender, Hispanic or Latino origin and race. It also includes additional demographic and economic business characteristics for home-based, family-owned and franchised businesses; sources of finance; types of customers; and year established.

### **Annual economic surveys:**

- *Annual Survey of Manufactures* - sample estimates of statistics for all manufacturing establishments with one or more paid employee.
- *County Business Patterns* - annually produced data sets that provide detailed geographic, industry and other data for U.S. business establishments with paid employees.
- *Nonemployer Statistics* - data for U.S. businesses with no paid employment or paid employees.

## **Reading Data Sets**

### ***Data Set Structure***

There are 4 kinds of fields (columns) that make up a data set:

- *Control Fields* are columns used to classify, index, sort and restrict the rows and/or columns in the data set (e.g., geography, NAICS code, year, etc).
- *Data Fields* are columns of data that are tabulated for industries, products, lines and other related data.
- *Data Quality Fields* are columns that contain imputation rates, standard errors and other indicators of data quality for certain data fields.
- *Flag Fields* are columns that are associated with each data field. When applicable, flag fields have symbols, or "flags," that replace data in the data fields. By default, flag fields are hidden in American FactFinder. Their values overlay or are appended to the data field values as appropriate and display only when downloading data or when turned on by the data user.

## Data Set Fields in American FactFinder

Control Fields		Data Fields	
2002 NAICS code	Meaning of 2002 NAICS code	Sales (\$1,000)	Annual payroll (\$1,000)
44-45	Retail trade	290,204	35,740
441	Motor vehicle & parts dealers	4,844	969
442	Furniture & home furnishings stores	9,051	1,148
4421	Furniture stores	D	D
44211	Furniture stores	D	D
442110	Furniture stores	D	D
		Flags	

### Data Set Fields Downloaded from American FactFinder

Control Fields		Data Field	Flag Field	Data Field	Flag Field
2002 NAICS code	Meaning of 2002 NAICS code	Sales (\$1,000)	Sl's, shps, rcpts, rev (\$1,000)	Annual payroll (\$1,000)	Annual payroll (\$1,000)
44-45	Retail trade	290,204		35,740	
441	Motor vehicle &	4,844		969	
442	Furniture & home furnishings stores	9,051		1,148	
4421	Furniture stores	0	D	0	D
44211	Furniture stores	0	D	0	D
442110	Furniture stores	0	D	0	D

### Data Set Text

Each data set has descriptive text associated with it. The data set text has details about the data set, including geographic coverage, data limitations and file size. To find the data set text, click on the title of the data set.

<p><b>2002 Economic Census</b>                  Release Date: 6/15/2005  <a href="#">Sector 51: Information: Geographic Area Series: Summary Statistics: 2002</a></p> <p>[NOTE. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <a href="#">Survey Methodology</a>. Data in this table represent those available when this report was created; data may not be available for all NAICS industries or geographies. Data in this table may be subject to employment- and/or sales-size minimums that vary by industry.]</p>
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Also included in the data set text are introductory text that outlines the scope, coverage and other information about the economic census program, the North American Industry Classification System (NAICS) sector, the data set series and the survey methodology text. All of this text is available by clicking on the file title as well.

## Content (Data Items)

Several key statistics are tabulated for all industries covered in the 2007 Economic Census:

- Number of establishments (or companies)
- Number of employees
- Payroll
- Measure of output (sales, receipts, revenue, value of shipments or value of construction work done).

Other items vary by sector, as illustrated in the tables below.

### **Major Data Items Published in the 2007 Economic Census (not all-inclusive)**

#### **Number of establishments and firms**

*Legend:* A--All areas except ZIP Codes; C--Counties, Metros, States and National; M--Metros, States and National; S--States and National; N--National only; Z--ZIP Codes and States

	Manufacturing	Mining	Construction	Retail Trade	Wholesale Trade	Management of companies	All other sectors
Establishments with payroll	A,Z	S	S	A,Z	A	A	A,Z
Establishments without payroll (nonemployers)	C	C	C	C	C	C	C
Single-unit and multiunit establishments				N	N	N	N
Establishments by legal form of organization	N	N	N	N	N	N	N
Firms	N	N		N	N	N	N
Franchising (selected industries only)	N		N	N	N	N	N

**Employment***Legend: A--All areas except ZIP Codes; S--States and National; N--National only*

	Manufacturing	Mining	Construction	Retail Trade	Wholesale Trade	Management of companies	All other sectors
All employees	A	S	S	A	A	A	A
Production (construction) workers/hours	A	S	S				
Employment size of establishment	A	S	S	N	N	N	N

**Labor costs***Legend: A--All areas except ZIP Codes; S--States and National; N--National only*

	Manufacturing	Mining	Construction	Retail Trade	Wholesale Trade	Management of companies	All other sectors
Payroll, entire year	A	S	S	A	A	A	A
Payroll, first quarter				A	A	A	A
Worker wages	A	S	S				
Supplemental costs, including pensions and health insurance	S	S	S	N	N		
Cost of contract labor				N	N		

**Sales, receipts or value of shipments/construction work done**

*Legend: A--All areas except ZIP Codes; M--Metros, States, and National; S--States and National; N--National only; Z--ZIP Codes and States*

	Manufacturing	Mining	Construction	Retail Trade	Wholesale Trade	Management of companies	All other sectors
Establishments with payroll	A	S	S	A	A	A	A
By specific product, line, or type of construction	S	S	S	M	M		S
Sales/receipts size of establishments			S	N,Z	N		N,Z (selected sectors only)
Class of customer				N	N		N
Type of structure			N				
E-commerce sales	N						

