

This final section of the workshop is a demonstration of two tools that the Census Bureau released in the last six months.



All the data presented in the previous section of this workshop was downloaded using American FactFinder. It is a really powerful tool, useful for downloading all kinds of data. However, it takes time to learn. For the casual user wanting just a piece of data, it can be frustrating. To make it easier to get all of the data that the Census Bureau has available, we have been working hard to improve the website and web-based tools. Some of the impacts can be seen on the Census Bureau's home page as more and more pages are topic based.



By clicking on the topics tab, this list of topics is shown. By choosing Employment, there is a list of programs at the Census Bureau providing employment data. Currently, it is a partial list and eventually everything will be included in in these topical pages. You will be able to access data across programs without knowing about the exact program responsible for collecting and compiling it.

With this goal in mind, code-athons have been hosted at the Census Bureau, where developers work on applications using Census data. This process has resulted in the two tools demonstrated today. They are deployed on the Cloud, which makes it fast for users and relatively inexpensive for the Census Bureau with immediate response to server issues (e.g., if a server goes down, it is back up in five minutes instead of hours or days). The development leveraged APIs (Application Programming Interfaces) where the data are dynamically grabbed from the Census Bureau without downloading the entire data set, ensuring that any updates are immediately refreshed in the tool.



The first tool is Census Business Builder. To access it, choose the Data tab, click on Data Tools & Apps, and choose Census Business Builder. You also could simply type in the search box, "Census Business Builder."



Here is the Census Business Builder homepage.

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Current Feat	ures and What's	Coming Soon			
Feature	Small Business E	dition (CBB: SBE) Lear	n More	Regional Analyst Edition (CBB: RAE) Learn More	
	Current Release	Additions/Changes Coming Soon	Additions/Changes in Future Releases	Beta Release	
		Content			
Business Types	53	72	All Industries	2-digit Sectors	
Geographies	US Counties, Cities/Towns, ZIP Codes, Neighborhoods	Puerto Rico	4	Build by county, view by county, city/town, ZIP Code, and Neighborhood	
Data Sources	ACS, EC, CBP, & NS; Consumer Spending (Esri)	ZBP & SBO	Economic Indicators	1	
Data Vintage	2012	2013 (CBP & NS)	Updated to latest	1	

By scrolling down, you can see this table that shows the features available in the tool now and the aspects coming in future releases.



Let's start with the Small Business Edition by clicking here.



The tool is designed to work in four simple steps. The first step is choosing the type of business you're interested in researching. Currently, the industries are grouped into these six broad categories. While the titles look similar to the NAICS sectors, they do not exactly match. Since the average data user does not understand or care about NAICS, the data are presented in groups using plain language.

For the purposes of this demonstration, we are interested in opening a restaurant, so we choose Food Services.



This list of detailed industries are within the Food Services sector. Food trucks was added based on comments that this was an area of interest, and there were enough of them (i.e., a critical mass).

Our interest today is in restaurants, so we click on it.



The second step is to choose our geography, the area where we are thinking about opening our restaurant. There are two options. we can click on this little button that will go to your current location or we can search for a county, a city, or a zip code. The "Go To My Current Location" button zooms to where you are currently located, which allows you access the data whenever finding a potential location. For example, when scouting around town with a tablet that's Wi-Fi enabled or has a data plan, a stop at an empty building could involve launching the browser, clicking the button, and zooming right to the location.

To get started, we recommend searching at the county level first and then drilling down to the smaller levels of geography. So, let's start with San Diego County.



When you type in the first few letters you get a little list. Let's choose San Diego County. The "Go To Map" button is activated as soon as you specify the location.



When you hit "Go To Map," the application zooms to San Diego County. Let's cancel this menu so we can see the map.



As you click on the map, the data in the box in the bottom left is updated for this area. Based on the top screen, the population of San Diego County is 3.2 million. If I click in the green area, the box is updated with the population of Imperial County (shown in the bottom screen).

The tool currently allows access to data not only at the county level but also for cities, ZIP codes, and census tracts. Since the general public does not know what a census tract is, it is listed as "neighborhood". This word is not perfect either so if you have a better idea, please let me know. There are about 70 different statistics included in this tool.



If you select the drop down menu beside "Total Population," there are three broad categories: information about potential customers, information about other businesses like mine, and information on consumer spending. Regarding the data source, user feedback indicated the only thing they really cared about is that the data are from the Census Bureau. All the customer data is from the 2010-2014 ACS 5-year estimates. The business data is from the three programs discussed today: the Econonomic Census, County Business Patterns, and Non-employer Statistics. The data on consumer spending is from ESRI based on credit card receipts that they get from Visa and Mastercard, etc.

Within "My Potential Customers," there are three subcategories: Demographic Characteristics, Socioeconomic Characteristics, and Housing Characteristics. For each one of these subcategories, there are a variety of variables. Use the scroll bar on the right to see all of them. Specifically, demographic characteristics include total population, age breakdowns, race/ethnicity, and average household size.



Socioeconomic characteristics include median household income, poverty, educational attainment, people in the labor force, employment, disability status, healthcare coverage, and travel time to work.



And housing characteristics include the number of housing units, homeownership rate, vacancy rate, house value, monthly owner costs, rent, and the median year the structure was built.

ACS publishes about 4000 different variables in American Factfinder. About 40 are included in the Small Business Edition of Census Business Builder. Let me know any variables used on a daily basis for consideration to add.



For other businesses like mine, based on the selections we specified: the number of restaurants, employment in restaurants, payroll in restaurants, and revenue in restaurants are included in the "Employers" category.



Non-employer data shows number of businesses, revenue, and revenue per business.



The key ratios section can be helpful when making a business plan. These ratios help answer the following questions.

