

NWX - US DEPT OF COMMERCE

**Moderator: Gregory Pewett
March 15, 2018
1:00 pm CT**

Coordinator: Welcome and thank you for standing by. All participants are on listen only until the question-and-answer session of today's conference. To ask a question, press star one on your touchtone phone, record your name, and I will introduce you. This call is being recorded. If you have any objections you may disconnect at this time. I'd now like to turn the call over to Andrew Hait. Sir, you may begin.

Andy Hait: Great. Thank you very much. So thank you all for attending. My name again is Andy Hait. I'm an economist here at the Census Bureau at our headquarters office in Maryland and I'd like to welcome you all today to this afternoon's webinar on like. I'd like to thank you for taking time out of your busy schedules to learn a little bit about the business data we have, specifically on the healthcare sector.

So this is the first of a six part webinar series we're going to be doing over the next six months. Each of these webinars is going to focus on a key sector of the U.S. economy or a key topic that we get a lot of questions about here at the Census Bureau. While the topics have been already selected, the screen over to the right-hand side shows a list of the six topics that we have planned.

We are very interested in hearing your feedback about whether or not there is additional topics or different topic you would like us to cover and at the very end of the presentation, I'll be providing some contact information for you all to use to send us your comments. That would also include questions that you don't feel comfortable asking here during the webinar today. I'm more than happy to answer those.

Our webinar topic today will follow a real life use case and that's going to be true for all of the webinars we do. These are real user stories of how people are using Census Bureau data. The use case that we're going to follow today is involving the healthcare sector in Washington State. It actually builds on a workshop that I did in Seattle about two years ago. So again, a real life use case.

Each of the workshops, each of these webinars are going to be presented by a different Census Bureau subject matter expert and we will again be providing Q&A at the end of the conference, at the end of the webinar. Again, be more than happy to ask those questions or you can ask them to me later. And of course, we are going to be recording the webinar and posting it online for later reference. That recording and posting will not only include the recording itself and the transcript, but we're also planning on posting a PDF of the PowerPoint file itself as well as some other reference materials.

I'm going to dive into the weeds a little bit in today's webinar, but I would really encourage you all to dive a little bit more into the detail that's included in the PowerPoint presentation and to do a lot of that additional research yourself.

To learn a little bit more about these webinar series, I have provide the link here on the bottom of the page. Today's webinar, again, is going to be

focusing on the Census Bureau data that provide data on a NAICS basis for the healthcare sector. The table to the right-hand side of the screen lists each of the Census Bureau programs that provide NAICS based data for this particular sector of the important -- of the U.S. economy.

There are other Census Bureau programs that provide related data, data related to the healthcare sector. For example, our centers of governments, our public sector program publishes state level and local government level healthcare expenditures. The survey of income and program participation or SIP publishes detailed information on health care insurance coverage. We are not going to spend a lot of time talking about those programs, but I have included a reference material section at the end of the presentation that will include some of those.

I will also point out, based upon a comment that we've already received from one of you from our chat section that there's a lot of other healthcare data from other federal agencies. The National Center for Health Statistics, for example, the Centers for Disease Control. Both have detailed information on demographics and on healthcare outcomes that you also might be interested in diving into to learn a little bit more about the healthcare sector as a whole.

In my workshop, in this webinar today, I'm going to be focusing on four of the programs that I personally feel are some of the best ones to present information on this particular sector. I am going to be mentioning some of these other programs, the ones I do not have highlighted in red, but again that's to encourage your exploration of the rest of the data that's available. In one hour, we can only cover so much.

I will also be mentioning some of the key data tools that you can use to access these data, but I will stress that this is not going to be a demo of these data

tools. We have a lot of other recorded materials on our training resources page on how to use American Fact Finder, Census Business Builder, and some of our other data tools, and I again would encourage you all to explore that training resources page to learn more about those tools.

Now, again, our use case today is going to be an evaluation of the healthcare sector in Washington State. That evaluation was done to determine if the needs of Washington State residents were being met by the existing healthcare businesses, or if changes to their policies and procedures, and other sort of things in the state might be needed to encourage more healthcare businesses to open in their state to meet the needs of their population.

Past evaluations that had been done looked primarily at the demographic data that we have, which of course is important in understanding the needs of our customers, of our people, but the state health department officials had been made aware of the business data that we have at the Census Bureau and they decided to use to help them take another fresh look at the data at their sector.

I will stress that this exact same evaluation that we're going to do today just on a glance for Washington State could easily be done for other states, metropolitan areas, or counties and again I'm going to encourage you all to explore the same type of data we're going to see today for your own particular area. Reviewing the available data in looking at this data raised as many questions as it answered and you're going to hear about that a lot during the webinar today. Our data give you a glimpse into what's happening in your economy, but it ends up encouraging us to further explore why that's actually happening.

Now, to get us started I wanted to give a very quick overview of the Census Bureau. We are the largest of the 17 federal statistical agencies. In fact,

during the conducting of the population census, we are actually the second largest employer in the United States. We are, of course, very well known for our population census, the decennial census, but we also conduct a lot of other annual demographic programs, including a program called the American Community Survey, or the ACS. This is our largest demographic program,. It's an ongoing annual program that collects detailed demographic, socioeconomic, and housing data about American people. In addition, though, we conduct over 40 different economic programs or business surveys.

