# Census Bureau Economic Programs Overview California State Data Center Affiliate Workshops March 16, 2016 Presented by: Andrew W. Hait

My name is Andy Hait and I have been economist at the U.S. Census for over 28 years. Today, we'll be walking through the economic programs conducted at the Census Bureau. When I use the term "Economic," I'm referring to data collected from businesses, as opposed to the American Community Survey that collects information from people and provides detailed information on household income, home value, and how much people pay for rent. Today, the focus is on data collected from businesses.

U.S. Census Bureau

U.S. Department of Commerce Economics and Statistics Adminis

The workshop this morning is broken into three pieces. We're going to start off, as you can see on this slide, with an overview, covering some basic terms that are important to know when you're using our data. Then we're going to walk through a high level overview of our programs, and then specifically dive at the Economic Census, focusing on programs that publish local area data. The Census Bureau conducts about 42 different surveys, and I'm going to focus on four. Many of the other ones only publish national level data, so I'm only going to touch on those and encourage you to look at them, because they are more recent than the local area data.

# Census Bureau Economic Programs Overview continued California State Data Center Affiliate Workshops March 16, 2016 Presented by: Andrew W. Hait U.S. Census Bureau Le Consus Bureau Le Consu

The last part of the presentation is going to be a walkthrough of two new tools just released within the last six months called Census Business Builder. The Census Bureau has been trying to make it easier to get to our data. Some of you may be familiar with American Fact Finder. While it is a powerful tool, it requires you to be essentially what I would call a power user. And to me a power user has three attributes: 1) understands Census Bureau programs and which program has the data of interest, 2) understands statistics, like margin of error, and 3) invests time. You need to be able to spend the time to learn how to use the tool efficiently. The tools I'm going to show you at the end of the morning are specifically designed for the anti–power user. They are designed for people who are simply interested in getting demographic and economic data for an area quickly and easily.

# **Outline**

- Census Economic Programs Primer
  - Key Terms
  - Programs Overview
- The 2012 Economic Census and Related Programs
  - What's Been Released So Far
  - What's Coming Up (Subjects/Summary Series, ZIP Codes)

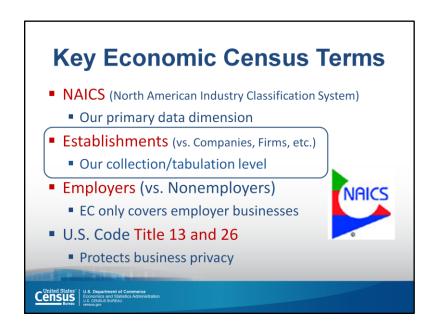


First, we're going to start off talking about some key terms for two reasons. First, there are important concepts to understand the economic data that we publish at the Census Bureau. Second, I want to distinguish the information available through the Economic Census from other data sources. Some of them are fabulous, some of them are horrible. The problem with a lot of them is they don't really describe how they get their data. What types of businesses are or are not included, how do they deal with privacy issues, do they even have privacy protections for the data. So as we walk through these concepts, these are the kind of things that you all ought to be questioning when you use other sources. Please don't think I'm discouraging you from using them; there's a lot of great data out there. There's things that Census can't do that other data providers can. Definitely use that data. But this part of the workshop is about being a more informed data user, so that's the key.

# Key Economic Census Terms NAICS (North American Industry Classification System) Our primary data dimension Establishments (vs. Companies, Firms, etc.) Our collection/tabulation level Employers (vs. Nonemployers) EC only covers employer businesses U.S. Code Title 13 and 26 Protects business privacy

NAICS is the North American Industry Classification System, which is used to classify every business in the United States. NAICS is a hierarchal system that starts off with a two digit sector code and goes up to the six digit NAICS code. The more digits, the more detail. For example, NAICS sector code 31 is manufacturing. Within Manufacturing is Food Manufacturing (NAICS three digit code 311). Within Food Manufacturing is Animal Food Manufacturing (3111). And eventually you get down to canned dog food. NAICS is updated every five years, including the years we conduct the Economic Census, which are years ending in 2 and 7. When you are using data from other sources, you find out if they are classifying businesses based on NAICS or still using the old SIC. SIC ended in 1997.

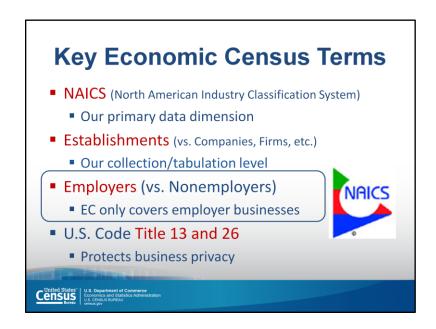
NAICS is an offshoot of the NAFTA agreement. When the U.S., Canada, and Mexico were working on the NAFTA agreement, they realized that the classification systems we were using across countries was so dramatically different there was no way to measure the trade across our countries. So they created NAICS. The codes are comparable down to the 5 digit level. At the six digit level, we kind of go our own way. So to give you an example, the U.S. and Mexico have a 6 digit NAICS code specifically for tortilla manufacturing while Canada does not. Apparently they don't make their own tortillas in Canada, or they don't make enough of them to warrant their own NAICS code, so they have tortillas added into "other baked goods," and it's a comparable system.



An establishment is a business at a single physical location, classified into their own NAICS code. Collecting the data at the establishment level instead of the company or firm level allows us to do two things. First, it allows us to count people where they are actually working, rather than where they are headquartered. The second thing is that establishments allow us to classify each location into the correct NAICS code. If you think about a company where all the locations are in one industry, that's easy. But when you have a company that's very diversified, collecting the data at the establishment level allows it to be put in the right geography and the right industry.

Using General Motors as an example, business locations are scattered all over the country in nearly every sector of the US economy. If we classify GM as a company based upon it's number of employees across locations, they are primarily classified as an automobile manufacturer. But if you classify GM based on revenue, they'd be classified as Finance. They make more money based on GMAC than they make on building cars. So that's just an example. We are one of the few organizations that collects data at the establishment level, and probably more than anything else, this is why it takes so long for us to release some of our data. We are about 90% done with the 2012 economic census. I know you all are scratching you heads wondering why it takes so long. It's because the data are collected at such a detailed level that is very accurate. The philosophy is that getting a good measure every five years that's really accurate is very important. Then all the monthly, quarterly, and annual data are benchmarked back to the economic census.

There are a couple of programs at the Census that we do collect at a company level, where it makes sense. We have a survey called Quarterly Financial Report, the QFR, that publishes company level profits.



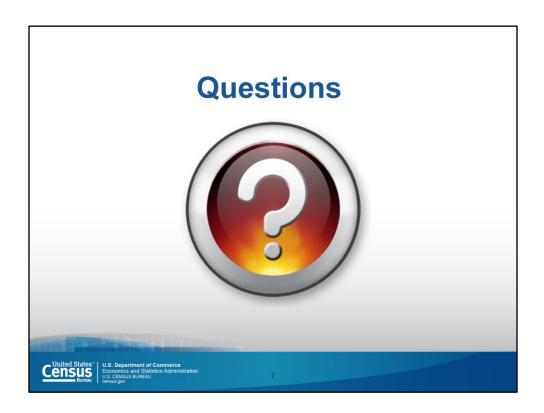
The Census Bureau breaks all companies in this country into two categories: Employer Businesses and Non-Employer Businesses.