**Expenses**

Legend: A--All areas except ZIP Codes; S--States and National; N--National only

	Manufacturing	Mining	Construction	Retail Trade	Wholesale Trade	Management of companies	All other sectors
Total				N	N		N
Cost of materials, parts, etc.	A	S	S	N	N		
Cost of fuels	S	S	S	N	N		
Energy consumed	S	S					
Cost of electricity	S	S	S	N	N		
Cost of other utilities				N	N		
Products bought for resale	S	S					
Taxes and license fees				N	N		
Cost of office supplies							
Depreciation charges	S	S		N	N		
Commission expense				N	N		
<b>Purchased services:</b>							
..Advertising	N			N	N		
..Rental payments	S	S	S	N	N		
..Legal services	N						
..Accounting services	N						
..Data processing services	N			N	N		
..Refuse removal	N						
..Communications services	N	S	S	N	N		
..Purchased repairs	N		S	N	N		
..Cost of contract work	S	S		N	N		

**Assets, capital expenditures and inventories**

Legend: A--All areas except ZIP Codes; S--States and National

	Manufacturing	Mining	Construction	Retail Trade	Wholesale Trade	Management of companies	All other sectors
Capital expenditures, total	S	S	S				
Depreciable assets, gross value	S	S	S				
Value of inventories	S	S	S		A		

## Changes to the Data

### Superseding Data Sets

Data sets released earliest, like the *Industry Series* (released from April 2009 to December 2009), may be superseded by data in later releases, like the *Geographic Area Series (GAS)* (released from November 2009 to August 2010).

The *Industry Series* will still be available in American FactFinder, but the *GAS* and *Subject/Summary Series* data sets will have the latest data.

*Economy Wide Key Statistics* is also a data set that is updated on a frequent basis. It will be considered final in October 2010.

### Revisions (Corrections)

As analysis and processing continue, economic data are occasionally revised and updated in American FactFinder.

- If a number changes and differs greater than a certain percentage of the initial value, then a new value will be released with an '(r)' in front of it to signify the revision.
- If a number changes and differs less than a certain percentage of the initial value, then there is no notice of revision.
- The threshold varies on the sector or program that produced the data.

Geographic Area Name	2002 NAICS code	Meaning of 2002 NAICS code	Sls, rcpts, rev (\$1,000)	Ttl operating expenses (\$1000)	Ttl operating exp, pct sls (%)
United States	42	Wholesale trade	2,835,528,616	(r)507,528,903	(r)17.9
United States	423	Durable goods merchant wholesalers	1,421,501,909	(r)307,386,615	(r)21.6

**Note:** Revisions are only applied when data in a particular data set are reissued due to the identification of an error. Preliminary data that are released in one data set and then released later in another data set do not get an '(r)' flag, even if they have changed.

Due to superseding data sets and data revisions, it is advised that you update your saved data sets periodically during the data release period of the 2007 Economic Census.

# Business Classification

The North American Industry Classification System (NAICS) is a system of grouping establishments into industries based on the similarity of their production processes. For the United States, there are 20 sectors and 1,175 industries in the 2007 NAICS.

NAICS is used by the Census Bureau to facilitate:

- the collection, tabulation, presentation and analysis of data relating to establishments and
- the uniformity and comparability in the presentation of statistical data describing the U.S. economy.

## History

Prior to the implementation of NAICS, the first standardized industry classification method used in the United States was the Standard Industrial Classification (SIC) system.

In July 1994, the U.S. Office of Management and Budget announced plans to develop a new industry classification system in cooperation with statistical agencies from Mexico and Canada. The new system, the North American Industry Classification System, replaced the SIC in 1997.

## NAICS Structure

NAICS uses a hierarchical structure. A "hierarchy" is the relationship of one item to a particular category. The organization of NAICS is as follows:

- **Sector:** 2-digit code
  - **Subsector:** 3-digit code
    - **Industry Group:** 4-digit code
      - **NAICS Industry:** 5-digit code
        - **National Industry:** 6-digit code

**Note:** Three sectors are represented by a range of 2-digit codes. These include Manufacturing (31-33), Retail Trade (44-45) and Transportation and Warehousing (48-49).

## Example

Sector	44-45	Retail Trade
Subsector	441	Motor Vehicle and Parts Dealer
Industry Group	4412	Other Motor Vehicle Dealers
NAICS Industry	44122	Motorcycle, Boat, and Other Motor Vehicle Dealers
National Industry	441221	Motorcycle, ATV, and Personal Watercraft Dealers

**Note:** Some data sets in American FactFinder also display data at the 7- and 8-digit levels. Although these codes are NAICS-based codes, they are not included in the official classification system.

## Sectors

There are twenty sectors included in the NAICS:

- 11: Agriculture (not covered in the 2007 Economic Census)
- 21: Mining
- 22: Utilities
- 23: Construction
- 31-33: Manufacturing
- 42: Wholesale Trade
- 44-45: Retail Trade
- 48-49: Transportation and Warehousing
- 51: Information
- 52: Finance and Insurance
- 53: Real Estate and Rental and Leasing
- 54: Professional, Scientific, and Technical Services
- 55: Management of Companies and Enterprises
- 56: Administrative and Support and Waste Management and Remediation Services
- 61: Educational Services
- 62: Health Care and Social Assistance
- 71: Arts, Entertainment, and Recreation
- 72: Accommodation and Food Services
- 81: Other Services (Except Public Administration)
- 92: Public Administration (not covered in the 2007 Economic Census)

## Codes Not Covered

The following NAICS codes are not covered in the 2007 Economic Census.