The economic census listed on your screen is the biggest and the most comprehensive our economic programs and we spend a lot of time collecting that data as part of the five year economic census. In fact, at the very end of today's webinar, we are going to be focusing a little bit on the upcoming 2017 economic census and what organizations can do to help promote response to this very important survey.

Quality is a key part of our mission statement that you see at the bottom of the page. And you're going to hear a little bit about quality as we walk through the data today. Now, to give us a little start about these economic programs and census, our data programs are grouped into three broad categories, monthly and quarterly, annual, and then every three years, we do an economic census.

Each of those monthly, and quarterly, and annual surveys are baselined or benchmarked back to the economic census and the general rule of thumb when you look at this chart is that the most current data that we have is also the least detailed. And the opposite is also true. The less current the data is, the more detailed it is and we'll see that in just a few minutes when we talk about the monthly and quarterly data that's very current but is not quite as

detailed as our more comprehensive annual programs and the economic census.

Now, any discussion of our business data requires a little bit of an understanding of the four basic terms that you're going to hear throughout the presentation today. I like to include a discussion of these four terms in every presentation I do because if you don't understand these four terms, you're not going to understand 80% of what we cover today.

The first of them is NAICS. Sounds like snakes. Stands for the North American Industry Classification System. This is a system that we use to classify every business in the United States. Each individual business location gets its own six-digit NAICS code and then tabulate the data for each of those six-digit NAICS codes by geography to give us summary level data by industry and by geography.

I mentioned that each individual business gets its own six-digit NAICS code. We do not actually assign a detailed six-digit NAICS code to an entire corporation because if you had a company that was very diversified what industry would be classified in.

That assignment is based upon the majority of the activity at that business. So when we look at the data today, you're going to see some detailed information on the healthcare industries and you might wonder what types of businesses are actually counted as part of those NAICS codes.

The second term is the term establishments and that is in contrast to the terms companies versus firms. This is the way that we typically collect the data on almost all of our business surveys. We will send a form to each individual business location ,each separate address of a company. We do not collect,

with very few exceptions, data at the company or firm level and the biggest reason why we do that is because doing so allows us to publish the most detailed, most accurate data that we can collect. If we collected the data for a company that's based in Delaware who had manufacturing operations, wholesale operations, and R&D facilities all over the country, what industry, what geography would be want to calculate, tabulate that data for that entire company. We don't do it that way. We collect it one each individual business address.

The third term is a term that I'm going to harp on a little bit more later on today and that is this concept of an employer versus a non-employer. Employer businesses are businesses that have one or more paid employees; non-employers are self-employed people. It's hard to imagine a non-employer hospital. In fact, it might be a little scary to think about a non-employer hospital but non-employers are significant in many industries and that is certainly the case in some of the industries within the healthcare sector and we'll learn a little bit more about that in a minute.

Finally, Title 13 and Title 26 are the laws that govern how we can publish, what we can publish in terms of our business data. Title 13 prevents the Census Bureau from publishing detailed data that would disclose the identity of individual companies. So that means we do not publish individual names and addresses, but instead publish summary level data. Also, when we have a small number of businesses in a particular industry and geography, we will have to suppress the data for that industry and geography because if we published it, it would disclose the identity of those individual companies.

You see the impacts of Title 13 when you drill down to very, very low levels of geography where the data starts getting thinner, and thinner, and thinner and finally end up with just a single company. Title 13 and Title 26 have a

bummer side in that we have suppressions of data, but the positive side that I really like to tell people about is that this protection, this privacy protection that we have on the data helps ensure a high quality of the data that we get reported to us from the businesses because companies then know that we're going to protect their privacy, that they can report accurately to us and know that we are not going to disclose their special sauce, if you will, their special thing that they had figured out how to do with their company.

Now, when we're talking about the healthcare sector, I want to quickly set some levels here on exactly what do we mean by the term healthcare. Healthcare is tabulated under the NAICS Code 62, which the official title is healthcare and social assistance. You can clearly see that there are four subsectors within this broader sector. The first of these is ambulatory healthcare services. This includes doctor's offices and other kind of healthcare practitioners, as well as the other types of businesses listed here on this screen.

Hospitals have their own three-digit NAICS code. This includes not only general medical surgical hospitals but also specialty hospitals like psychiatric hospitals. The third grouping is nursing and residential care facilities, NAICS 623. This includes not only skilled nursing facilities, but also continuing care and residential care facilities. And finally, and surprisingly, the NAICS 662 also includes social assistance, which you can see includes not only individual and family services, relief services, rehab services, and even child daycare. These are all industries, detailed industries that are included as part of this three digit NAICS code.

The Census Bureau does actually collect data for both for-profit and nonprofit businesses. When we publish these data, we publish them as taxable and tax-exempt, but the term taxable and tax exempt is a reasonable proxy for the

concept for-profit and nonprofit. Both of them are included. I also just want to quickly mention and remind everybody that government owned and operated businesses are normally excluded from most of our business surveys because we have a separate public sector, a census of governments program area. However, there is one exception to that exclusion and that is hospitals. The business data you're going to see today on hospitals does include both government owned and operated hospitals and private sector hospitals. The reason why we do this is because if you excluded the hospitals that are government owned, you'd be missing more than half of the hospitals in the U.S. So we actually collect these types of businesses both in our public sector program and in our other business surveys.