Employer Businesses are businesses with one or more paid employees (i.e., companies that file the payroll tax form 941 with the IRS). Only a quarter of all businesses in the United States are Employers. That's about 8 million or so.

Non-Employers have no paid employees (i.e., sole proprietors, independent contractors, businesses that file the schedules C with the IRS). Three quarters of all businesses in the United States, of fourteen million, are Non-Employers.

In California (as will be explained more later), on the Employer side, the economy has still not recovered to the 2007, pre-recession levels. In terms of number of businesses, and in terms of revenue and employment. However, the Non-Employers are double what they were in 2007. It seems like people who were laid off during the recession have now come back and are now working as independent contractors and consultants. These jobs are the primary occupation for these people, not second jobs; and they are in industries that are very well paid. The largest number of Non-Employers in California are in the professional scientific and technical services. There are a lot of people working as independent contractors for businesses.

This distinction is very important because there are very few data providers that measure Non-Employers. The State of California does not count Non-Employers because they are not covered by unemployment insurance.



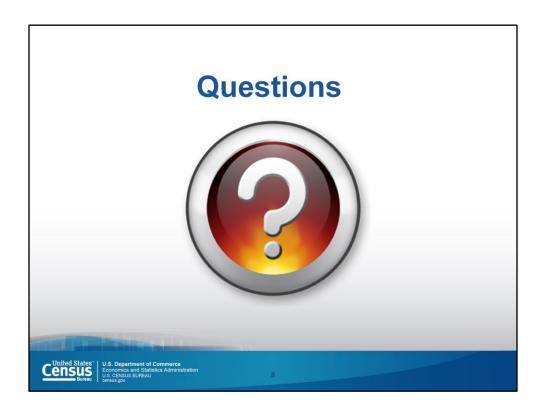
### What about people who are contracted from an employment agency?

There are lots of creative employment arrangements that people can have today, which has a big bearing on where we capture those employees and what industry they're captured in.

The traditional business has regular employees – they are counted as an employee at an Employer business.

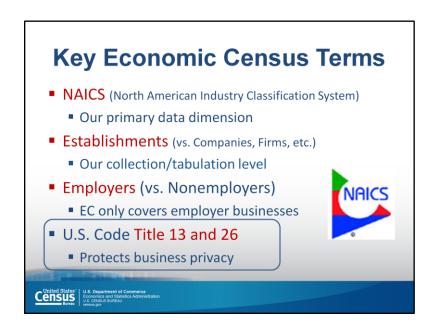
People that are contractors but that work for a contracting company can be more challenging to capture. For example, there are Professional Employer Organizations (PEO) that lease employees. These employees are particularly popular in manufacturing, especially in industries that are seasonal. When there are big swings in employment, businesses don't want to bring these people on for twelve months out of the year. They want to bring them on just when they need them and let them go when they don't. Short 3-, 4-, 5-month leases, with full management of that employee is the perfect solution.

To accurately capture these employees for manufacturing, we counted them twice. Once as an employee of the PEO and once as an employee of the manufacturing business, because otherwise productivity data for manufacturing would had missing data.



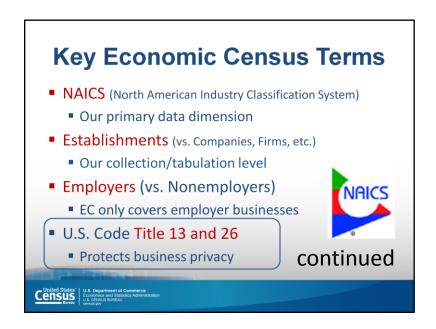
### Is there a single NAICS for the PEOs?

There is a specific NAICS code just for PEOs. The really fascinating thing about PEOs is that they seem to be clustered in certain states, and it creates some challenges with tagging those employees. For some reason, there are a lot of PEOs in Florida. It's probably got something to do with the tax laws in Florida that encourage PEOs to be there. So you'll have people that are being counted as working for a PEO in Florida when they're actually working for a manufacturing plant in Illinois. It creates some real challenges of collecting the data. I think there are some PEOs in California too.

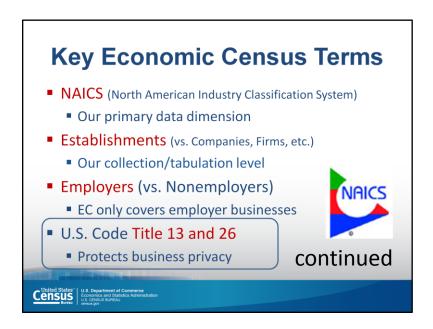


U.S. Code Title 13 and Title 26 are the laws that govern how we collect and publish data, and how we can collect and publish from the Census Government programs. Title 13 does a couple of things. First, it allows us to make the Economic Census mandatory. While it is a mandatory survey, the response rate is not 100% so we use information from an administrative source (like IRS or Social Security Administration data) as a proxy for the Economic Census. This law allows us to pull data from other federal agencies, but we are prohibited from pushing data back to them. As I'll show in a moment, there are differences between our data and that published by the Department of Labor because we can't match up our NAICS codes. That is, Title 13 law makes the Economic Census mandatory, and also protects the privacy of the businesses responding. We are prohibited from releasing data that will disclose the identity of individual companies.

So let's just pretend that you and I are the only two gas stations in our town. The census couldn't publish data about the gas stations, because if they did, you could subtract your employment and your payroll data and your sales from the total and know exactly how much I pay my employees and what my sales are. It would be a violation of the law. It's a company-based law though. Let's say we have ten gas stations – you own five and I own five. Same situation would apply.

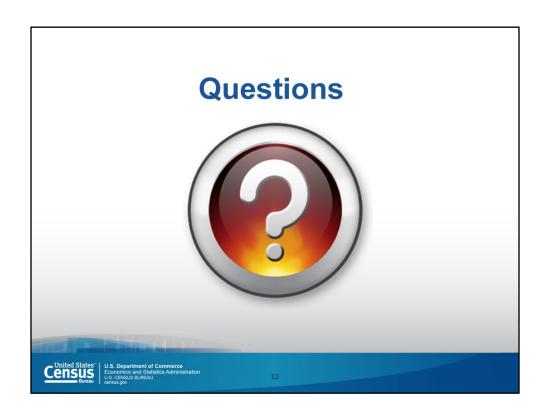


Where Title 13 gets interesting is when you have three or more companies in a specific industry or community when the question of dominance comes in. If we had twenty gas stations in our town, and you own ten and I own seven, and the other three were owned by three other individuals. If our seventeen gas stations dominated the industry, we would still have to suppress the data. People have asked how much they have to dominate the industry to be counted, but the rule itself is a disclosure, I can't tell you. The result of this rule is sometimes data is suppressed and the number of suppressions increases as the level of industry detail and geography increase. When you get down to the very small towns where there's only two grocery stores, much of the data will be suppressed. As a result, it is best to always start at the sector level first when looking at NAICS based data. That is, start with the two-digit NAICS first and to see how much is suppressed and before moving on to more detail (i.e., three, four, five, and six digit NAICS levels).