- What is the average size of a restaurant in San Diego County? How many employees do they have?
- How much to employees get paid on average? If deciding to open a restaurant in one place versus another, it would be helpful to know if it costs twice as much to pay employees in one place versus somewhere else.
- How much does each employee generate for the business on average? For every dollar paid to employees, how many dollars do they generate in terms of sales?
- How many people does each restaurant serve (i.e., population per business)?
- How much total competition is here in the area (including number and revenue for non-employer businesses)?



Let's look at one as an example. Choose payroll per employee and click on "Select Variable."

This slide shows that the average of a restaurant employee is \$19,278. To see how this number compares to the neighboring counties, simply click on the map to reveal that Imperial County is around \$15,000, Riverside County is about \$17,000, and Orange County is almost \$18,000.



Let's explore the demographic data and look at total population.



We are starting with San Diego County (shown in the top screen shot). Now let's click on ZIP Code and the bottom map is displayed.



By clicking in the Kearny Mesa area, we see that there are 78,201 people that live in 92126 (shown in the top screen shot). The data can be filtered with up to three specifications. For example, you can show ZIP Codes with high median incomes. To add a filter, click on the pull down menu under "Select Your Filter" and choose "Add New Filter."

Select a Map Variable			
Primary Category			
My Potential Customers	Xher Businesses Like Mine	Consumer Spending	
Secondary Category			
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Choose "Socioeconomic Characteristics" and "Median household income" and "Select Variable". The range for all the zip codes on the map is 24,032 and 228,587. To filter the results to high incomes, use the slider to set the range to about 100,000 up to the maximum and apply the filter.



Only the Zip codes that meet that criteria are highlighted. You can add up to three of these. For example, you can filter high income, all the people with bachelor's degrees, and all the people who spend a lot on their rent.



The last step of the small business edition is then generating a report. Right now we have reports available at the county and the city level. Let's go back to the county level and then click on the "Create Report" button (see bottom left of this screen shot).



This report is the result. Scroll down to see all the data we just looked at for San Diego County. The first section focuses on potential customers with the demographic, socioeconomic, and housing characteristics. After that is the business data.

**Question:** Is the report the best way to find where the data is coming from? Because I see it says source at the bottom.

**Answer:** The source links are included in the report because we know when people download it want that information too. The source links bring you back to the program page where you can learn more.

Also, notice "For more demographic data and margins of error go here." If you click on that word "here" (see the arrow on the screen shot), it takes you to American FactFinder, pre-filtered for San Diego County, so you can access not just these statistics, but also all of the other demographic profile characteristics and the margins of error. This link is a compromise because some people think margins of error are very important and others are annoyed by them, so we decided to not provide them in the report but to include the link to them instead. The tool is being refined and we are considering having two versions of the report (one with margins of error and one without).



Let's go back to the map so I can highlight some upcoming enhancements.

- The dashboard in the lower left hand corner shows statistics, so at a glance you can see population, median household income, home ownership rate, percent with a high school degree or higher, and number of employer establishments. Right now those four other ones are fixed, but in June you'll be able to change them. You can pick the ones you want to see.
- Two compare features also will be added. The first one is a comparison to the parent geography (e.g., comparing San Diego County to the state and to the nation). For example, you will be able to see how payroll per employee in San Diego County for an industry compares to the state and the national average. The second compare feature will show data over time for up to five years. Right now, the only time comparisons are in the bar charts in the reports. This comparison will show if the industry is improving or declining.
- And you may have noticed the URL has not been changing as we navigate through the tool. The URL will change as you're navigating in the next release of the tool, allowing you to bookmark it and come right back to it again, share it with others, and not have to recreate it.



Moving on let's go back to Census.gov and get to Census Business Builder homepage to show you what the Regional Analyst Edition does differently.



The first thing you'll notice when opening the Regional Analyst Edition is that the industry menu on the left hand side is gone. This tool provides data for all industries and does not let you select a specific industry. The first step is to choose the primary county of the region. Right now, this tool only lets you build a region by counties, but we are planning on expanding to let you build it by city. So if your region is five cities within San Diego County, you would be able to choose the individual cities and create your own grouped up area. For today, let's create a region for San Diego.



After clicking on "Go to Map," the result is very similar to the small Business Edition. It zooms to the map. Let's build a region made up of San Diego County, Riverside County, Imperial County, and Orange County. Open the Region menu by clicking on the arrows to the right of "Region" and then click "Edit Region."



Click on each county on the map and click on "Add to My Region" for each county one at a time. If you change your mind or accidentally add an area that is not needed, you can delete it by clicking on the minus sign (see the red arrow in the screen shot) and confirm by clicking on the trash can that appears. You can customize the title by clicking on the pencil beside "My Region" (also noted with a red arrow). When finished, click "Done Editing," and the map will show an outline around all four counties selected to create a total of that region. It is still possible to browse the city, ZIP code, and neighborhood level by zooming in. Reports can be created for each individual county in that region, as well as a summary level report for the combined area by clicking on "Create Report," which will produce a report with all the data for the four counties aggregated together into a profile. Currently, the two reports are separate from each other, the summary report and the individual counties. Future enhancements will pull everything together so you can see the four-county total in the box at the bottom left.



Here is the combined report. The first page is very similar to the previous report generated through the Small Business Edition. However, the data on businesses beginning on the second page is quite different, providing a breakout by sector and key ratios.

For the next release, the employer and non-employer data will be shown side by side; business owner data will be added (showing race and ethnicity breakouts of the business ownership by sector), and a section of ACS variables will be added.



When it comes to building geographies, is there any chance that it will get smaller?

Yes, in the June release, you will be able to build it by place, and we are considering adding smaller geographies as well. The issue is that the maximum number of geographies you can choose is 24 so that the URL will not be too long to be able to save it.



If you have questions, my contact information is on this slide.