Now, the first question that people always ask me when they're interested in understanding what data we have for a given industry is what is the most recent data you have. And for the most recent data I always send people to those economic indicators surveys, those monthly and quarterly surveys. In the case of the healthcare sector, the quarterly services survey is the survey that we want to turn to. This survey publishes detailed information by industry on revenue and on expenses, as well as a few other types of statistics. For example, inpatient dates and discharges.

The data from the quarterly services survey are disseminated on something called the economic indicators dashboard. There is a screenshot over on the right-hand side of the screen that you can clearly see the dashboard. I will tell you that the screenshot here on the right was taken in February 20. So if you looked up the economic indicators dashboard today, it might look a little different because we are constantly updating that page to show the latest data that was available. The latest economic indicators surveys is shown at the top.

Now, to dive into the quarterly services survey a little bit, this chart here, this line graph is showing information on revenue of hospitals, NAICS 622. You can notice that the data shown is not seasonally adjusted. These economic indicators survey publish data not only on unadjusted data, meaning the data as reported by the business, but we also publish seasonally adjusted data that smoothes out this line, if you will. It removes some of the normal blips, the normal increases and decreases that happen during seasonal industries, for seasonal industries. And yes, seasonality even affects hospitals in comparison to other types of businesses.

So this chart clearly shows this constant increase, this growth in the healthcare sector revenues from the end of -- excuse me -- first quarter 2008 through the last fourth quarter of 2017, which is the latest data that's currently available.

Looking at the expenses data, we see a similar pattern of growth. One of the common mythologies that we hear in the news periodically is that hospital profits are increasing at an alarming rate and that part of that reason is because of the gap between expenses and revenue, that revenue is growing at a faster rate than expenses. As you can clearly see from the two charts we just saw, that is actually not the case. So again, putting some real numbers behind these stories of what's happening is important.

Now, the next question we're going to talk about is how does the healthcare sector in the United States compare to other sectors. We could use the other economic indicators surveys that way we just did use the quarterly services survey. To do so though, we would have to open up each of the economic indicators, one to grab the retail data, one to grab the wholesale data, a third one to grab the services sectors data, a fourth to grab manufacturing data, et cetera.

A better data tool, a better data program to turn too is County Business Patterns. This is a program I send a lot of users to. County Business Patterns covers just employer businesses, those are those businesses with one or more paid employees, and they do publish information on number of businesses, employment, and annual payroll. In having the employment and payroll data, you could easily calculate average annual payroll per employee, which we'll actually see in just a few minutes.

The key data tool that you'd want to use to access these data from County Business Patterns is our American Fact Finder application. This is a great tool because it very easily allows you to select all of the sectors at one time and download the data for a particular state, or in this case the nation. So what I've gone ahead and done is I have now gone ahead and selected each of the sectors from the County Business Pattern data for 2015, which is our most recent data. The 2016 data is coming out in a month or so.

And as you can clearly see on the chart on the top, the healthcare sector is our largest employer sector in the United States with over 19 million employees working in the healthcare sector. Retail trade is ranked second with 15.7 million employees and the accommodation and food services sector is ranked third with 13.2 million sectors. The chart below it is even more interesting in that it shows that the largest growth of all of our sector in the U.S. economy over this timeframe is again, the healthcare sector. This sector has gained more than 2.4 million employees since 2007.

Unfortunately, I have circled, the manufacturing sector has shown the largest decline over the same period, down over 1.7 million employees. But if we started looking at this chart over time, we'd see that the manufacturing sector is beginning to recover from the decrease that occurred after the recession.

Going to our next slide, we're now going to look at payroll per employees. Looking at the top chart, you can see that company headquarters, which are included in NAICS 55, reported the top payroll per employee in 2015 of over \$110,000. It's good to work for a company headquarters. Utility sector reported a very high average annual payroll per employee as well, of over \$100,000. If you look on the previous slide, though, you see that the utility sector is actually quite a small employer in the United States.

And finally, the finance sector is ranked number three with about \$97,000. The average healthcare employee, average payroll per employee of a healthcare sector employee is a little over \$47,000. So still a healthy wage in comparison to some of the other sectors. Looking at the change over time, though, we see some interesting patterns here and the first is that the information sector and the mining sector both have seen large increases in payroll per employee over the period 2007 to 2015. Each of them are earning more than \$25,000 more in 2015 than they earned in 2007.

The healthcare sector is up a little over \$7,000. Now, one point I do want to make about this slide that will apply to all of the dollar slides you're going to be seeing in the rest of the presentation is that our data are not adjusted for inflation and therefore, some of this change that you're seeing here is just inflationary growth.

Looking a little bit about the businesses themselves and diving down into a little bit more detailed industry group levels, we can see that the individual and family services subsector or industry group has seen the most growth in the healthcare sector businesses from 2007 to 2015. There more than 24,000 more individual and family services businesses in 2015 than there were in 2007.