These suppressions can be frustrating when you need data. Whenever we have to suppress the data we do give you two data points: the number of businesses and employment size range. Using these two data points the missing data can be approximated based on the assumption that those businesses are consistent with other businesses like them. In some industries, this strategy works well. For example, convenience stores are so homogeneous in terms of their ratios (e.g., number of employees, sales). They're so competitive, it's impossible for one to make significantly more than any other based upon their employment. In other industries (e.g., car dealers), it is probably not a good idea to impute the data. For example, if the average is based upon a bunch of Ford and Chevy and GM dealerships, and a Ferrari dealership is suppressed, the average is not going to be a good proxy for their sales.

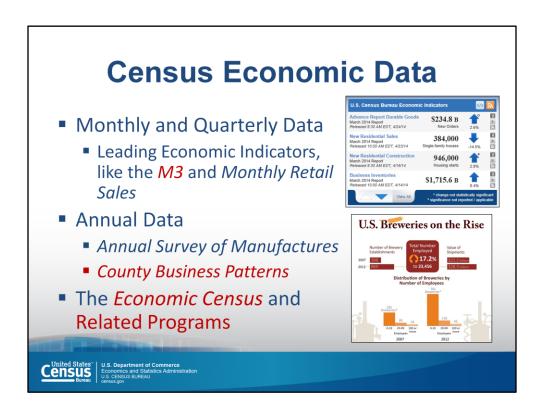
But there is an upside of suppressions: quality. Because businesses know that we protect their privacy, they report much more accurately. Keep this point in mind when using data from other sources that have no privacy protection. For example, Google or Bing or Yelp show points on a map of gas stations and convenience stores and Starbucks. They have data for each of those stores. Think about how accurate those numbers are because those businesses don't have their privacy protected.



### Is it clear which data is suppressed when you're looking at the tables?

Yes. When you're looking at the data tables, in a case where the data are suppressed, you will see the number of businesses, and you'll see a little letter with the employment size range, but then all the other cells will have a D in the table. D is for disclosure.

Regarding the disclosure process, it is done in two phases. First, cells are identified that have to be suppressed due to privacy (i.e., only two gas stations). Then the need for complimentary disclosure is assessed by looking for cases where there's only a small number of suppressions, resulting in the opportunity to take the total, subtract the published rows, and determine the suppressed row. In these situations, more suppressions are added to cover for the one that was required (i.e., complimentary disclosure). There is no way to tell when you look at the data tables which is the primary and which is the complimentary disclosure. The program that does this work is very complex and about thirty people are responsible it.



When you think about our economic programs, you can break them into broad categories. Monthly and quarterly data, annual data, and the Economic Census and our related programs. The first thing you need to know is that the more current the data, the less detailed it is. And that the opposite is also true; the less current the data, the more detailed it is.

Economic Programs - How are They Different?					
	Monthly/Quarterly example: M3	Annual example: County Business Patterns	Every 5 Years  Economic Census		
collection	Sample survey	Administrative data	Census		
industries	Selected  example: NAICS 3121 – Beverage Manufacturing	2- thru 6-digit NAICS  example: NAICS 312120 – Breweries	2- thru 6-digit NAICS  example: NAICS 312120 — Breweries		
geographies	US Only	US, State, Metro Area, County, ZIP Code	All* Geographies		
data variables	Shipments, Inventories, & Orders	Number of businesses, employment, payroll	200+		
	5. Department of Commerce onomics and Statistics Administration CENSUS BUREAU sus-gov	14	14		

For example, from the monthly and quarterly side, we publish a survey called the M3. It stands for manufacturer's shipments, inventories, and orders. It is one of the fourteen economic indicator surveys that the Census Bureau publishes. M3 is a sample survey that publishes selected NAICS data. It has national data only and three statistics: number or value of shipments, inventory, and orders. It is a very detailed and timely survey, but limited to nationwide only.

For annual data, county business patterns is fairly geographically detailed. Data are published down to the ZIP code level. The NAICS breakout is detailed to the 6-digit level. But the data items are limited to number of businesses, employment, and payroll. There are no sales data available from county business patterns.

Finally, every five years we conduct the economic census. It is a complete census, covering every NAICS code and all geographies. The asterisk signifies that "all" geographies has some caveats that I'll share in a moment. There are over 200 statistics published for the Economic Census, so the most detail.

# "Employment" Economic Data

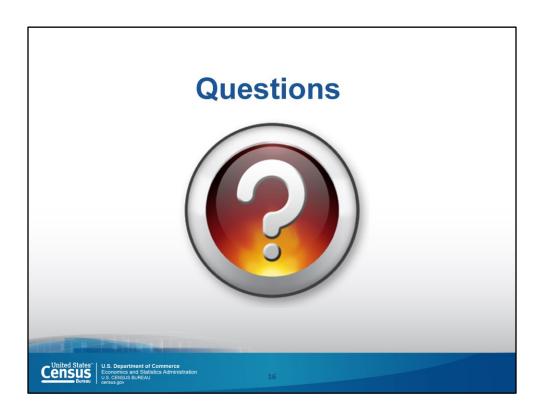
- Collected from households vs businesses
  - ACS Households for Primary Job
    - Detailed data by Occupation
    - Limited data by Industry
    - Data primarily published by residence
  - Economic Programs Businesses for All Jobs
    - No data by Occupation
    - Detailed data by Industry
    - Data only published by business location
- BLS data similar to Economic Programs, but...



The Census Bureau publishes employment "data" in two areas. The American Community Survey (ACS) and the Current Population Survey (CPS) publish a lot of employment data, including occupation and industry. The key point is that these two surveys collect data from households. And the question is "What is your **primary** occupation or job?" Primary is defined as where they make the most money, but that may or may not be the one that you put the most time into, nor the one that you most think of yourself as. My wife used to be a part time substitute teacher and also worked part time at a big garden center in our town. She most certainly thought of herself as a teacher, but that is not the industry she made the most money in, even though she worked at the garden center in the summer time. So for the ACS, she's the employee of a garden center and not a teacher.

If you're trying to measure the number of people who are working in your communities, the ACS and our demographic programs are the best source because each person is counted once.

For the Economic Program, business and employment data count the people in that business regardless if they work somewhere else as well.



### Do we know if they're part-time employees, or the full-time equivalent?

With very few exceptions, the economic data include total numbers of employees with no adjustment to full-time equivalents.

Payroll per employee can reveal some changes in this area. In some industries payroll per employee is less than what it was the previous year or years prior. It is not because they are paying their employees less. It is because their employees are working fewer hours. This reason is reflected in wages because they are up.

# "Employment" Economic Data (cont).

- Collected from households vs businesses
  - ACS Households for Primary Job
    - Detailed data by Occupation
    - Limited data by Industry
    - Data primarily published by residence
  - Economic Programs Businesses for All Jobs
    - No data by Occupation
    - Detailed data by Industry
    - Data only published by business location
- BLS data similar to Economic Programs, but...



The Bureau of Labor Statistics (BLS) publishes two sets of employment data. They publish the unemployment rate, which actually comes from the Current Population Survey (CPS), which is a household based survey, counting people one time whether or not they are employed in any industry.

The BLS also conducts the Quarterly Census Employment and Wages (QCEW), which is a business based survey, counting employees of a business and not individual people. This information is most similar to the economic census and our economic programs, with a couple exceptions.

