## [ Please standby for realtime captions ]

>>> Good afternoon everyone. We have a webinar for you today. It is entitled Geography at the Census Bureau . I am with my colleague as technical support. We have our presenter Artemis Oconner. Let me just read a little bit about Artemis. During the last four years, she has been working in the customer service area. She has a PhD from the University of Illinois. Before we get started, I am going to go through some of our housekeeping reminders. If you have any questions or comments on the presentation please feel free to type them in the chat box located in the bottom right corner of your screen. There was a caveat on that that I will mention in a little bit. I will keep track of the questions as they come in. At the end of the questions, Artemis will respond to each of them. We are also recording today's session and will email a link to everyone who register for this webinar. We will also be sending you a certificate a percent -- participation. If anyone needs additional certificates, please email the address and the title of today's webinar along with the names and email addresses for those certificates. If you need to zoom in on the slides, you can click on the full-screen button on the bottom right side of your screen. Then you can click on the return button to get back to the default view. At the end of the session, will be sharing a webinar satisfaction survey with you. We will let you know when the survey is available on the URL. We very much appreciate your feedback after the session is true today. Also please keep in mind to reserve your comments about the value of the webinar for the survey. Used to webinar chat box for questions you would like to ask. Finally this just came up recently. Artemis will be screen sharing her presentation which means that once you start talking, you will not be able to see the chat box in the lower right-hand side of the screen. When the menu drops down, click on chat to enable the chat box. With that, I will hand the virtual microphone over to Artemis.

>> Good afternoon. My name is Artemis and I am a geographer at the U.S. Census Bureau. It is really what expensive. We have our own geography division. We also have geographic work in different areas. Our focus at the Bureau level is on preparation for the census. We use national and local partnership to collect the data for the database. Provides easy access to these destinations. Our products include digital data and interactive mapping tools. We also have geographical information inside the United States. This is used to create the address list. As well as addressed list for other service. That is used to create the maps and special products for all of the stages and as a basis of the Census Bureau. We provide Digital Products in the database as well as static maps. We also course have statistical bounders. We design urban areas and map other geographical areas. The boundary data is used to aggravate the geographical analysis of the raw data collected. As I mentioned, is the master address file. All those different layers and types of geography that I mentioned are related to each other. We do not create our own data but we aggregate other data from other sources. This is true for all of our geographical data. A major source of our data comes from the U.S. Postal Service file. It is submitted twice each year. This file is kept current for the postal carriers. We also taint address letter from the census euro build --Bureau build. Another major source of data is to the program. It is conducted prior to the census in order to update our maps. We also conduct yearly updates to other partnership efforts. This is the geographical support system which is an ongoing program. We have experimented with obtaining but this is not done very extensively. In similar type of operations, Doris -- we also use imagery analysis and to add new roads. Our main source of batteries come from troubled states and local governments participate in geographical programs. This is conducted annually to update the boundary and rolled data from the geographical area. This is city in towns, townships, and solid in cities. Another partnership program was conducted prior to the Centennial census. Will also 10 data from other federal agencies and from regional planning Association. Let me at this point stop for a moment and discuss the differences between our type bounders. We have legal boundaries which are legally defined by the local entity involved. These include state, counties, incorporated cities and towns, census doesn't in the places -- places and school district. Statistical bounders include census tracts. How to define the