This industry group includes child and youth services and services for the elderly and persons with disabilities. So in looking at this data, we immediately start asking some questions. Why is this particular industry group growing? What is the reason why that's growing? Is it our ever aging population? Is it better access to healthcare insurance that covers more types of services or maybe are there other economic factors that are causing some of this change? All great questions. All questions that further delving into the data might help us understand.

This industry group is followed by the other healthcare practitioners group, which is up over 21,000, nearly 22,000 businesses. This industry group includes chiropractors, optometrists, mental health practitioners, therapists, and even podiatrists. And again it sort of begs the question, why is this particular industry group growing. We do see highlighted in red a couple of industry groups that have seen a small decline including other residential care facilities.

Looking at employment change come over this time period, again looking at these more detailed industries, we see a similar pattern as we just saw in terms of the number of businesses, a big increase in the individual and family services, up 517,000 employees from 2007 to 2015. We do, though, see big increases in employment in home healthcare, up 355,000 employees, and doctor's offices, up 273,000 employees.

In these two industries, the establishment count did not grow the way that these do. So what's happening here? Are these doctor's offices that are hiring more employees but aren't actually adding more locations? Great questions for us to try and explore. So let's dive into these two highlighted sectors, the green highlighted sector and the purple one a little bit more.

Looking at our green sector, again for other healthcare, we see that most of the growth in the businesses has occurred in therapists, mental health, and all other, which includes podiatrists. Again, the question is why? What is going on with these? Even more dramatic when you look at the employment data is that almost all of the growth has happened in offices of physical, occupation, and speech therapists, and audiologists. That industry is up more than 117,000 employees at the national level. Again, why? What is going on with this? Is it again this question of healthcare insurance now covering these types of services that it previously didn't cover.

Again, we could explore this further by drilling down to even more detailed industry breakouts, but again we will do that at a later time. Looking at our purple, industry for the individual and family services industry group, most of the growth in businesses and employment is with elder and disability care. You can clearly see that here on the slide in terms of where that growth is all occurring.

Now, so far, we've just been looking at number of businesses, employment, and payroll. We haven't really talked very much about revenue other than the quarterly services survey. So now, we're going to change gears a little and look at the services annual survey. This is the annual component to the quarterly services survey and again publishes detailed information on revenue, expenses, and some other statistics on the healthcare industry. The data from the quarterly services survey and the services annual survey are both released in Excel files and again we can go ahead and look at that.

What I've gone ahead now is I've downloaded the data for this particular industry, these two industries, offices of physicians and hospitals, to compare and contrast the distribution of revenue sources for these two industries. You can see that the distribution is really quite different between the two of them,

especially when you look at the categories for Medicare versus private health insurance coverage. Data are also available for all other healthcare industries within the healthcare sector.

So again, we could do the same type of comparison from the services annual survey for other types of healthcare businesses, like podiatrists for example, as we just did for physicians and hospitals.

So, so far, we've been looking at national data and I wanted to quickly mention that there are a few other surveys that we're not going to talk about today, but that do have healthcare data as well. The first of them is the annual capital expenditures survey or ACES. This particular survey shows some really interesting data on capital improvements by healthcare companies. It's especially interesting looking at this for hospitals, seeing how much money hospitals are spending on capital expenditures.

The second one I want to point out here is the E-Stats report. This report shows that not only do we have e-commerce receipts in the retail sector, as we all expect, but that we even have e-commerce shipments, e-commerce revenue in the healthcare sector because of how we define what is an e-commerce, what is e-commerce.

Finally, the last program I want to mention, very important one is the economic census. This survey publishes detailed data by business size. The business size data are broken out not only by establishment and by firm size, but they are also broken out by employment and by revenue size. So if I wanted to find out how many small doctor's offices are there and what share of total medical doctor's office practices are accounted for by doctors' offices that have less than five employees, let's say, that type of data would be available from the economic census.

Now, so far, we've been looking just at national level data. I now want to dive into Washington and talk a little bit about how does the healthcare sector in Washington state compare to other states in the nation. Once again, we're going to again turn to County Business Patterns. Again, this program provides slightly less current data than is available from the quarterly services survey, but it covers all sectors of the US economy and it allows us to drill down to state and even local area level data. Again, American Fact Finder is our key access tool because again it allows us to easily access and download data across all states. You can easily select that.

Census Business Builder also includes data from County Business Patterns, and in some respects this tool is a little bit easier to use than American Fact Finder and it also displays data in a map interface and in downloadable reports. So I've gone ahead here and pulled down some data from County Business Patterns for every state for the healthcare sector. As you'd expect, the numbers of healthcare businesses in the United States by state mirrors the state populations with state like California, Texas, Florida, New York having the most healthcare businesses. Washington had about 20,534 healthcare businesses in 2015.

However, the second chart shows a very different pattern when you're looking at percentage growth in healthcare businesses over this time frame. Missouri showed this huge percentage increase, over 82% increase in the number of healthcare businesses in Missouri, in the period 2007 to 2015. And honestly, it totally surprised me. I have no idea what happened there that caused that increase. Washington State, by comparison, healthcare businesses grew by about 11%.

