Now that you have an introduction to some concepts about how the data are collected, we can begin to dive into the data. Please check out the Excel file shared with this presentation that contains the data discussed today. It includes the data for every county in the California so you can examine the data on your own.

The process for pulling this information together started at the two-digit sector level. I encourage you to look at the 3-digit and the 4-digit and the 5-digit and the 6-digit NAICS level to understand the specific industries in the different sectors in your county.
To start exploring the data, the first question to ask is what are we good at? What are the industries that are strong in our area? And what can we do to help promote these types of businesses and help them grow?

Also, it is important to explore the things that are not so great. These areas may be opportunities to improve policies or procedures that encourage businesses industries that are not doing spectacularly to grow and flourish.
Four datasets will provide information about the economy in California. First, County Business Patterns provides employer data annually, down to the county and ZIP code level. Non-employer statistics, the second bullet here, shows annual data for non-employers at the county level, not ZIP code. The Economic Census has revenue information at the place level. And finally, the Survey of Business Owners includes race, ethnicity, gender, and veterans status.
All the data can be accessed through American FactFinder through the Advanced Search.
Finding the latest data available for California businesses

Tips using the Advanced Search

- Select the Geography (ies) first
- Start off at Sector and then drill down

Once in the Advanced Search, the very first thing to do is choose the geography. When the geography is chosen first, the list of options is trimmed to include only data for that particular geography. The downside is that some of the datasets of interest that don’t publish data for the geography specified are cut out. There will be no way to know that there’s state level data when looking for a specific county, but it’s a great place to start.

The next step, when I look at industry data, is to look at the sector level (i.e., the 2-digit NAICS code) and then drill down.

One tip that may be helpful is that American FactFinder has pseudo-geographies and pseudo-industries (e.g., “All Counties in California” and “All Places in San Diego County”). Any time more than one county or more than one city is of interest, always use these options. This practice has a couple advantages. First, if you are interested in five cities in San Diego County, but unexpectedly need the data for a sixth city, downloading the data for All Cities will be a huge help. But the big reason is that selecting individual geographies in American FactFinder can result in system crashes because each of the geographies are strung together with the word ‘and.’ If any one of the cities was suppressed, the entire request dies and you get no results. When using “All Places in San Diego County,” even if some of them are suppressed, it gives you the whole thing because it puts the word “or” in between the geographies.
Starting with employer businesses... as previously discussed, this group is relatively small in number (about 25% or so of all businesses), but accounting for 96% of Gross Domestic Product (GDP), based on the gross national average. As the data will show in a moment, this percentage does not apply to California overall or some sectors of the California economy where non-employers account for way more than 4% of the gross state GDP. This rule of insignificance in numbers but significance in percentage of sales revenue is national and not necessarily true at the state level or for smaller areas.
These two graphs are based on data downloaded from the Economic Census. The top left shows the number of employer businesses (the blue bars) relative to employment (the red line), looking at data from 2007 to 2013. While there is an increasing trend from 2010 to 2013, it is still below pre-recession levels. Further, the growth is slow as shown by the slope of the line, which is not steep.

The chart below shows the number of businesses by sector. The interesting finding for California is that most businesses are not in retail trade as in most states across the nation (it is number two). The number one is professional, scientific, and technical services with about 117,000 companies in this sector.

The information in these two charts together raises questions about what is going on.
Digging deeper at employment in 2013, the number one employer sector is healthcare, about 1.8 million employees shown in the top graph. Professional, scientific, and technical services (the top line) is the fourth ranked. The previous slide showed this sector as having the largest number of companies, but is not the biggest with respect to employees, which raises the following questions.

- Where are the employees of these tech businesses working?
- Why are there so few employees in these businesses?
- Where are they coming from?

The bottom graph shows employment change. Professional, scientific, and technical services is down from 2007 to 2013. The number of businesses is up (based on the previous slide) but employment is down since 2007. Healthcare is up the most with an employment boom. Other sectors are down quite a bit, specifically construction and manufacturing.
This slide presents the ratio of payroll per employee. The average employee in the information sector makes $120,000 a year, the highest of all the sectors, which sounds great though there are a relatively small number of businesses in this area compared to the payroll.

The second highest salary is for management companies and enterprises. This NAICS code signifies company headquarters and payroll offices to distinguish them from companies they serve so that these employees are not combined with those working at a manufacturing plant for example.
These tables rank the counties in California. The first table looks at employer businesses and Los Angeles County is number one and San Diego County is number three in the state based on number of establishments (shown in the first column).