Those industries marked with "CBP" are included in County Business Patterns and in Statistics of U.S. Businesses, which both use NAICS.

NAICS	Industry categories excluded from the 2007 Economic Census	Coverage in CBP
11	Agriculture, Forestry, Fishing and Hunting	CBP (except 111,112)
482	Rail Transportation	
491	Postal Service	
525	Funds, Trusts, and Other Financial Vehicles	CBP (except 5251)
6111	Elementary and Secondary Schools	CBP (private schools only)
6112	Junior Colleges	CBP (private schools only)
6113	Colleges, Universities, and Professional Schools	CBP (private schools only)
8131	Religious Organizations	CBP
81393	Labor Unions and Similar Labor Organizations	CBP
81394	Political Organizations	CBP
814	Private Households	
92	Public Administration	

## Exclusion of Government-Owned Establishments

The economic census does not generally include government-owned establishments, even when their primary activity would be classified in industries covered by the economic census. Because of these exclusions, economic census data for industries in many sectors might appear to be incomplete.

Sector	Illustrative Governmental Activities Excluded
Utilities	Public electric, gas, water and sewer utilities
Construction	Highway construction performed by government employees
Retail Trade	Post exchanges, ship stores and similar establishments operated on military posts by agencies of the federal government
Transportation and Warehousing	Publicly-operated buses and subway systems
Information	Public libraries
Administrative and Support and Waste Management and Remediation Services	Municipal trash removal
Health Care and Social Assistance	Municipal ambulance services and County or city nursing care services
Arts, Entertainment, and Recreation	Public museums or zoos

In addition, certain industries dominated by government activity are **excluded** from the scope of the economic census.

At the same time, exceptions have been made to **include** certain governmental activities in the economic census:

- Hospitals
- Government-owned liquor stores
- University press publishers
- Federal Reserve Banks

In addition, the economic census does **include** the activities of private contractors that may be carrying out governmental functions on contract. For example:

- Highway construction contractors
- Privately operated prisons
- Private firms contracting to provide services to government
- Government-owned/contractor-operated (GOCO) plants

There is a separate Census of Governments, which provides some data on revenue, expenditures, and employment for various governmental functions, such as streets and highways, solid waste management, sewerage, electric power, transit, and local libraries. At the same time, these data are not reported on an establishment basis and are not classified by NAICS.

## Revisions

Revisions and changes to the NAICS classification structure occur every 5 years. The latest version was released in 2007.

### ***Bridging Between NAICS Releases***

To be released in June 2011, the *Bridge Between 2007 NAICS and 2002 NAICS* data sets show the relationships between 2007 NAICS and 2002 NAICS categories in detail and where they have changed.

The following files map 2002 NAICS to 2007 NAICS and vice versa:

- 2007 NAICS U.S. Matched to 2002 NAICS U.S.
  - <http://www.census.gov/naics/2007/n07-n02.xls>
- 2002 NAICS U.S. Matched to 2007 NAICS U.S.
  - <http://www.census.gov/naics/2007/n02-n07.xls>

## **Product Classification**

### ***North American Product Classification System***

In February 1999, the statistical agencies of Canada, Mexico and the United States launched a joint multi-phase initiative to develop a comprehensive demand-oriented product classification, known as the North American Product Classification System (NAPCS). Work to date has focused on the products produced by service industries in NAICS sectors 48-49 through 81.

### ***Manufactured and Mineral Products***

In addition to industries, products in the manufacturing and mining industries are classified consistently with the NAICS structure. The first 6 digits of the 10-digit product code are normally the same as the NAICS code for the industry with which the product is most often associated.

See a full list of manufacturing and mining codes at <http://www.census.gov/prod/ec02/02numlist/02numlist.html>.

Broad product or service lines also are provided for retail and wholesale trade and other service industries.

### ***Import and Export Codes***

The 2007 Economic Census does not use import and export codes, but they may be useful when combining different sources of data.

All of the import and export codes used by the United States are based on the Harmonized Tariff System (HTS). The HTS assigns 6-digit codes for general categories. Countries that use the HTS are allowed to define commodities at a more detailed level than 6 digits, but all definitions must be within that 6-digit framework.

The United States defines products using 10-digit HTS codes. Export codes, which the United States calls "Schedule B", are administered by the U.S. Census Bureau. Import codes are administered by the U.S. International Trade Commission (USITC). Web sites for U.S. import and export HTS codes:

- Export Codes (Schedule B, administered by the Census Bureau)
  - <http://www.census.gov/foreign-trade/schedules/b/>
- Import Codes (HTS, administered by USITC)
  - <http://www.usitc.gov/tata/index.htm>

# Geography

The 2007 Economic Census presents statistics for the Nation, States, Metropolitan Areas, Counties, Places and ZIP Codes.

Coverage varies by economic census sector and program.

- The greatest variety of statistics and most detailed industry classifications are published at the national level.
- A smaller variety of statistics and less detailed industry classifications are published for States and smaller areas.

## ***Reference Date***

The ZIP Codes published in the 2007 Economic Census are those defined by the Office of Management and Budget (OMB) as of June 1, 2007.

The Metropolitan Areas published in the 2007 Economic Census are those defined by OMB as of December 2006.

All other geographic areas are defined by OMB as of January 1, 2007.

## **Regions and Divisions**

Census Regions and Divisions are groupings of States that subdivide the United States.