Looking at the employment data by state, we again see a similar pattern of employment in these high population states, but when you look at the percentage change in employment, we see a much different pattern than the establishment change pattern we just saw. The question that I always (unintelligible) when I see these spikes in states like Alaska, and Colorado, and Idaho is are existing healthcare businesses in those states hiring more staff where there's fewer new businesses or is something else sort of going on there?

Finally, we're going to look at payroll per employee at the state level for healthcare and what we see is that the average payroll per employee is much more consistent across states than the numbers of businesses or the employment, that there is much less variability. But you do notice two small outliers, Alaska and the District of Columbia, and it sort of makes me wonder why? Does cross-state competition and willingness for healthcare workers to move, is that why this is sort of a uniform pattern and these two states have had to pay their employees more because of the competition for other employees, other neighboring geographies. What is happening there.

When you look at the change in healthcare payroll per employment, we see a big increase in the payroll per employee in states like North Dakota, Vermont, and Alaska and again I'm going to ask the question, did they have to do this to attract workers to those states. Washington state saw an increase of 26.8%, which again was one of the higher increases.

Now, looking at a slightly different display, this is Census Business Builder. This tool lets me look at the data we were just looking at in these charts in a map. And as you can clearly see, the average payroll per employee in the blue highlighted states, essentially the entire West Coast, as well as a couple of the New England states, and New York, and my home state here Maryland,

and Delaware are both highlighted in blue. This tool does allow me to drill down from state to counties and cities to see how distribution varies by state.

So let's dive now a little bit more into Washington state now that I'm just looking at the two digit sectors. Let's look specifically at some more detailed industries. Again, we're going to look at County Business Patterns, and again we're going to look at American Fact Finder because again it makes it very easy for users to select all industries within this sector.

On slide 14, which of our state level establishment count slide. We saw the breakout of healthcare establishments by industry group and we saw that the large growth of individual and family services, which was the subsector, the industry group that had the most growth in healthcare businesses from 2007 to 2015.

We see a similar large growth from 2010 to 2015 for the other category, up 516 businesses, but not the large increase in individual and family services that we saw at the national level. Why? What's going on here? However, we do see a large increase in outpatient care and continuing care, disproportionately greater than the growth at the national level. Why? What is Washington doing that's encouraging the growth in these types of businesses and not in other ones?

And what is going on over there with child day care services? Why have we lost 95 child day care businesses in Washington state? Again, looking back to Slide 15,. We saw the breakout of healthcare employment by industry group in the United States and we saw a similar growth in individual and family services, up over 517,000 employees and doctors' offices. For Washington State, we see a much smaller increase in employment for individual and family services, and for home healthcare. Both are up just modestly but the

same big increase as we saw at the national level for doctor's offices. So doctors' offices in Washington State are tracking along with the national average.

However, we see a really interesting outlier here and that is general medical and surgical hospitals. The pattern here is dramatically different in Washington state than it is in the United States where the U.S. data gained 157,000 employees at the U.S. level, but in Washington, they lost over 6,000 employees or nearly 6,000 employees. What's happening here? How has the decline in the number of employees of hospitals, how is that impacting the clients, the customers of those hospitals?

Perhaps we could drill down to some more detailed industry basis to see what types of hospitals are actually showing this employment decrease. Like before, we have a few other programs I want to quickly mention. The Quarterly Workforce Indicator is a really great data set that allows us to look at some labor force statistics. This program publishes detailed informational and hires separations and other types of labor force statistics for healthcare establishments.

So instead of just simply looking at the change in employment, we can find out how much of that changer came from new hires versus separations, versus expansion and contraction. Those kinds of breakouts are available. Statistics of a U.S. business or SUSB helps us also understand the change that's happening but this time for the number of businesses over time by breaking these changes out into establishment births, deaths, expansions, and contractions. So instead of just simply looking at the number of establishments change, we get to see the breakout of how many new doctors' offices are being opened each year. That kind of information is available in SUSB.

The economic census not only includes detailed information on total revenues of healthcare businesses, but they also publish detailed product line information. This information is similar to that revenue breakout that we saw from the services annual survey, but it's available at the national and the state level and this allows us to compare the distribution in Washington State of hospitals and doctor's offices, where their revenue is coming from to other states and to the nation.

Finally, we could compare data for the United States to the U.S. territories through using data from the economic census (unintelligible) areas, ECIA. Now, so far, we've been looking again at the national and state-level. I want to drill one step further and now look at some county level data. Again, we're going to turn to County Business Patterns, but now we're going to loop in some data on our population estimates program that's going to allow us to compare population change in Washington State to business change to see are those two changes happening in sequence with each other?

County business patterns again lets me go down to the county level and they even have some ZIP code based data in this program available as well. Again, American Fact Finder and Census Business Builder are our key data tools to go in and actually look at these data. So going in and looking at the county level data for Washington healthcare employment, we can clearly see the substantial concentration of healthcare employment in King County. This is where the city of Seattle is located. Pierce County where Tacoma, Washington is located and Spokane County, where again Spokane is located, and Clark County, where Vancouver is located also see a substantial number, a substantial concentration of healthcare employment.