The BLS relies on the business to assign their own NAICS code. At the Census Bureau, we don't let the business assign their own NAICS code, we assign it for them based on the data we collect about what they do, what they make, what they sell, and what services they provide. As a result, BLS data from QCEW may be different from the Economic Census.

# "Employment" Economic Data (cont).

- Collected from households vs businesses
  - ACS Households for Primary Job
    - Detailed data by Occupation
    - Limited data by Industry
    - Data primarily published by residence
  - Economic Programs Businesses for All Jobs
    - No data by Occupation
    - Detailed data by Industry
    - Data only published by business location
- BLS data similar to Economic Programs, but...



To elaborate, some industries in NAICS are really simple. If you're a grocery store, you probably know what your NAICS is. Not complicated. But other industries are not so simple. There are businesses that doing multiple things at a location. Which industry they are classified in depends on what the majority of the operation is.

For example, many agricultural support businesses not only sell supplies like (grain, seed, feed, and tractor parts), but also have a fertilizer blending operation at the same location. If a farmer is having an issue, they can test a soil sample, identify the problem, and prepare a custom fertilizer. So if more than 50% of the sales of that business comes from this kind of fertilizer blending operation as opposed to the wholesale portion, the entire business is classified as a manufacturer because fertilizer blending is considered manufacturing (according to NAICS). Businesses prefer to be classified as wholesale because manufacturers are required to comply with special EPA and OSHA rules (e.g., eye wash stations, containment fields, etc.). So when they are allowed to classify themselves for the BLS, they are probably counted as wholesalers, which results in differences compared to the Economic Census.

Despite this caveat, the BLS QCEW data is conceptually the same as the census business data. The advantage of QCEW is that it's obviously more current. It's quarterly.

# **Other Current Economic Surveys**

- Retail e-Commerce Sales (E-Stats)
   (census.gov/econ/estats/index.html)
- Annual Capital Expenditures Survey
   (census.gov/econ/aces/index.html)
- Information and Communication Technology Survey (census.gov/econ/ict/index.html)
- Statistics of U.S. Businesses (census.gov/econ/susb/index.html)
- Business Dynamics Statistics (census.gov/ces/dataproducts/bds/index.html)
- International Trade (census.gov/foreign-trade/)
- Census of Governments (census gov/govs/)



Other Census Economic programs that you might find interesting include the ones listed on this slide.

E-Stats measures e-Commerce, which includes any transaction or sale from one business to another, as well as retail sales like Amazon.com. For example, when an auto manufacturer buys water pumps, body parts, or any other parts from a supplier and they order electronically with no paper changing hands, that is considered an e-Commerce sale.

ACES is a capital expenditure survey measuring how much companies are spending on capital spending and capital improvements. It is an indicator for what is going to happen in the economy in the future. When capital spending increases, it suggests that businesses are ramping up for the future.

ICT measures information on how much businesses are spending on communication information technologies.

# **Other Current Economic Surveys**

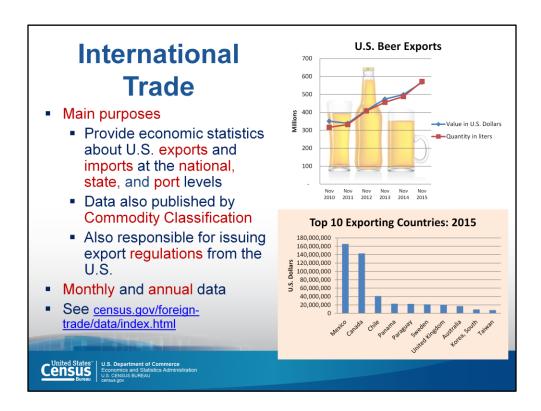
- Retail e-Commerce Sales (E-Stats)
  - (census.gov/econ/estats/index.html)
- Annual Capital Expenditures Survey
   (census.gov/econ/aces/index.html)
- Information and Communication Technology Survey (census.gov/econ/ict/index.html)
- Statistics of U.S. Businesses (census.gov/econ/susb/index.html)
- Business Dynamics Statistics
  - (census.gov/ces/dataproducts/bds/index.html)
- International Trade (census.gov/foreign-trade/)
- Census of Governments (census.gov/govs/)



Statistics of U.S. Business (SUSB) publishes detailed statistics on business births, deaths, expansions, and contractions. While county business patterns shows net change without specifying the number of births and deaths, SUSB actually shows the components of that change. It shows how many truly brand new businesses are there, how many businesses died, how many businesses expanded their operation and opened more locations, and how many of them contracted and reduced the number of locations.

Business Dynamic Statistics (BDS) is interesting because it looks at business ownership over time. The Census Bureau maintains this database called the Business Register. It is a database that includes every single known business in the United States, and we can track ownership of a location over time. So if you just wanted to kind of understand how many companies have opened in California and have changed hands a certain number of times over the last 20 or 30 years, that kind of information is available in BDS.

The last two highlighted in red will now be covered in a little more detail.



A lot of people don't realize that the Census Bureau publishes most of the import and export data from the federal government, the International Trade data. Data are published by where we are exporting to or importing from. Beer is shown here as one example. The chart on the bottom shows that we export a lot of beer to Mexico and Canada. This import/export data is available for national, state, metropolitan area, and port level. So you can look at exports from the port of San Diego by commodity classification and know exactly where those products are going to and coming from. Check out all the detail available using the link on this slide.

## **Statistics About Governments**

- Main purposes
  - Provide economic statistics about governments at the federal, state, and local area levels
  - Serve as public-sector counterpart to private sector
  - Track activity of governments over time
- Response is voluntary
- Virtually no confidentiality restriction



We also conduct a census of governments. The main purpose of our governments data is to provide a counterpart to the private sector data we publish. It is completely voluntary. You can create total of employment in your community by adding the businesses plus the government employment. For the census of governments, it is all public record. There are almost no confidentiality restrictions on the data, allowing for very detailed analysis (e.g., how much does the school system spend on school lunch programs).

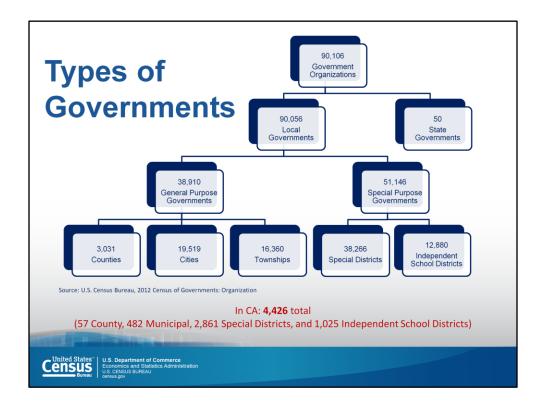
# **Core Programs Content**

- Organization and Structure Governments by type
- Government Employment Full-time employees, Fulltime gross payroll, Part-time employees, Part-time gross payroll, Computed FTE
- Government Finances Revenue by type, Expenditure by character object & function, Debt term, Cash and Securities by type of holding

See <a href="http://www.census.gov/govs/index.html">http://www.census.gov/govs/index.html</a> for more information

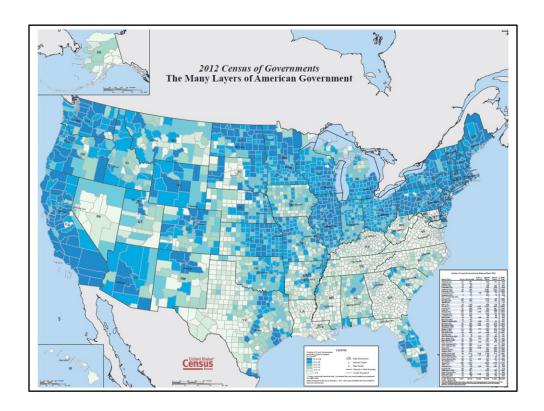


The data are broken into three main categories. Organization and structure shows governments by type. Detailed data on government employment is also provided, including a full time equivalent conversion, as well as the regular, straight numbers. On the finances side, we have both revenue and expenditures data, as well as debt terms and holdings. Again, use the link on this slide to check it out.