Each of the four census Regions is divided into two or more census Divisions:

- Northeast Region
  - *New England Division:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont
  - *Middle Atlantic Division:* New Jersey, New York and Pennsylvania
- Midwest Region
  - *East North Central Division:* Illinois, Indiana, Michigan, Ohio and Wisconsin
  - *West North Central Division:* Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota
- South Region
  - *South Atlantic Division:* Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia
  - *East South Central Division:* Alabama, Kentucky, Mississippi and Tennessee
  - *West South Central Division:* Arkansas, Louisiana, Oklahoma and Texas

- West Region
  - *Mountain Division:* Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming
  - *Pacific Division:* Alaska, California, Hawaii, Oregon and Washington

**Note:** Data from the economic census are summarized by Region for the Construction sector only. Data from the Commodity Flow Survey are published for both Regions and Divisions.

## **Coding**

Census Regions and Divisions are identified by one-digit Census Region and Census Division codes (CENREG and CENDIV), which are sequenced alphabetically.

## **States**

States are the primary governmental divisions of the United States. Also recognized by the Census Bureau as State equivalents for economic census purposes are:

- The District of Columbia
- The Island Areas
  - These include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.
  - These areas are mainly published in the Economic Census of Island Areas data sets.
  - Statistics for the Island Areas are not included in U.S. totals.

## **Coding**

States are identified by a 2-digit numeric American National Standards Institute (ANSI) State code (ST), which are sequenced in alphabetical order by State name.

## **Counties**

Counties are the primary political and administrative divisions of States. Also recognized by the Census Bureau as county equivalents for economic census purposes are:

- Parishes in Louisiana;
- Boroughs, Census Areas, Cities and Boroughs in Alaska;
- Independent Cities (in Maryland, Missouri, Nevada and Virginia);
- The District of Columbia (since it has no primary divisions);

- Districts and Islands in American Samoa;
- Election Districts in Guam;
- Municipalities in the Commonwealth of the Northern Mariana Islands;
- *Municipios* in Puerto Rico and
- Islands in the U.S. Virgin Islands.

**Note:** Kalawao County, HI, is combined with Maui County for statistical purposes.

## ***Coding***

Counties are identified by a 3-digit ANSI County code (COUNTY), which are sequenced alphabetically within a State, with independent cities following the listing of Counties within each State.

## **Metropolitan and Micropolitan Areas**

The 2007 Economic Census provides data for the following types of statistical areas in the United States and Puerto Rico.

### ***Metropolitan Statistical Areas***

Metropolitan Statistical Areas have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

### ***Micropolitan Statistical Areas***

Micropolitan Statistical Areas have at least one urban cluster of at least 10,000 but less than 50,000 population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

### ***Metropolitan Divisions***

Metropolitan Divisions are subdivisions of Metropolitan Statistical Areas (into smaller groupings of counties) which include a single core with a population of 2.5 million or more.

### ***Combined Statistical Areas***

Combined Statistical Areas are combinations of adjacent Metropolitan and/or Micropolitan Statistical Areas that retain their own designations as Metropolitan or Micropolitan Statistical Areas within the larger area.

- The Office of Management and Budget (OMB) defines the "employment interchange measure" as "the sum of the percentage of employed residents of the smaller entity who work in the larger entity and the percentage of the employment in the smaller entity that is accounted for by workers who reside in the larger entity."

- Combinations for adjacent areas with an employment interchange of 25% or more are automatic.
- Combinations for adjacent areas with an employment interchange of at least 15% but less than 25% are based on local opinion as expressed through the Congressional delegations.

These areas are defined in terms of whole counties (or equivalent entities) under the auspices of the OMB.

## ***Coding***

They are identified by a 3-digit ANSI Combined Statistical Area code (CSA), 5-digit ANSI Metropolitan and Micropolitan Statistical Area code (MSA) and 5-digit ANSI Metropolitan Division code (MD), which are sequenced alphabetically within each parent and component Metropolitan area.

**Note:** Metropolitan Area boundaries can change annually with changes in population and commuting patterns as documented in the American Community Survey, so the Metropolitan Areas published for the 2007 Economic Census may be different from those published in 2002.

## **Places**

The 2007 Economic Census provides data for the following types of statistical areas that are published as "Places" in the United States and selected Island Areas.

### ***Incorporated Places***

Incorporated Places are legally defined as incorporated municipalities (cities, towns, villages and boroughs) with 5,000 or more inhabitants as of the 2007 American Community Survey.

**Note:** The population cutoff for prior economic censuses was 10,000 for the six New England states, Michigan, Minnesota, New Jersey, New York, Pennsylvania and Wisconsin. For the rest of the country, the cutoff is 2,500 inhabitants.

For the first time, the 2007 Economic Census also will provide information for incorporated places with 5,000 or more jobs as of the 2000 Decennial Census.

### ***Unincorporated Places***

Unincorporated Places are unincorporated county subdivisions with 5,000 or more inhabitants or jobs for all States.

These are also known as Census Designated Places (CDP's).

**Note:** These are NEW for the 2007 Economic Census, except for Hawaii (which included CDP's with 2,500 or more inhabitants in the 2002 and prior economic censuses, since it does not have any recognized incorporated places).

## ***Independent Cities***

These cities (in Maryland, Missouri, Nevada and Virginia) are independent of any county organization and constitute primary divisions of their States.

They are treated as County and Place equivalents.

## ***Additional "place equivalents" in the Island Areas***

These include "Counties" in American Samoa and towns in the U.S. Virgin Islands.

## ***Part Places***

Part Places are the County parts of places that cross County boundaries. The Place total, as well as the County parts of the Place are both published.

## ***Balances of Counties***

Balances of Counties include all municipalities, towns and townships that do not qualify using the criteria noted above as well as the remainders of Counties outside places.