The second table shows payroll per employee (in the fourth column) and San Diego County is ranked number nine in terms of average payroll per employee across all employer businesses.
Looking at change in number of establishments and employment, San Francisco, Santa Clara, and LA County are the four that have the highest increase in the number of businesses (column 5 in the table on the top of this slide). San Francisco, Santa Clara, Kern, and Lassen County are the ones that had the highest increase in number of employees (column 6 in the table on the bottom).

The dotted line around those four counties highlights that they are the only four counties that had an increase from 2007 to 2013. Every other county was down for the number of employer businesses. For San Diego County, there are 809 fewer employer businesses. Same thing on the employment side. San Diego County, from 2007 to 2013, is down 16,273 employees.

Again, this information leads one to wonder what’s going on. Why are the employer businesses not growing? The top sector is professional, scientific, and technical services with lots of businesses and not so much employment. What is affecting these numbers?
Looking at the 2-digit NAICS code specifically for San Diego County in 2013, professional, scientific, and technical services is the number one sector in terms of total businesses and total annual payroll. Healthcare is top employer in terms of total employees.

Based on change over time, finance and insurance had the largest increase in how employees are paid, while health care rose the most with respect to number of establishments, employees, and total payroll.
Now let’s look at non-employers.

Non-employer Businesses

- Only covered by a few Census Bureau economic programs (not covered by most other sources)
- Make up 75% of all US businesses but less than 4% of GDP, but...
- A key engine that drives the economic growth
The top chart is similar to the previous figure shown for employers. This time green bars indicate the number of non-employer businesses and revenue is shown with the blue line. The good news here for non-employers is that number of businesses and revenue are increasing since 2009 and this upward trend is steeper than for employer businesses. The measures have not only hit the 2007 level, they have surpassed them.

Looking at the type of business, the top sector in California is professional, scientific, and technical services. In most states, other sectors that are normally not high-paying have the most non-employer businesses. The second highest area is other services, like auto repair facilities or personal services like nail salons and hair salons. These more service-oriented industries are usually not the highest paying.

The fact that professional, scientific, and technical services is the highest leads one to wonder what was going on. One theory is that people who were laid off by tech companies in 2007, 2008, and 2009 have come back to work as non-employers, contractors, and independent consultants for some of these same businesses they were worked for before the recession. These types of businesses lend themselves really well to creative work arrangements like telework (working virtually from your own home).
Moving on to examine receipts, real estate is at the top, which is typical because these are non-employer realtors (i.e., independent real estate agents). Most real estate companies do not hire real estate agents. Independent contractors rent a seat at the office. This industry is pretty good in California with $36 billion in revenue for Non-employer realtors.

In second place is professional, scientific, and technical services. These non-employers make up $24 billion of revenue in California. Growth could be promoted by celebrating the fact that these types of businesses lend themselves to creative work arrangements.

The chart on the bottom explores change in receipts from 2007 to 2013. The growth in real estate is not surprising and related to housing prices.
The county rankings for non-employer businesses reveal that San Diego County is number three in the number of non-employers in California (in the first column of the top table). In terms of average receipts per business across all industries, San Diego County is ranked number 18 (in the third column in the bottom table). The average non-employer earns $49,806 in San Diego County. Again, this is probably someone’s primary occupation. Look at specific two-digit NAICS codes, the average receipts is larger (i.e., six figures). These non-employers are doing well for themselves.
These tables present the change from 2007 to 2013. San Diego County is ranked number three in terms of the growth of non-employers from 2007 to 2013 (third column, top table), with 19,185 new non-employers. In terms of change in receipts, San Diego ranks 30th, indicating that the growth in number is not accompanied by a boom in income. They were high paid, but the increase over time has been relatively small.
This table shows the data by sector for San Diego County. Specifically, of the over 246,000 non-employers, about 49,000 of the them are in professional, scientific, and technical services. Real estate is highest in terms of receipts and receipts per business. To clarify, the receipts per establishment are gross (i.e., before expenses). So for real estate, you need to figure out how much realtors spend to sell the houses to get the net income.
Is this information available at the city level or is it only available for the county?