This slide shows the hierarchies of government data available. Counties, cities, and townships are types of government, not geographic area. For example, if you were looking at San Diego County level government employee data, you are talking about employees that work for San Diego County government, but those employees may or may not be physically working in San Diego County. Those employees are an employee of that government type, not the geography. Keep this concept in mind when adding together the census of government data and business data.

At the bottom of the slide, you can see in California you have a many governments, 4,426 in total, 57 counties, 482 municipal governments, over a thousand special districts. These are organizations that act like a government (like a water district). They have governmental character, but they aren't normally what you would think of as a government.



This map show counts of governments by county. The darker shaded regions indicate more governments in the county than in the lighter-shaded regions.

Some states, like Maryland, have very few. There are a very small number of independent cities in Maryland. For example, Annapolis is the only incorporated city in the entire county. Some states like New York every single town has individual school systems, fire departments, police departments, trash removal, etc.

San Diego County and much of California is shaded in dark blue showing the large number of governments.

Percent Distribution of State Government Tax Revenue											
	Total %	Sales Total	General Sales	Selective Sales	License Taxes Total	Income Taxes Total	Individual Income	Corporation Income	All Other Taxes Total	Property Taxes	Other Taxe
J.S. Average	100	47.5	31.3	16.2	5.9	41.2	35.9	5.3	5.3	1.6	3.7
Alaska	100	7.6	Х	7.6	4.2	12.1	X	12.1	76.2	3.8	72.4
Delaware	100	15.1	X	15.1	41.0	41.5	32.8	8.8	2.4	X	2.4
Florida	100	82.1	60.7	21.4	6.0	5.8	X	5.8	6.1	<.01	6.1
Maryland	100	42.4	22.2	20.2	4.5	46.3	41.1	5.2	6.8	3.8	3.0
California	100	36.2	27.0	9.3	6.5	55.7	49.2	6.4	1.7	1.6	0.1

For revenue data, here is one example of the data available. It shows the sources of tax revenue by type of where the taxes are coming from. Data for the nation are on the top line: 47.5% come from sales taxes, 31.3% general sales taxes, etc. Several other states are included for comparison.

Alaska has 76.2% of its taxes come from "all other" taxes, which includes severance tax (the amount the state charges companies drilling for oil and tapping into the pipeline). This large revenue source is why they have no income tax. They also do not have state sales tax (indicated by the X in that column).

In Delaware, 41% is license taxes. Delaware provides substantial incentives for companies to incorporate in Delaware. This revenue source allows Delaware to have no property taxes.

In Florida, 60.7% of their tax revenue comes from general sales tax, at least partially fueled by tourists, resulting in very low income tax and property taxes.

Percentages change over time, but often due to price changes of the goods, rather than tax rate changes. For example, as the price of gasoline goes up and down, the taxes that the state is collecting on gasoline sales similarly fluctuates. Percentages of the revenue received from taxes are very price dependent.

# **Economic Census**

- Done on the years ending in "2" and "7" (2012 Economic Census dissemination kickoff in March 2014)
- Covers employer businesses in the U.S.
- Covers businesses in all NAICS sectors except:
  - Agriculture
  - Public Sector







Moving on to the Economic Census. As previously mentioned, this survey is conducted in the years ending in 2 and 7, focusing on employer businesses with a couple exclusions. We do not count agriculture. The USDA took it over in 2007. If you want total number of businesses, you have to get the farms from USDA, National Agricultural Statistic Service, NASS, and add it to the business data we have from our programs. As discussed earlier, data on the public sector is provided through the Government Census.

The remaining exclusions are described at the link on this slide. For example, while government-owned businesses are excluded from the Economic Census because they are covered by the public sector government census, hospitals are counted even if government owned and operated. Otherwise, half the hospitals in the United States would be missing.

Another major exclusion is schools. Elementary schools, middle schools, high schools, colleges, and universities are excluded from the economic census in our education services sector because they are covered by the National Center for Education Statistics, the NCES. The Department of Education publishes all data for schools. The addition of the census of agriculture, the economic census, and the census of governments accounts for about 98% of all employer businesses in the U.S. So these exclusions are relatively small in terms of the number.

# The Economic Census Offers...

- Over 200 unique industry statistics
- National-, state-, metro-, county-, place-, and ZIP Code-level data (varies by sector)
- Industry detail: 2- thru 6-digit NAICS codes
- Additional cross-tabs, including:
  - Business employment and sales size
  - Taxable and tax exempt business
- Very accurate

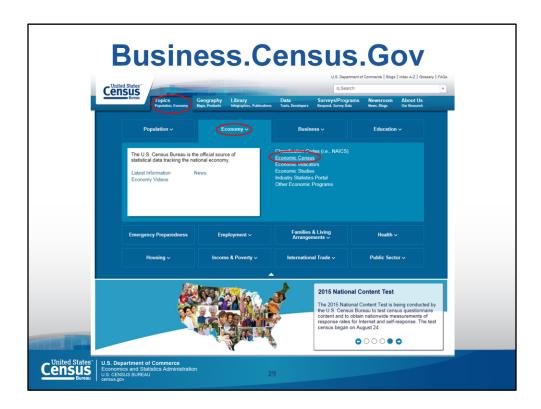


The economic census provides lots of data for many geographies. Notice that place is highlighted in red on the geography list. The Census Bureau only publishes city and town economic data from the Economic Census. This source is the only one for local area data on businesses. Place level data is not published anywhere else. In a moment, place will be defined.

Full industry details are provided to the 6-digit NAICS code. Data are published at the employment and sales level.

There are limitations. We define a small business as one having 500 or fewer employees (equivalent to a very small auto assembly plant or a massive convenience store).

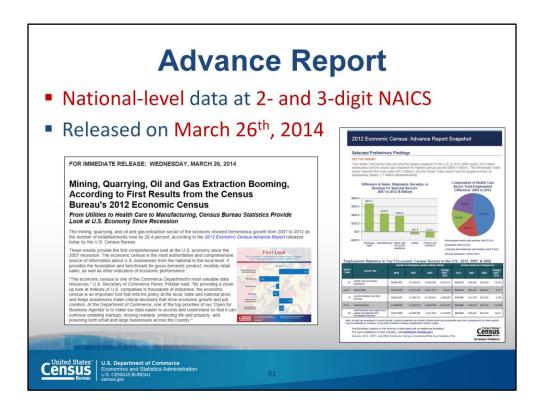
Also, for profit and non-profit organizations are included, but this designation is not specified because what it means to be a non-profit varies from state to state and it constantly changes. Not just legally, but conceptually at each individual business location. One year it could be profit and the next non-profit. The closest we get is tax status. Data on taxable versus tax-exempt businesses. For example, the number of daycare centers or home healthcare businesses are taxable versus tax-exempt is a reasonable proxy for profit or non-profit. It is not an exact proxy because it is possible to be taxable and be non-profit or tax-exempt and to be a for-profit, but it is close enough.