Looking at change over time, we see that King, Pierce, and Clark counties have also seen big increases in employment between 2010 and 2015, but we also see some increases in Snohomish County, which is where Everett, Washington is located and Thurston County, which is where the city of Olympia. So the question I wanted to ask was, okay, I'm seeing these concentrations of healthcare employment and I'm seeing this change in healthcare employment. How does this compare with population?

So this chart here now mashes up together the establishment counts shown in blue, the change in establishment counts shown in blue, and the change in population shown in orange. While there are certainly some Washington counties where the change in the number of healthcare businesses mirrors the change in population, like King County that I have circled in green, there are some counties where the change is happening in the opposite direction, like Garfield and Jefferson County that are circled in red. And there are some counties where the change is much greater between these two variables, like Adams County and Columbia County.

Adams County, for example, had a really much larger increase in the number of healthcare businesses in comparison to the population. What's going on here? Why is it that the business growth and the population growth in many of these counties is not happening in sequence, in sync with each other? To explore some more, we could again drill down to the specific industries within these counties, again, using county business patterns data to see what the components of change are and we could also use the data from the economic census to drill down to the individual communities within these counties to see which cities and which towns the change is actually occurring in.

Again, I'm going to turn to Census Business Builder, again, as a nice way to display this number of healthcare businesses by county. You can clearly see

highlighted in blue the large concentration of healthcare businesses shown in blue on the west side of the state. King County is the one I have highlighted that has 7,650 healthcare businesses.

In terms of other programs that provide county level data on healthcare sector, again, we could look to the quarterly workforce indicators program that again has that more detailed information at the two through four digit NAICS code level. We could also explore the American Community Survey. The ACS publishes detailed information on industry and occupation that would allow us to look at these healthcare business employees but instead of looking at them from a business perspective, we can look at them from a householder demographic perspective.

As already mentioned, we could explore the city and town level data within the counties to see if the distribution within the counties is the same. And again, we have data on a number of establishments by ZIP code even.

On May 8, we're going to be having some official letters sent out with online access codes. Organizations again will be asked to distribute an arrival email saying your business should have just received a form from the economic census and an invitation how to go to this how to respond webinar that we're going to be holding on the week of May 14. And finally June 7, we're asking organizations to send out a final due date reminder email to their members. We're going to be providing some additional communications in advance of that response deadline, which again is June 12.

Communications materials are already being posted on this website that I have located here and will be available for download in February, as we are already there. More information is going to be available later.

So in summary, this economic census data that we have can help organizations -- can help data users better understand local economies and national industries. They help people understand what are the things that we are good at and what can we do to keep promoting this. We saw this in the Washington State data where some of their industries are growing at a similar rate as the national level data and in some cases, they're growing even faster than national data. What can we do to keep promoting that healthy growth.

Finally, next, what can we do to help businesses that were not quite as good at and what can we do to make things better. The third point I want to make here is that while employer businesses certainly are key to our U.S. economy, non-employer businesses are an important part of the economic development landscape as well. A lot of times people sort of forget how important non-employers are and with the changes in the ability for people to work out of their houses, with online access, high-speed Internet access, et cetera, the ability for companies to reduce their hired workforce, but instead bring in independent contractors who are all considered non-employers, this is changing the landscape of what it means to be a business.

And finally I just want to remind everybody to please help us promote response to these programs that help us ensure the high quality of the data that you need.

Just to close this out, I want to remind everybody that our next webinar is scheduled for April 17 and this webinar is going to cover the different types of data that we have available on employment. I get a lot of questions from people saying, Andy, I know that the Census Bureau has employment data in your business surveys. You have employment related data in your demographic programs like the American Community Survey, and I know

that the Bureau of Labor Statistics has data. Which one should I use for my use?

This webinar is going to walk through each of the different Census Bureau data sources and talk about which one is best for your particular program. You again can learn more about the webinars at the URL that I have here posted on the screen. And with that, I would like to thank everybody for attending. Here on the last slide is my contact information, e-mail address, and phone number.

We do additional training to learn about census data. If you want to do training in your local area, we have the Census Bureau data dissemination specialists that are willing and able to do training in your own areas. Here's a phone number or an email address that you can use to contact.

So with that operator, I think we're ready to take some questions. I do want to let people know that we have gotten a few chat related questions that have come in so while we're waiting for people to ask questions over the phone, I'll quickly take a quick look at the chat posted questions and we will answer some of those.

So operator if you want to queue up any questions we might have that would be great.

Coordinator: To ask a question, please press star one on your touchtone phone, unmute your phone, record your name clearly after the prompt and I'll introduce you for your question. That's star one to ask a question. If you need to withdraw your question you may press star two. Please stand by for incoming questions. Currently, there are no questions in the queue.

Andy Hait: Okay, well, let me go through a couple of the questions that came through here on the chat. One of the questions that came in was asking about suppression, the withholding of data for establishment at the county level. The short answer to that question is there aren't any. The number of businesses is typically not suppressed in any of our data programs because essentially knowing how many businesses are there in a particular geography is almost like public record.

You could drive down the street in Suitland, Maryland where we're located here and actually see each of the convenience stores in this area. So we don't actually suppress the number of establishments at any geographic level. That even means that we would tell somebody that there is one doctor's office in a particular town.

Now, of course we could never publish the employment, the payroll, and the sales data for doctor's offices in that town but the number of establishment itself is never really ever considered a suppression. So that's a great question.