## ***Coding***

Places are identified by a 5-digit Federal Information Processing Standards (FIPS) Place code (PLACE), which are sequenced alphabetically within a state.

- Part place totals are identified with a county code of "000" and the appropriate place code.
- Place parts are assigned the appropriate county code for each part.
- "Balance of county" places are assigned a place code of "98xxx", where "xxx" uniquely identifies the balance of county.

**Note:** With the change in the population cutoff and the addition of a jobs-based cutoff for Incorporated Places, plus the addition of CDPs, the places shown for 2007 may be different from what was shown in prior economic censuses.

## ***Consolidated Cities***

Consolidated cities are consolidated governments, which consist of separately incorporated municipalities.

## ***Coding***

They are identified by a 5-digit ANSI Consolidated City code (CONSCITY), which are sequenced alphabetically.

## ZIP Codes

ZIP Codes are administrative entities of the U.S. Postal Service. As such:

- They do not coincide with the Census Bureau's geographic or political areas.
- They change according to postal requirements.
- They do not have specific boundaries.
- Their implied boundaries do not necessarily follow clearly identifiable physical features.

ZIP Codes are summarized in the 2007 Economic Census for individual 5-digit ZIP Codes in the Retail Trade sector and several of the Services sectors. These statistics are limited to a count of the establishments in each industry by sales/receipts/revenue-size range of establishments.

**Note:** These ZIP Codes are reported by businesses or coded from addresses. They are not the ZIP Code Tabulation Areas (ZCTAs) published in the Decennial Census.

## Puerto Rico Commercial Regions

Puerto Rico Commercial Regions are groups of *municipios* that collectively cover Puerto Rico. They are used in the Economic Census of Island Areas data sets for Retail Trade and Service industries instead of Metropolitan Areas, but are not published for other sectors.

### ***Coding***

Puerto Rico Commercial Regions are identified by a one-digit Puerto Rico Commercial Region code (COMMREG), which are sequenced alphabetically.

## Offshore Areas

Selected data for Mining (sector 21) present statistics for offshore areas.

These are treated as "pseudo states" and are:

- All Offshore Areas (State code 80)
- Atlantic Offshore Area (State code 81)
- Gulf of Mexico Offshore Area (State code 82)
- Pacific Offshore Area (State code 83)

## Maps

Reference maps for the 2007 Economic Census are available at <http://www.census.gov/econ/census07/www/geography/012140.html>.

## Geographic Coverage Tables

### Geographic Coverage for the 2007 Economic Census

"X" denotes geographic coverage in the 2007 Economic Census.

2007 Economic Census Sectors	U.S./States	Metro Areas	Counties	Places	ZIP
Mining	X				
Utilities	X	X			
Construction	X				
Manufacturing	X	X	X	X	
Wholesale Trade	X	X	X	X	
Retail Trade	X	X	X	X	X
Transportation and Warehousing	X	X			
Information	X	X	X	X	
Finance and Insurance	X	X			
Real Estate and Rental and Leasing	X	X	X	X	
Professional, Scientific, and Technical Services	X	X	X	X	X
Management of Companies and Enterprises	X				
Administration and Support and Waste Management and Remediation Services	X	X	X	X	X
Educational Services	X	X	X	X	X
Health Care and Social Assistance	X	X	X	X	X
Arts, Entertainment, and Recreation	X	X	X	X	X
Accommodation and Food Services	X	X	X	X	X
Other Services (Except Public Administration)	X	X	X	X	X

### Geographic Coverage for Other Economic Programs

"X" denotes geographic coverage in other economic programs.

Economic Program	U.S./States	Metro Areas	Counties	Places	ZIP
Annual Survey of Manufactures	X				
Commodity Flow Survey	X	X			
County Business Patterns	X	X	X		
Nonemployer Statistics	X	X	X		
Survey of Business Owners	X	X	X	X	
ZIP Code Business Patterns	X				X

## Geography Changes

The following resources are available at  
<http://www.census.gov/econ/census07/www/geography/012235.html>.

Geography boundaries may change over time.

To confirm that data are comparable from previous economic census, use these tools to see if your geographic areas of interest have had boundary changes.

- GeoNotes - document boundary and other geographic changes from the 2002 Economic Census in a textual format
- Geographic Reference Files - portable document format (PDF) files that document additional coding system changes since the 2002 Economic Census

# Methodology

This section contains general information about how the 2007 Economic Census was collected and processed.

## ***Censuses and Surveys – What’s the Difference?***

A *sample survey* is a data collection activity involving observations or questionnaires for a sample of a population.

A *census* is a special kind of sample survey where all units of a population are selected into the sample. For the economic census, the sample includes all employer establishments in the United States.

Surveys are normally less expensive to conduct than censuses. They may be taken more frequently and can provide information updates between censuses. Often, surveys are used to collect a smaller variety of information than what is collected in a census.

**Note:** 2007 Economic Census data for the construction sector comes from a sample survey and is technically not a “census.”

## **History**

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958 and 1963. Prior to that time, individual components of the economic census were taken separately at varying intervals.

The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time an economic census was taken apart from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some covering service trades in 1933. Censuses of construction, manufacturing and the other censuses of businesses were suspended during World War II.

The 1954 economic censuses were the first economic censuses to be fully integrated: providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications and reporting units. It was the first census to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records also have been used to provide basic statistics for very small firms, reducing or eliminating the need to send them economic census questionnaires.

The range of industries covered in the economic censuses expanded substantially between 1967 and 1992. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977 and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the economic census broadened its coverage to include all of transportation, communications and utilities, as well as financial, insurance and real estate industries.