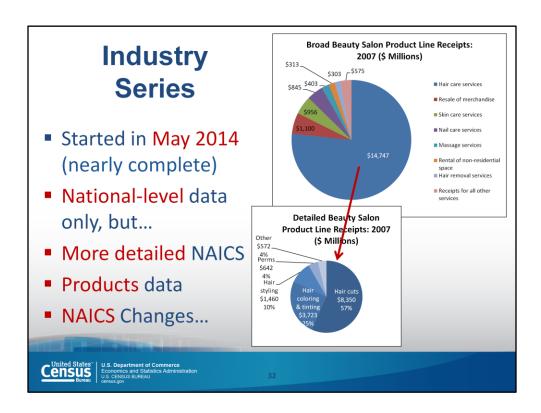
Business.Census.Gov houses all the information related to the Economic Census. To get there from census.gov, go to the topics menu, select Economy, and then choose Economic Census. Or you can use the URL shown at the top of this slide.



This slide shows the main page. The right hand side is a good place to check on upcoming releases.



Speaking of releases... It takes about a year and a half to release all the data from the Economic Census. The first report released was the Advance Report in March of 2014. Why the delay for 2012 data? The Economic Census of 2012 covered the period from January 1<sup>st</sup> to December 31<sup>st</sup>, 2012. Businesses had until March of 2013 to report. There were extensions through August because we really want to collect the data. As a result, our first publication was released about six months after we completed collection of the Economic Census.



After the Advance Report, the Industry Series is released including product line data. The charts here look at the product line sales of beauty salons. No surprise, the biggest chunk of the pie is for hair care services (75% in blue). The data are broken down into more detail. For example, hair salons include hair cuts, tinting, and styling, etc. As this example shows, the product line shows the different products or services that a business is providing. It allows a company to compare themselves to similar businesses.

Initially, this information is published at the national level and we are in the process of releasing state level data.

The data are tailored to each industry, but we do collect some data across every industry. For example, tobacco products are collected across a number of NAICS codes. You can use that data to understand the places where theses products are being sold. What are the industries that sell these products? This information was helpful last year when the state of Maryland was debating increasing the tobacco taxes. They used the Census Bureau's product line data and identified that over 70% of the tobacco products sold in Maryland were sold in convenience stores (small businesses with less than five employees). The tax increase would be an significant impact these businesses, so they didn't go through with it.

The takeaway here is that you can use product line data is to look at each industry and compare data across industries.

# New Industries for the 2012 Economic Census • New and emerging industries • Breakout of solar, wind, geothermal, and biomass electric power generation from All Other Electric Power Generation (NAICS 221119) • Stats: • Number of businesses: 673 in 2011 with 9,058 employees (435 in 2007)

As mentioned at the beginning, NAICS changes. We have a couple of new industries. For the first time, we are publishing data on solar, wind, geothermal, and biomass electric power generation. So for the first time detailed data (e.g., employment, sales, etc.) is being published for all the wind farms in California.

These are the only new industries added for 2012. Since NAICS is related to the free trade agreement, discussions between the U.S., Canada, and Mexico determine the new emerging industries to include. They have to grow to a certain extent that they now have an identity to warrant us breaking out the data. These changes are actually posted in the Federal Registrar. In September, the notice was posted regarding the new industry changes for the 2017 NAICS classification system.

# Industry Changes for the 2012 Economic Census

- Consolidations due to decrease in number of companies due to:
  - General industry decline
  - Company consolidation (mergers and acquisitions)
- Primarily impacts the manufacturing sector (178 industries)
- Stats:
  - Steel mills (880 in 2007, 570 in 2011)
  - Machine tools (579 to 626 (cutting type) and 292 to 312 (forming type)





Some NAICS codes have been consolidated, mostly in the manufacturing sector. Consolidation occurs for two reasons.

Industry decline is well known when a large number of companies close in an industry, the ability to breakout that data is reduced, so the industry is consolidated. For example, there used to be a NAICS codes for men's sock manufacturing and women's sock manufacturing. Apparently, socks are not made in the United States anymore, so those two industries have been consolidated into sock manufacturers. This situation primarily occurs in manufacturing.

Consolidation can also occur when an industry is booming. This situation arises due to merges and acquisitions. As the number of companies in an industry decline because of mergers and acquisitions, it gets harder and harder to break out the data without revealing the identity of the company. For example, without naming names, there is a very large company based in Tacoma, Washington, starting with the letter B, that dominates the civilian commercial aircraft industry. As a result, it is getting very hard to publish data on aircraft manufacturing because they are essentially the only one left in the U.S. There are lots of military, about five or six companies making military planes, but not so much on the civilian side.

# **Other Industry Changes**

- Changes to (and consolidation of ) existing industries due to market change
- Primarily impact the Retail and A&F sectors
- Stats
  - Computer Stores: 12,411 in 2007, 10,292 in 2011
  - Camera Stores: 2,049 to 1,115
  - Music Stores: 4,496 to 2,379

2007 NAICS	2012 NAICS	NAICS Industry Title	
	443142	Electronics Stores	
443112		Radio, Television, and Other Electronics Stores	
443120		Computer and Software Stores	
443130		Camera and Photographic Supplies Stores	
451220		Prerecorded Tape, Compact Disc, and Record Stores	

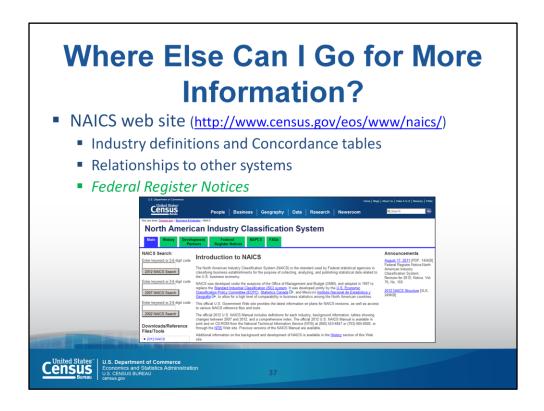


Consolidation can also result from shopping patterns. This screenshot shows that radio, computer, camera, and music stores have been combined together into a new industry called Electronic Stores. They have been combined because these detailed industries are in decline, a number of them are closing.

The point to remember is that when you are comparing data for industries over time, you need to double check that the industries are comparable by looking at NAICS vintage. The codes change so much every five years that you could be comparing apples and oranges.



All this information about industry changes are available on the 'What's New' page. Check it out. There is all kinds of information there.



There is also a NAICS website that has the federal registrar notices. The changes planned for 2017 can be found here.