The next question that came in on the chat was about the NAICS codes that health insurance companies fall under. Health insurance is one of the detailed industry breakouts within the financial insurance sector. To be honest, I don't have that right here in front of me but if you want to call me or email me, I'll get you the actual detailed code. One comment I will make thought about health insurance is that there are insurance companies that provide health insurance coverage that are in and of themselves not a health insurance company.

The classification of an insurance company is based upon the majority of the activity that they. So insurance companies that just provide health insurance would be in a certain NAICS code, but insurance companies that provide a

variety of types of insurance, including health insurance, would actually be in a broader code. So that's a great question.

The next question that I got on here in the chat was asking about public schools and wondering whether or not those types of businesses are included in the education or government data. The answer is yes and no. The government data definitely covers primary and secondary education that are state owned and operated schools. So when you're talking about a county school system, Prince Georges County public schools for example here in Maryland, is a government and the employees of PG County Schools are in fact included in our government census.

The other schools that are counted as education would be things like colleges and universities. Private universities and stuff like that would be counted in education and this again is one of those sectors where we don't have comprehensive coverage at the Census Bureau on education because the National Center for Education Statistics covers that sector so well. So again, we have a couple of exclusions. The Post Office, for example, is not covered by the economic census. Public schools are also not covered.

Now, the next question I got was asking about revenue and expenses and whether or not we do any inflation adjustment on any of our data. The note that I commented about earlier saying that we do not -- that the data that you are looking at for not adjusted for inflation that note applies to almost every single dollar that we publish on the business side here at Census. The only program at the Census Bureau that I'm aware of that actually does do an inflation adjustment on their dollars is the American Community Survey.

So for example, when you look at the median household income data for the American Community Survey, their numbers are inflation adjusted to a

particular baseline period. So for example, the 2016, '15, '14, '13, and '12 annual American Community Survey data are inflation adjusted to 2016 basis.

We do not do that inflation adjustment at the Census Bureau for any of our business surveys because we leave it up to another agency that's actually located in the same building to do that adjustment and that is the Bureau of Economic Analysis. We just simply publish detailed data, and let the users make those adjustments themselves. Part of the reason why we don't do it is it's really a complicated thing and knowing how to inflation adjust data is something that BEA is really, really good at.

Okay, let's look down here a little bit more. Operator, do we have any questions on the phone?

Coordinator: Yes, our first question is from (Anne Furnia). Your line is open.

(Anne Furnia): Hi, Andy. (Anne Furnia) managing the national health interview survey for the Census Bureau's part of national center for health statistics being the sponsor. Found your presentation very interesting and the map builder, I forget exactly what you called it, is just really a nice tool. One thing I was learning from you -- so it's more of a statement of how I would like to keep up with some of this stuff is the access to care feature of my survey and how that's changing, how people are accessing care and you mentioned some of the ways people now access care. Do you have any -- so that's one interesting point that we might want to be up on and so that as access changes it's not just strictly a formal doctor's appointment or a hospital. There's so many different ways now. Urgent care facilities, assisted living type arrangements.

I'm not sure you talked about either one of those or maybe they were covered in one of those other industry groups, but where would assisted living fall in

this makeup? Is that in 62 and then urgent care facilities because I might want to look at that a little bit further.

Andy Hait:

That's a great question and thanks for the nice comments. Urgent care and assisted care facilities definitely are both counted as part of NAICS 62. They're in a different NAICS code and if you want to contact me later, I'll give you the exact NAICS code. Your comment about access to care and how people are receiving care today is changing. I specifically harped on when we talked a little bit about the home healthcare industry. When you think about rural America, the opportunities for people who live in rural areas to go to a doctor or to go to the hospital might be quite different from someone living in a suburban or an urban area. And requiring a person who lives in the rural Washington State, in the Eastern part of Washington State, for example, to drive all the way into King County go to a hospital would be very challenging, especially since there's a big mountain range in between the east and west side of the state.

So businesses like home healthcare businesses that allow the physician, if you will, the nurse to come to the client rather than the client come to the provider, provide a service that is extremely valuable. And I know when I've done similar workshops to this one in other states, reliance, the increasing reliance on home healthcare as being the way that some rural areas get health care to people in those areas was a very interesting situation in Washington. Because as you notice in the data, their data does not show a big increase in home healthcare. In fact, it actually shows a decline in home healthcare businesses.

And I didn't want to get into the weeds too much in today's presentation but there are a lot of reasons within the state -- and this is true not just for Washington, but other states that are actually discouraging certain types of businesses to open. And so the data discussion we had today was about not

just exploring the information that's available but how people could use that data to then change policies, to change procedures. Why is it that so few people are willing to open a home healthcare business in Washington state.

If that is in fact the case, what could be done to actually encourage people to open those kinds of businesses. It's a really fascinating question. I have to tell you this. When we were debating what the six topics were going to be for this webinar series, healthcare was one that immediately floated to the top because it's so popular. It's so meaningful to many people but it's also a sector that we have really, really good data on and I just for one love talking about it, as you can probably tell. So great question.

Any other questions, operator?

Coordinator: Our next question comes from (Burt Kamano). Your line is open.