For non-employer data, the smallest level of geography is at the county level. The Economic Census includes the place and the city level data, but only for employer businesses. But a comparison of the Employer data for the City of San Diego to the County of San Diego shows the share of employer businesses in the city in comparison to the entire county. Based on this information, you could use some creative statistics to see that same distribution for non-employers. Based on local knowledge, you can look at the results and determine if it makes sense, if it is really true. There is one issue... the distribution might not match because some of these non-employers could be working for a firm in the City of San Diego but may be living some place outside of the city and work from home, commute in one day a week, consult, etc.
As previously mentioned, the Economic Census is the only place where you can get place level data. It is also the only place where you can get revenue data. To refresh your memory, places include incorporated cities and census designated places.
This slide focuses on health care in San Diego County because again it is a sector where you can see the concentration of employer businesses in the cities within San Diego County. It is no surprise that the vast majority of these businesses are in the City of San Diego (4,180). Based on revenue per business, however, La Mesa tops the list, which is probably due to a hospital located in La Mesa.
Survey of Business Owners is another data source that provides demographic composition.
This table is for California in total. Looking in the first column, there are about 3.5 million total businesses in the state (employers plus non-employers) and about 679,000 of them are employers (column 5) and 2.8 million are non-employers (column 9). Examining race/ethnicity and gender, 66% of all the businesses in California are white-owned and 52% are male-owned.

This last category at the bottom of the table is almost always the one that has the highest share of receipts. This category is for corporations (i.e., publicly held businesses), which make up 1.69% of the total businesses in the state of California, but they have 61% of the revenue.

Looking further, how do these measures compare for non-employers? Columns 10 and 12 show that similar proportions of non-employer businesses are white-owned and male-owned and their share of receipts is high. This information leads one to ask the following questions:

- What is it that is encouraging non-employers to be so prolific, but still being primarily white-owned and male-owned, statewide?
- How do we encourage other demographic groups to open businesses?
This table shows veteran-owned businesses. There are about 252,000 veteran-owned businesses in the state of California and San Diego ranks second in terms of number of veteran-owned businesses. The amount of data available about veteran-owned businesses has expanded because of the number of veterans that are coming back from Iraq and opening businesses.
Hopefully, this section of the workshop has given you a good introduction so you can explore more.

- So far, we have looked at two-digit NAICS codes. I encourage you to drill down into the professional, scientific, and technical services to learn more about what is happening in those specific industries, to see which ones are doing so well.
- The countywide information could be compared to places within the region or to neighboring counties or to similar-sized counties elsewhere in California or in other states.
- Check out the ZIP code and product line data
- Incorporate demographic data by computing per capita measures to tell the story that raw numbers cannot by themselves.
- Considering data from other sources may also be helpful. The trick when using data from multiple sources is to make sure that the comparisons make sense. For example, if you are looking at population data and comparing it to median household income, an apples to apples comparison requires the same source for all the data.
In summary, there are a lot of data available. American Factfinder is a great way to extract the data, though not for data manipulation. Excel is better for analysis and downloading to Excel is possible using American Factfinder.
Regarding the small business owner data, at the census designated place (CDP) level, is it possible to identify the major employers in the community and the number of employees?

The short answer is no. Though the Census Bureau data is very accurate, the privacy of the businesses is protected through disclosure rules. As a result of this privacy protection, data on specific businesses identifying individual employers is never published. Using local knowledge about the biggest employer in a specific NAICS code in your community, examining the data for that specific NAICS code along with data from other sources could help you extrapolate the information needed. While the Census Bureau cannot give you names and addresses and specific data, this information may be available from other data providers can’t. Use Census Bureau data for aggregated summary level totals and then incorporate micro level data from other sources.
The American Community Survey (ACS) 5-year data also has employment by industry. Is this information more refined than available in the Economic Census?

The ACS data on employment is based on the person and the industry of that person’s primary job, not all of their jobs. The level of detail published about industry in the ACS is significantly less than what we publish from the Economic Census. The industry categories in the ACS are fairly broad industry categories. The full set of 1200 NAICS codes is not included like in the Economic Census. But the ACS does provide a point of comparison.

The ACS asks individuals to report the industry of their primary job and the Economic Census asks businesses how many employees they have. The numbers for the same industry can be very different, because the business counts all of their employees, not just the primary job, while individuals focus on the primary job. Also, the data are based on where someone lives for the ACS and on the location of the business for the Economic Census.
If you have any questions, here is my contact information.

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