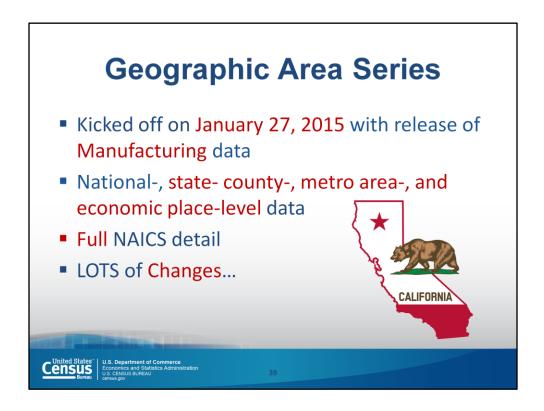


There is a 'Finding Data' page on Business.Census.Gov. A tool called the 'Industry Statistics Portal" (ISP) is located here. The ISP is a great resource, providing access to all of the programs at the Census Bureau that publish data for a certain industry.

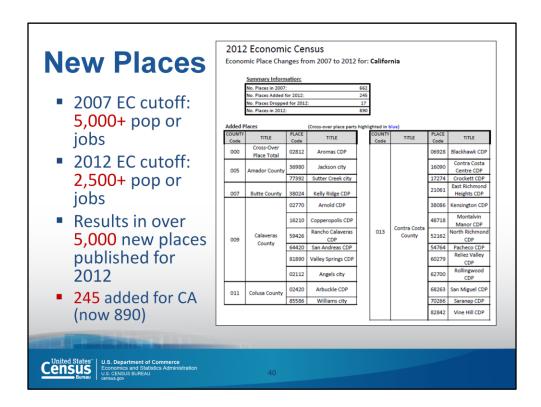
For example, if you are interested in dog food manufacturers, a search for dog food here would result in a list of every program that the Census Bureau has regarding dog food manufacturing with links to the data.

The comparability information also is located here. Every NAICS change that has occurred from 1977 all the way to 2012.

Industry snapshots also can be accessed here. These snapshots provide a profile of an industry at the national, state, and county level.



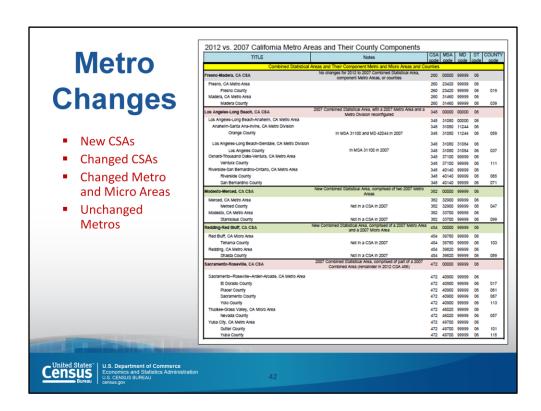
Now, we can talk about local area data.



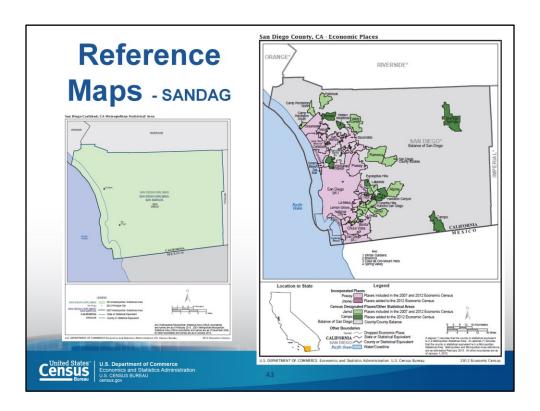
As mentioned earlier, data are published at the place level. The Census Bureau has historically used a cut off of 5,000 population or 5,000 jobs to qualify as an economic place. For the 2012 Economic Census, it was reduced 2,500. As a result, over 5,000 places were added nationally and 245 in California. This screenshot is of a document that lists every new place added in California. In a moment, I'll show you where you can get them.

		aces for the 2012 I			es File for Califor		Census)		
	2012				2007				
Adds / Drons	Economic Place Long (LSAD) Na	me ECPLACE Code	COUNTY	COUNTY Name	Economic Place Long (LSAD) Name	ECPLACE Code	COUNTY	Description of Change (2007 to 2012)	Change Da
Adds / Diops	Acton CDP	00212	037	Los Angeles	Balance of Los Angeles County	98037		New qualifying place	01/01/2012
D I									
Boundary									01/01/2010
,	Alum Rock CDP	01458	085	Santa Clara	Alum Rock CDP	01458	085	Area loss	01/01/2010
Changes	Amesti CDP	01651	087	Santa Cruz	Balance of Santa Cruz County	98087	087	New qualifying place	01/01/2012
Changes							009	New qualifying place	
								New CDP	
New	Antioch city	02252	013	Contra Costa	Antioch city	02252	013	Area gain	01/01/2010
14044	Anza CDP	02294	065	Riverside	Balance of Riverside County	98065		New CDP	01/01/2010
Incorporations /			071	San Bernardino	Apple Valley town	02364	071		0.001/201 0.001/201
	Aptos CDP	02378	087	Santa Cruz	Aptos CDP	02378	087	new qualifying entities	01/01/2010
Unincorporations				Sacramento				Area loss	
offificor por actions	Armona CDP	02700	031		Balance of Kings County	98031	031		01/01/2012
	Arnold CDP	02770	009	Calaveras	Balance of Calaveras County	98009		New qualifying place	01/01/2012
	Aromas CDP	02812		Monterey San Benito	Balance of Monterey County  Balance of San Benito County				01/01/2012
	Aubum Lake Trails CDP	03205	017	El Dorado	Balance of El Dorado County	98017		New CDP	01/01/2010
	Avalon city	03274	037	Los Angeles	Balance of Los Angeles County	98037	037	New qualifying place	01/01/2012
				Kern					
	Bayview CDP	04478	023	Humboldt	Balance of Humboldt County	98023	023	New qualifying place	01/01/2010
	Bear Valley Springs CDP	04734	029	Kern	Balance of Kern County	98029	029	New qualifying place	01/01/2012
	Bella Vista CDP	04926	089	Shasta	Balance of Shasta County	98089		New CDP	01/01/2010
						98071			01/01/2010
	Blackhawk CDP	06928	013	Contra Costa	Blackhawk-Camino Tassajara CDP	06933	013	Area loss/Name and FIPS code change	01/01/2010
	Bloomington CDP	07064	071	San Bernardino	Bloomington CDP	07064	071	Area gain/Area loss	01/01/2010
	Bonny Doon CDP	07470 07498	087	Santa Cruz San Diego	Balance of Santa Cruz County  Balance of San Diego County	98087		New CDP	01/01/2010
			073			98073	073	New qualifying place	01/01/2012
	Bonsall CDP  Borrego Springs CDP								
	Bonsall CDP  Borrego Springs CDP  Boulder Creek CDP	07596 07652	073	San Diego Santa Cruz	Balance of San Diego County  Balance of Santa Cruz County	98073	073	New qualifying place New qualifying place	01/01/2012
	Adds / Drops Boundary Changes New Incorporations / Unincorporations	Boundary Changes New Incorporations / Unincorporations Agent CEP Advance CEP Bay Vera CE	Adds / Drops	Comment   Comm	Excommer Peters Long (LSAC) Name   Cook   Cook	Economic Press Corpg   Scot   Scot	Recommendation   Content   Content	County   C	Common Plane Long (LLAL)  Name   Code   code   COMIN' Y Same   Common Plane Long (LLAL)  Name   Code   co

Place boundaries also change, which impacts comparisons over time. For example, if you want to determine how much the economy has changed for a geographic area, you need to take into account the boundary change that may or may not have occurred there. Growth or a decline may be more of a function of a boundary change than any real growth or real decline. Place change files, GeoNotes files, compare the geographic boundaries in 2007 to 2012 and highlight where the boundary of that area changed. The detailed breakouts give you the ability to determine what small or large changes mean for the place. This tool helps you to figure that out.