(Burt Kamano): Hi, Andy. I was just wondering if this presentation would be posted online and if so will when will it be available?

Andy Hait: Yes, Burt, it will be posted online. When you went to our website to get the login information, to log into today's webinar in that general vicinity is where you will actually see the recording. We expect to have the recording up in the next day or so. You will see not only the recording, but we also post a transcript of the presentation for folks who want the transcript and as I mentioned at the very beginning of the presentation, we're going to be posting up a PDF of the presentation itself and I would very much encourage you, Burt, to download the presentation file. I may also load up some of the Excel files that I prepared to build all of those charts. Because there is a lot of really interesting data buried in that file that I just couldn't cover in a one hour long webinar. So they will all be there.

(Burt Kamano): That would be great. I couldn't get online so I'm doing it through the phone.

Andy Hait: Sure, that's great. Glad to have you.

Coordinator: At this time, there are no further questions in the queue. Again, if you would like to ask a question you can press star one, unmute your phone, and record your name, and I will introduce you.

Andy Hait: So while we're waiting, I'm going to just quickly go into a few other questions that came in via the chat. We did get a question about the burden of response for our data-gathering efforts and what we are doing to reduce that burden. Certainly, the person's question was what kind of advances in information systems are we leveraging to make things easier.

Yes, we certainly are doing that. You will see those changes not only in the online reporting instrument that we have today that will allow people to fill out their form, not just on their desktop computer but also on their iPad and their other mobile devices. You will be able to fill out your forms this time that way. We are also researching other ways of collecting information to help reduce respondent burden. In the end, there is sort of a happy -- we have to come to a happy medium of reducing the burden to respondents as much as possible, while still preserving the quality of the data that we have and the ability for us to publish it.

In most of our business surveys, we have a 70% minimum response rate, meaning that if less than 70% of the businesses responded to a question for a specific industry and a specific geography, we would actually suppress the data. When I tell people about that 70% minimum, I often get eyebrows raised. Folks are amazed when they are accustomed to using data from

private third-party data sources that are thrilled with a 30% response rate. They are amazed that we have a minimum 70% response rate.

For the 2012 economic census, for example, we had an 84% response rate. Now, that does of course then mean that even though the economic census is a mandatory survey that 16% of the businesses did not actually fill out their form. For those 16% of the businesses that didn't, we used administrative data in place of their census filing as a proxy for their data, but the challenge is when you use, when you rely on administrative data is if that administrative data is substantially clustered in certain industries and certain geographies, the reliance on administrative data and not the direct responses from the businesses could actually result in us having to suppress the data because such a large percentage of the businesses didn't report and therefore didn't -- their data didn't show up.

What we try to work on all the time is working with organizations to show them the value of the data that comes from our programs, and therefore encourage their response. When businesses see that they could use the statistics themselves in their business plans, in their loan applications, in their sort of understanding of what's happening with their business, they are much more likely to be good respondents to our surveys because they see value in what we're asking them to do.

So that's a very common question that we get, how do we get that response up high so that people can use the data. I'm going to quickly take a look to see if there are any other questions over here that I want to quickly touch on. A lot of great questions, a lot of great comments about great webinar. Thank you all so much for putting those in.

The last question I will touch on is again why would any business take the time to fill out a survey and I just sort of said it. When businesses see the value in the data that we publish and that they could use it, they are much more likely to be good respondents. I will tell you sort of a somewhat funny story that I personally had as my last sort of Andy story today or my only Andy story today.

When I first started working at the Census Bureau, I was working with a large company headquartered in Delaware and we were having some response challenges with that company. And we had scheduled a meeting with them in person to talk about what the Census Bureau could do to make responding to our surveys less painful, the kinds of things that we were willing to do to work with them to actually help them gather the data that they would need for our Census forms.

And at that meeting, we had folks from not only the government reporting office from that company who were the ones who were filling out the forms, the accountants in that office that were filling out the forms, but we also had the head of the marketing department at that company that came to the meeting as well with his staff.

When he heard that we were having a hard time collecting data from his business, he had a fit and he said, "What do you mean my company is not filling out their census form? They're giving you a hard time. I need this data for my marketing plans. I need to be able to figure out what type of people are buying our products, what the total size of our product market is, what share of our product market we have so I can plan what is our company going to be manufacturing in the next five years. I need this data." And for the rest of the meeting, they argued back and forth between the two sides, marketing and accounting, to determine how could they fill out their census form.

At the very end of the of the conference, at the very end of the meeting, my contact in the accounting department came up to me and said, "Andy, that was great. You did that on purpose didn't you?" I said, "Well, yes, I will admit that bringing together the marketing people and accounting people was something that I figured was going to end up happening, was going to help because they would recognize value in the data." They saw that there was something actually in it for them in filling out their form.

So that is a common theme you're going to hear in all of our business surveys. Use the data. See how valuable it is and then fill out our forms.

So with that, I just want to say thank you one last time for everybody who attended. Again, my name is Andy Hait. You see my email address and phone number here on the screen. If you have any other questions please feel free to contact me and again, thank you so much for your time. Have a great afternoon.

Coordinator: This concludes today's conference. Thank you for your attendance. You may disconnect your lines.

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