In 2002, economic census coverage added landscape architecture, landscaping services, veterinary services, and pet care services, industries previously classified as agricultural services. With these additions, the economic census and the separate census of governments collectively cover roughly 96 percent of all economic activity.

There is also a census of agriculture, which has been collected by the U.S. Department of Agriculture's National Agricultural Statistics Service since 1997. Agriculture contributes about 2 percent of all U.S. economic activity.

## ***Historical Statistics***

Previous economic census data is available online for the 2002, 1997 and 1992 Economic Censuses.

Because of the change from SIC (Standard Industrial Classification) to NAICS (North American Industry Classification System) in 1997, Comparative Statistics (classified by SIC) is the only 1997 Economic Census report completely compatible with prior economic census data.

CD-ROMs issued from the 1987 and 1992 Economic Censuses contain databases for nearly all data published from those two economic censuses, plus a few additional files covering selected sectors for 1982 and 1977.

Statistical reports from the 1992 census are most readily available in portable document format (PDF), but there are no PDFs for earlier economic census data. Printed reports from earlier economic censuses, providing historical figures for the study of long-term time series, are available for reference at Federal Depository Libraries.

## **Forms**

There were many factors considered when designing the forms for the 2007 Economic Census.

- *Forms from the previous economic census* – to maintain data comparability
- *Requests from data users* – to meet the changing needs of data users
- *Feedback from data users* – to incorporate feedback from trade associations, selected companies and other government organizations on draft forms
- *New or changing industries* – to collect data on new and developing industries while focusing less on other industries

View sample 2007 Economic Census forms at [http://bhs.econ.census.gov/ec07/CEN\\_2007FORMS.html](http://bhs.econ.census.gov/ec07/CEN_2007FORMS.html).

## **Method of Assigning Tax Status**

For kind-of-business classifications where there are substantial numbers of taxable and tax-exempt establishments, establishments are classified based on the federal income tax filing requirement for the establishment or organization. This classification was based primarily on the response to an inquiry on the census questionnaire. Establishments that indicated that all or part of their income was exempt from federal income tax under provisions of section 501 of the Internal Revenue Service (IRS) code are classified as tax-exempt; establishments indicating no such exemption are classified as taxable. All government-operated hospitals are classified as tax-exempt. For establishments without a report form, the tax status classification was based upon the type of tax return filed by the firm or organization.

For selected kind-of-business classifications that are comprised primarily of tax-exempt establishments, all establishments in those classifications are defined as tax-exempt. All establishments in the remaining kind-of-business classifications (comprised primarily of taxable establishments) are defined as taxable.

## Sources of the Data

Firms in the economic census and related programs are divided into those sent report forms and those not sent report forms. For most economic census sectors and programs, all large- and medium-size firms and all multi-establishment firms were sent report forms to be completed for each of their establishments and returned to the Census Bureau.

For most sectors and programs, report forms were also mailed to a sample of small employers. These include single-establishment firms with payroll below a specified cutoff. This cutoff varies by economic census sector, industry and geography. However, for most very small firms, data from existing administrative records of other federal agencies were used instead. These records provide basic information for the business, including data on sales, payroll, number of employees, legal form of organization and other statistics.

All data for firms with no paid employees during the year (also known as “nonemployers”) were obtained from administrative records of other federal agencies. Data for nonemployers are not included in the reports from the economic census but are released in the annual *Nonemployer Statistics* series.

## Industry Classification of Establishments

The industry classifications for all establishments covered by the economic census and surveys are based on the North American Industry Classification System (NAICS).

The method of assigning industry classifications and the level of detail at which establishments were classified depends on whether a report form was obtained for the establishment. Establishments that returned a report form were classified on the basis of their self-designation; product line sales, products produced or services rendered; and responses to other industry-specific inquiries.

Establishments that did not return a report form and those that were not sent a report form were classified using the following methods:

- the most current industry classification available from the applicable Census Bureau current surveys or the previous economic census,
- the classification from administrative records of other federal agencies and/or
- a brief inquiry requesting information necessary to assign a kind-of-business code.

## Basis of Reporting

The economic census is primarily conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location or establishment. Companies engaged in distinctly different lines of activity at one location are requested to submit separate reports, if the business records permit such a separation and if the activities are substantial in size.

For selected industries, only payroll, employment and classification are collected for individual establishments, while other data are collected on a consolidated basis.

## Reliability of Data

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the economic census:

- inability to identify all cases in the actual universe;
- definition and classification difficulties;
- differences in the interpretation of questions;
- errors in recording or coding the data obtained and
- other errors of collection, response, coverage, processing and estimation for missing or misreported data.

Selected data from the economic census are subject to sampling errors as well as nonsampling errors. These data are estimated based on information obtained from census report forms mailed to all large employers and to a sample of small employers in the universe. Sampling errors affect these estimates, insofar as they may differ from results that would be obtained from a complete enumeration.

The accuracy of these tabulated data is determined by the joint effects of these sampling and nonsampling errors. No direct measurement of these effects has been obtained except for estimation for missing or misreported data. However, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors.

When data are presented that reflect both sampling and nonsampling errors, statistical measures of reliability (e.g. a variable for "Percent of sales from administrative records") are provided. The Census Bureau recommends that data users incorporate this information into their analyses, as these errors could impact the conclusions drawn from the data.