Metro areas also change. These change note files compare the changes.

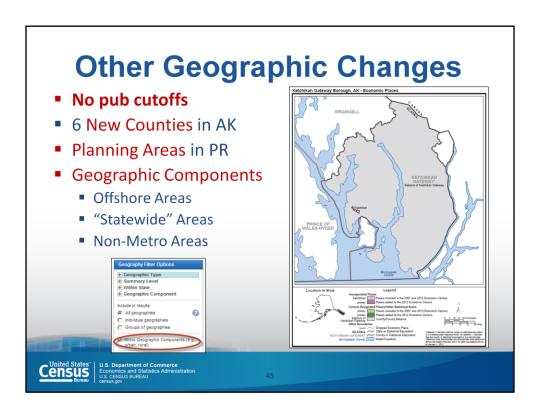


The Census Bureau loves maps. The example on the left shows San Diego county. On the right, the dark green shaded areas are the towns that were added. The light green ones are census designated unincorporated cities and the purple ones are the incorporated areas. The big gray area called "Balance of San Diego County" includes the places that do not meet the threshold to be broken out in the 2012 Economic Census, as well as unpopulated areas.

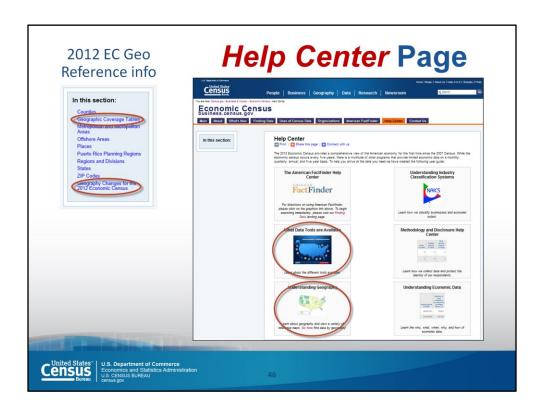
2012 Economic Census Geographic Coverage								
Economic Census Sector		Metro Areas	Coun- ties	Places	ZIPs			
21: Mining	Х							
22: Utilities	Х	Х	Х	X				
23: Construction	Х							
31-33: Manufacturing		Х	Х	Х				
42: Wholesale Trade		Х	Х	Х				
44-45: Retail Trade		Х	Х	Х	Х			
48-49: Transportation and Warehousing	Х	Х	X	X				
51: Information	Х	X	X	Х				
52: Finance and Insurance	Х	Х	X	X				
53: Real Estate and Rental and Leasing	Х	X	X	Х				
54: Professional, Scientific, and Technical Services	X	X	X	Х	X			
55: Management of Companies and Enterprise	Х							
56: Admin. and Support and Waste Management and Remediation Services		X	X	Х	X			
61: Educational Services		Х	Х	Х	Х			
62: Health Care and Social Assistance		х	Х	Х	Х			
71: Arts, Entertainment and Recreation		Х	X	Х	X			
72: Accommodation and Food Services	Х	х	Х	Х	X			
81: Other Services (Except Public Administration)	Х	Х	Х	Х	Х			
			x	– New for	2012			

This table shows the level of geography available for each economic sector. For example, for mining, the data are published at the national and state level only. For other sectors like retail trade, every geographic area is available: state, metro, county, place, and ZIP code. The areas highlighted in red indicated information that is new for the 2012 Economic Census. For the first time, county and place data are being published for Utilities, Transportation and Warehousing, and Finance and Insurance.

Some of you may be wondering why the Construction sector is available at the state level only. The reason is that Construction is not a true census. It's actually a sample survey because the lengthy survey (15 pages) is more than small construction businesses are willing to complete. As a result, the sample size is not large enough to allow for publication at the smaller geographic levels. However, the Census Bureau conducts other construction surveys that do publish local area data. Building permits and housing starts data are provided at the permit issuing area level.



This slide lists the other geographic changes. The most important one is that all publication cutoffs have been eliminated. Historically, we had used publication cutoffs to determine the minimum amount of activity that was required to make the cut to be in a publication when everything was in hard copy books. It was cost prohibitive to print books when the activity was small. For example, no one wanted to pay \$500 for a 5,000 page book. Now that everything is shared electronically, all data are published. In California, we are publishing over 40% more data than in the past.



The help center provides guidance regarding geographies.



The Census Bureau is in the process of finishing off the Economic Census Summary Reports, Product Lines, Establishment and Firm Size reports, and Miscellaneous Subjects, which include tables that are very specialized to certain industries. For example: hotels by number of beds or gas stations by the number of pumps.

The last thing to be released is the data by ZIP code. As previously mentioned, there are eight sectors with data available at the ZIP code level data.

## **Census-Related Programs**

- Commodity Flow Survey (CFS) Selected national- and finer-level data on the movement of products across the U.S. by mode of transportation (plus other breakouts). (http://www.census.gov/econ/cfs/)
- Economic Census of Island Areas Selected industry, product, and other data for American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. (http://www.census.gov/econ/islandareas/)
- Survey of Business Owners (SBO) Selected national- and finer-level industry data for women- and minority-owned businesses and the characteristics of all businesses and their owners. (http://www.census.gov/econ/sbo/)



These programs are related to the Economic Census.

- The Commodity Flow Survey (CFS) is conducted for the Department of Transportation to track the movement of commodities across the country by commodity, by distance, by weight, by mode, etc.
- The census of island areas covers the five U.S. territories.
- Finally, the Survey of Business Owners is our one economic program that includes demographics and economics together. It publishes data on the race, ethnicity, veteran status, and gender of the business owner.

## **Summary**

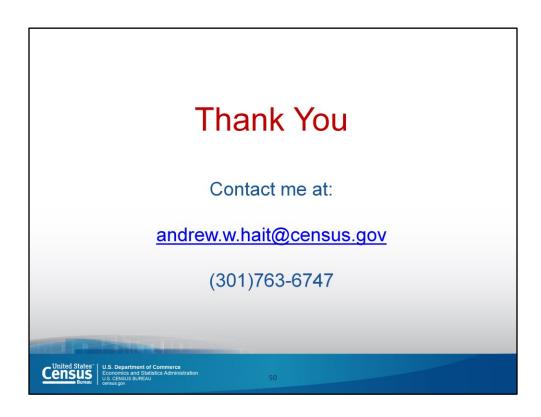
- Census economic data can help you and your customers understand the California economy
- The 2012 Economic Census provides a wealth of data for you and your users
  - Most are released
  - More coming

Census U.S. Dep

 business.census.gov site has a lot of useful materials for you and your users



This slide summarizes the main points from this portion of the presentation.



If you have any questions, here is my contact information.