geographical terms? Let me go outside of the presentation for a moment here and so you how to find it -- so you how to find things on our website. You can see all the different types of information available by clicking on the top. You can go to the reference and on that page, you can click on terms and content. We have glossary here alphabetically of course with all of the terms that we use. All of our types of boundaries. Also other terms such as aerial measurements. From here, we have census block to block. All of the definitions are available there. Here is our page with the geographic terms including incorporated places and what the place called me and so forth. We have all of that information easy to find. Our most popular products are the digital geographic products. Let me show you a little bit about finding the different products that we have. Now that we have done terms, we are going to do the same type of thing. Click geography. On the right-hand side as I mentioned, we have the geographic database called Tiger. Here is our page. Tiger is what we call our geographic database. Does remember that every layer is integrated. The topmost one here is our most well used. Are most frequently downloaded and most comprehensive dataset. It has the location information as well as some information to do with areas of that particular geography. Another popular product, the third one down, is a very popular product because it has both the demographic data as well as the geographic information. We have other products here as well. All of the information is there that you may need. Let me just click on our most used product. Is used in particular software. The people you're working with have that expertise, they would know how to use these files. What you do is simply downloaded through the FTP site. Can choose the type of geography that you want here and download the file. Keep in mind, that our website works best. You that in mind. -- Keep that in mind. We also have some informational pages here. We have several how-to guides that is linked to that page. There was one on downloading the Tiger files. How to download the tabular data. There was a little trick in Mark Suffolk so that would be easier to join. How to actually join the to the straight file. As we are discussing our digital mapping products, I am going to briefly go over our tablet -- tabular geographical product as well. This includes tables of all geographical areas. Here is the information about what the files are available. Click on the most recent year. There is the files available. Let's click on counties for example. This just tells you what is available in that file. Has an area of land and water. Has a latitude and longitude points of that particular geography. For counties, you can download the national file. Let's say we selected California. Here is what that file would look like if you want to download it. It makes it a little easier to read in Microsoft excel. You will see that I have done screenshots of all of this. You can go back and read the note section and it is everything that I am saying here. You can go back and look at all this information. We also have -- I always prefer maps to spreadsheet as a geographer. I'm going to show you some of the most popular map product. Shows area geography showing demographic will characteristics. It is the population distribution in the United States. You can click on schematic maps and find this map. In this case, 1.represent 1000 people. You can kind of see the major population areas in the country. This map is also very popular. This is one of our most used maps. Reorders especially from teachers for this map. One can download any of these maps. Commercial district boundaries. We create maps that are located under our reference map. We have this particular national map of congressional districts. We also have commercial boundaries as a map and individual boundaries as well. There is the truck reference map. They are available by county. This is just an example of a statistical boundary. We also have a series of interactive mapping locations. Go back to our website and go back to geography. In this case click interactive map. Here is a list of all of our interactive mapping locations. The response area outreach mapper. You need to click on this application. Then on this page it is the current data. Is the data for 2010. This is just going to open up a map of the United States. It will have most of our lawyers on the left-hand side. On the left inside to the layers of all of our geography. I can move in and out using the slider toll. I can drag the map to move into it. I can keep moving in. That is one way. You can see the states and counties are always outlined and the labels are generally turned on as well. There was another way. I am going to use the same address. We need to make sure that you include the commas. Click enter on the keyboard. This should show the