## Data Processing and Treatment of Nonresponse

To prepare 2007 Economic Census data for release to the public, the data are be processed in three primary ways:

- Data Edits - to detect reporting errors and other problems
- Nonresponse Imputation - to estimate missing data
- Tabulation and Analytical Processing - to tabulate and analyze summary data and prevent disclosure of respondents' identities

### ***Data Edits***

Data captured in an economic census must be edited to identify and correct reporting errors and other problems. The data also must be adjusted to account for missing items and for businesses that do not respond. Data edits detect and validate data by considering factors such as proper classification for a given record, historical reporting for the record and industry/geographic ratios and averages.

The first step of the data editing process is classification. To assign a valid kind-of-business or industry classification code to the establishment, computer programs subject the respondents' responses to pre-

specified items of a series of data edit programs. The specific items used for classification depend on the census report forms and include:

- self-designated kind-of-business check-box classifications,
- responses to product lines sold by a retail establishment,
- products manufactured by a plant and
- entries written in by the respondent explaining the establishment's activities.

If critical information is missing, the record is flagged and fixed manually before further processing occurs. If all critical information is available, the classification code is assigned automatically. After classification codes are assigned, a "verification" operation is performed to validate the industry, geography and ZIP Codes.

After an establishment has been assigned a valid kind-of-business or industry code, the data edits further evaluate the response data for consistency and validity—for example, assuring that employment data are consistent with payroll or sales/receipts data. Response data is always evaluated by industry; in some cases, type of operation or tax-exempt status is also taken into account. Additional checks compare current year data to data reported in previous censuses or from administrative sources.

## ***Nonresponse Imputation***

Nonresponse is handled by estimating, or *imputing*, missing data. Imputation is defined as the replacement of a missing or incorrectly reported item with another value derived from logical edits or statistical procedures.

There are two types of nonresponse:

- *Unit nonresponse* occurs when an eligible unit fails to provide sufficient data to be classified as a response.
- *Item nonresponse* occurs when some but not all data have been collected for the respondent.

Title 13 of the United States Code states that respondents are required to answer all questions to the best of their ability. Incomplete forms, unclear or erroneous data, or nonresponse can affect data analyses and the quality of the published data.

Problems that arise from missing data include:

- Analyses of data sets with missing data are more problematic than analyses of complete data sets.
- Lack of consistency among similar analyses due to differing treatments of missing data.
- Inappropriate imputation models, if the reason for nonresponse is dependent on the data item collected and not random.

Although economic census nonresponse accounts for less than five percent of published figures, it is a significant source of nonsampling error.

**Note:** If a data cell contains too much imputation, the value will be suppressed with an 'S' flag.

## ***Tabulation and Analytical Processing***

Individual establishment records are tabulated in different ways based on data product and analytical needs. Tabulations include data summed by industry, specified geographic areas, establishment-size, products produced, materials used, fuels used and product lines sold.

The tabulations are subject to disclosure analysis prior to macro-analysis.

During macro-analysis:

- units of measure are converted from collected to disseminated units,
- a variety of data flags and symbols are set and
- data fields are renamed for dissemination.

## **Disclosure**

A *disclosure* would occur if someone could infer data values (e.g. dollar value of sales) for a particular business that has provided information via a census or survey form under a pledge of confidentiality.

The Census Bureau is committed to confidentiality and constantly pursues new procedures, technologies and methodologies to safeguard individual data.

## ***Methods of Preventing Disclosure***

Disclosure avoidance is the process for protecting the confidentiality of data. The Census Bureau uses two methods of preventing disclosure of business data, *cell suppression* and *noise infusion*.

## **Cell Suppression**

Some of the data in economic census data sets are withheld to protect the confidentiality of information reported by individual businesses. Data withheld are replaced with 'D's in appropriate data cells.

Cell suppression protects the confidentiality of individual businesses by cell values in tables where the amount of the cell, if it were known, would allow one to estimate a single contributor's value too closely. This occurs when there are very few contributors or when there are one or two large contributors that dominate the aggregate statistic.

The cells that must be protected are called *primary suppressions*.

To make sure the primary suppressions cannot be closely estimated by subtracting the other cells in the data set from the higher-level totals, additional cells may also be suppressed. These additional suppressed cells are called *complementary suppressions*.

The process of suppression does not usually change the higher-level totals. Values for cells that are not suppressed remain unchanged. Before the Census Bureau releases data, computer programs check published data sets for both primary and complementary disclosures.

Establishment counts are not considered to be disclosures, so this information is published in all tables.

Ranges are sometimes used in place of 'D's to suppress sensitive data, but still provide meaningful information.

## **Noise Infusion**

Noise infusion is an alternative to cell suppression that allows for the publishing of more data. By marginally adjusting (perturbing) each respondent's data, data for individual businesses can be camouflaged. Most of the resulting aggregated statistics are distorted by a relatively small amount. Some cells may be suppressed for additional protection from disclosure or because the quality of the data does not meet publication standards. Though some of these suppressed cells may be derived by subtraction, the results are not official and may differ substantially from the true estimate.

Protective noise is applied to the following economic data sets:

- 2007 Commodity Flow Survey
- 2007 Economic Census of Island Areas
- Nonemployer Statistics, starting with the 2005 reference year
- County Business Patterns, starting with the 2007 reference year
- 2007 Survey of Business Owners

For more technical information on noise infusion, read "Using Noise for Disclosure Limitation of Establishment Tabular Data" by Timothy Evans, Laura Zayatz and John Slanta in the Journal of Official Statistics (1998): <http://www.census.gov/prod/2/gen/96arc/jiaevans.pdf>.

## ***Disclosure Limitation is Required by Law***

The Census Bureau is bound by Title 13 and Title 26 of the United States Code. Title 13 provides the authority to conduct censuses and surveys, and both Titles 13 and 26 provide strong protections for information collected from individuals and businesses.