map. In this case it does, if it does not show the match, then that means it is not in our state address range. In some commercial areas, we do not have that complete. I have a blue dot. Let me go back to my layers and start turning on some of these layers. We do that by just clicking on the little box. I'm going to zoom back out. It will make it a little more interesting. Now we can see all of the streets around this particular address. Then you can turn on or off the different layers. For example, somebody may be interested in finding out what census tract they live in. Another common reason that I get a lot of calls about that often people are looking to start a business and they get special funding if it is in a rural area. This just demonstrates the process. You can enter the address. If it puppets in a rural area, that means it is in the urban area. Now we are starting to see some of the areas around the Washington DC area. If it is in this purple that it -- then it is an urban area. We recommend going and looking at your areas and what track you live in. Just take a look at this particular map. Let me go back to interactive map. I will show you a few other of our mapping applications. The census data mapper is another popular application. In this particular application, it is for viewing County based demographic maps. It is a customized map based on certain statistics. As you can see, the characteristics include age, sex, population, and family and housing. Let's do other outreach family size. You can choose the number of classes. We can choose the classification type. It will take a moment and tell you this information. As I look at this, I see the average family size of 3.09. We have parts of the Southwest area. Then, smaller family sizes. This is just a quick venture based on the counties of different statistics. You can save these maps you make or print them if you wish. Another one is the census flow mapper. Officials county to county migration pattern. Keep clicking on it. I'm going to stick with the most recent dataset. It is kind of interesting to see both in time. The judge is male or female or go by age as well. I'm going to stick with the one we are at. Then over here, you click map the county migration flow. It is not surprising to see these counties north of San Diego. There was lots of blue in the west. We have a darker orange near San Diego. If you pick another county in South Dakota and do the same parameters, you can see how that may vary. Now I'm getting a different picture here. That is very localized. You never know. You never know what is going to happen. This may be of interest to somebody doing some research on a particular area to understand where people are coming from. That was the census mapper. Let me show you another one here. We have the response outreach area mapper. That is otherwise known as Rome. This was made to identify hard to serve areas. These other efforts can include response rates. That is why we made it public utility. May not be that interested in response rate. Here's some information on how to use it. We can drag it around. Like I said, we were interested in the response rate. Which may be interested in is all of the other information. It is very simple to use. You just click on the county and you get the information. This is kind of a fun tool to quickly get if you statistical tidbits about a particular county may be interested in. Let me show you one more tool. This is the census business builder. It has 2 options. We have a small business edition for understanding the potential market or the regional and was addition -- endless addition. In this case, it is going to open up and I'm going to choose one of these particular types of businesses. Are selected food-service and bakeries. Then we can put in a location. Since we have the California thing going, let's go to this one. I click on it and I can either create a report or go to the map. This is going to give me some mapped information about the area are selected. It is giving me some information about this particular area. There was a lot more to this. You can play around with this and discover information about a particular build in your plans. I will suggest going to all of these types of map systems that we have here. We have others as well that we do not have time to show. I will suggest checking this out and just playing around with them. Their very user friendly and fun to use. Another service I want to talk about today is our coding service. Under the page, there is all the information you need. How to do a batch sponsor. We can load many addresses at a time. This is a frequently used system. From what we understand, we have hundreds of thousands of hits annually. There is also an API service available so that programmers can build a direct link into the colder and use it that way. Here is all of the information about a. Mystic a quick look at the encoder -- let's take a quick

look at the encoder. It is a very simple looking tool. You can find a location using either one line or an address on the separate line. You can also find geography. I'm going to do a little sample today to find geography. We're going to go back to the 1600 and 70. That is in Washington. I'm just going to leave the default here and click find. We know this particular one already has a match. It gives me the county and the county code. The gizmo the census tract as well. That is a live demo for you. It will also return the census block and state. You can get more data on a single address option by simply going to the end of the URL. And you can hit return again. You are going to get other types of geography as well. It is going to give me other type of geography such as the statistical area. There is other information in that process as well. You can scroll down and see much more information there. That will show in the in the return. Is very well used. Is one of the truly available encoders out there. The final one I'm going to talk about is what is happening in our international program. And includes population estimates. Another program is the demo base. Is the pixel based population map. This is on the international program page. I'm going to scroll down and talk first about this international map. You click on the viewer. The available data includes population. You can click on any country to find the actual population number with the percent of those different characteristics. And maybe running a little slow. Let me go back to my presentation. Let me go through all of the pages that I built here. In this case, I click next to the growth rate. You can see the areas in dark green or a higher growth rate. The areas in letter green or a lower area. The lowest are in this purple and dark purple. If you click on the country, you can get the actual percentage of the growth rates. You can click on it and take a look at these different countries. Now to the international programs. I will show you the population areas. This is the population mapping from the demo. In this particular example, we have the larger map of it. Down from that to the latter areas. You can take a look at the map for the international program. Will give you more information about the work they're doing around the world. That is all that I have for you today about geography at the Census Bureau. There was much more work being done at the Census Bureau and more information. I suggest going to our website and checking out what other maps we have available. You can look at those other interactive maps as well as going to our international section and taking a look at the various maps and other programs they have going on there. At this point, I will entertain any questions you may have. >> Thank you Artemis. Very educational. I learned quite a bit. Any questions for Artemis. Please put them in the chat box. I had a couple of questions myself. The congressional district information, is that right up to the minute? I believe there was some recent maybe in Pennsylvania some changes. I do not know how current that information is.

>> We do have the most recent information. We have updated our maps recently. We also have maps on our sites from previous years as well. In the program that I showed you, we have the current congressional districts there. Let me just show you quickly. Let me go back to the website. Let me go back to geography and maps and data. On the left inside, we have our twisted maps. Let's go to our reference maps. We have the national map which I showed you in the presentation. We have the maps by states. We just go to Pennsylvania. Since you mentioned that one. We have the state map in the various district. It will pop up and load and you will be able to see that it is the most current boundary. >> I know we asked them to put that on the congressional district. I know the line can sometimes cross through campus and go anywhere.

>> In that, yes. You can do that just like I did earlier. You can put on the legislative areas. Let me get rid of a couple here. We have the state legislative districts. I am just going to leave it as a congressional district. You will see the outlines of the congressional district. Those of the congressional district. The outlines are the district boundaries. You can see which boundaries has fallen. There were certain elements that do not sure when your father out because you're not able to see them. I think we have a slow connection so it is still loading. You normally see the whole boundary. I apologize for that. Either interactivity's historical census data?

- >> We do not have that available at our website. If you're looking at geographical entities from previous time, the best place would be to go to the national archive. They have an extensive map room. Another good site is the national historic geographical information system. The collect all of our data as well and have a lot of collections of past geographies.
- >> In the other questions for Artemis. This is terrific information. We had a meeting earlier today talking about census map of the United States. One of my colleagues said that it just changed recently. Perhaps you can comment on that.
- >> I am not sure what you mean.
- >> I guess it was something to the effect of trying to group our depositories and trying to use the census geographical grouping. I think they were talking about something being six or eight. I do not know if that makes sense to you at all.
- >> Maybe that is what I am thinking of.
- >> Just a second. Here is my key to customer service. I googled everything.
- >> I do not want to dominate the questions. Please get those in the chat box.
- >> Let me see what we have here. I do not know of a change. That does not mean it did not happen.
- >> Let me clarify that with my colleagues and maybe get back to you.
- >> I will give that it looked.
- >> Here is my contact information the people, questions later. We have eight helpdesk. We also have an email that you can send questions to.
- >> My colleague is going to put the link to the satisfaction survey. Please give that a look over. Please fill that out. If you want to know more about our Academy, there is a good article by my colleague. It talks about the webinars and offices that would do and other training things that we have in the economy.
- >> I am going to go into my closing remarks. We still have plenty of time for questions for Artemis. Please put those in the chat box. First, I would like to think Artemis for a terrific webinar. I learned a great day. I'm definitely going to go back and use some of these tools. I would also like to think my colleague for his great work in keeping everything running smoothly. Hope the audience enjoyed the webinars much as we did here. Do not forget that our upcoming webinars are scheduled for July. The first one is on Tuesday July 10. You will receive notice of all of our upcoming webinars when they are announced. Give you a calendar of upcoming webinars and other events. Volunteered to present a paid Academy webinar. Please think about that. Any presentation you have done locally or nationally. Please think about doing a webinar with this. Let's see if there is any last questions. They cover every issue. That is probably why there is not a lot of questions here. We have a few minutes for any questions if anyone has any. I have not heard the name Artemis before.
- >> I would like to thank everybody for participating today. Again, if you have any future questions, do not hesitate to contact us. Any last questions for Artemis. We have a couple of minutes. I do not want to close it out prematurely. Last chance for any questions. The crowd was quiet today. I think I will close things out. Fantastic webinar from Artemis. We appreciate you coming in to present. Thank you Corey for your great work. Thank you audience and have a great rest of the day., Back on July 10 for another paid Academy webinar. [ Event Concluded ].