Other federal laws, including the Confidential Information Protection and Statistical Efficiency Act and the Privacy Act, also reinforce these protections.

# Notes and Cautions

Census Bureau economic data are collected, processed and published in different ways.

Data users need to be aware of certain details before using data from multiple sources.

Links in these notes and cautions can be found at

[http://develop.ssd.census.gov/econ/census07/www/notes\\_and\\_cautions/](http://develop.ssd.census.gov/econ/census07/www/notes_and_cautions/).

## Definition Changes

### *Industry Classification Changes*

The North American Industry Classification System (NAICS) is updated periodically. Changes are implemented during economic census years.

To confirm that data are comparable, **data users need to review:**

- the [NAICS](#) and [Standard Industry Classification \(SIC\)](#) correspondence tables and
- the *Bridge Reports*, which show the effect of industry classification changes between economic censuses. The 2007 *Bridge Reports* will be available June 2011.

### *Geographic Boundary Changes*

Geography boundaries may change over time. The geographic areas covered by County Business Patterns and Nonemployer Statistics are benchmarked to the year of the last economic census.

To confirm that data are comparable, **data users need to review:**

- the [GeoNotes](#) file that document boundary and other geographic changes from the prior economic census in a textual format and
- the [Geographic Reference Files](#) that document additional coding system changes.

### *Data Field Changes*

Data field names and definitions may change over time.

To confirm that data are comparable, **data users need to review:**

- the data field definitions. Click on the data field name to get the definition.

## Different Data Sources

### *Industry Comparability*

Industry detail across censuses and surveys do not always match.

For example, the 2003-2006 Annual Survey of Manufactures (ASM) and the 2002 Economic Census were both published on a 2002 North American Industry Classification System (2002 NAICS) basis.

However, in the ASM, many "real" NAICS codes were combined into "pseudo" NAICS codes. This substantially impacts the comparability of the data.

To confirm that data are comparable, **data users need to review:**

- the industry detail published to understand the contents of each NAICS code before making data comparisons. Click on the title of the data set to find this text.

### *Industry Coverage Comparability*

Coverage of industries published across censuses and surveys do not always match.

For example, agriculture is included in County Business Patterns but not the economic census.

To confirm that the higher-level totals are comparable, **data users need to review:**

- the industry detail published. Click on the title of the data set to find this text.

### *Business Coverage Comparability*

Types of businesses included in one survey do not always match businesses included in another.

For example, nonemployers AND employers are included in the Economic Census of Island Areas data for American Samoa but employers only for other the island areas.

To confirm that data are comparable, **data users need to review:**

- the Introductory and Methodology text. Click on the title of the data set to find this text.

### *Source of Raw Data*

Some published data from censuses and surveys are a combination of collected data and administrative data, while others solely use administrative data as their source.

**Data users need to understand:**

- the limitations of administrative versus collected data and
- administrative data are often reviewed differently than data collected by Census Bureau.

## ***Report Release Timing***

Similar data are often published for same time period but released significant time apart.

For example, the 2007 County Business Patterns is published in July 2009 while the 2007 Economic Census is published from 2009 to 2011.

### **Data users need to understand:**

- that often the most recently-release data are the “better” data, as it has gone through additional review that the prior-released data may not have gone through.

## **Different Methodologies**

### ***Sample Surveys versus Censuses***

Published sample survey data include sampling and non-sampling errors. Published economic census data (except for Construction) only include non-sampling errors.

To confirm that data are comparable, **data users need to review:**

- the methodology text and published measures of reliability. Click on the title of the data set to find this text.

### ***Business Classification***

Some surveys and censuses capture data on an establishment basis and tabulate data up to firms, while others capture data on a firm basis to start with.

To confirm how the data are collected, **data users need to review:**

- Data users need to review the methodology text because classification of an entire firm (and all it's establishments) may be quite different from the classification of each establishment of the firm. Click on the title of the data set to find this text.

### ***Industry Self-Classification***

Some surveys and censuses allow businesses to self-classify while others collect raw data that is then used to classify the business.

To confirm how establishments are classified, **data users need to review:**

- the introductory and methodology text because results of self-classification may be quite different from Census Bureau-performed classification. Click on the title of the data set to find this text.

## ***Disclosure Handling***

Disclosure processing is done separately for each census and survey.

### **Data users need to be aware of this:**

- because it is possible to see different disclosure patterns for seemingly similar data across two or more surveys.

## **Data Manipulation**

### ***Effect of Suppressed Records on Sorted Data***

When using the sort tools in American FactFinder to rank data, suppressed records fall to the bottom of the ranking.

### **Data users need to know:**

- these suppressed records could be one of the higher rankings and
- that they need to calculate the amount of the total that these suppressed records account for (Total - published rows = residual) to determine if the suppressed records could be on top.

### ***Effect of Unpublished Data on Sorted Data***

Data often have to meet minimum criteria to be published in the data sets.

### **Data users need to know that:**

- this minimum criteria used is often unpublished,
- the sum of the data published is often less than the totals and
- that just because an industry or geography is not published, it does not mean that there is zero activity in that industry or geography.

### ***Ranking "Small" Data Cells Along With "Larger" Data***

### **Data users need to know that:**

- these small cells of data often are not statistically significant enough to allow for comparison with larger, more significant industries,
- small changes in these small industries can often result in large (but statistically insignificant) swings in year-to-year and other ratios and
- with the limited resources the Census Bureau has, these smaller industries/geographies may not be as thoroughly reviewed as others.