

Webinar Transcript: [Data Training Webinar: Food Access Research Atlas and Food Environment Atlas - YouTube](#)

Good afternoon, everyone. My name is Valerie Negron, your host for today's webinar. On behalf of USDA's Economic Research Service, welcome and thank you for joining us for the third event of our data training webinar series. Today's webinar will feature ERS Economist Alana Rhone, who will be highlighting estimates and walking us through accessing and using ERS's Food Access Research Atlas and the Food Environment Atlas, two separate tools that map different indicators within the food environment. As part of the data training webinar series, this webinar is meant to teach those interested in ERS data how to access and fully utilize our many data products and what better way to do so than connecting you directly with the experts. In the year ahead, this webinar series will continue to connect viewers with ERS special- specialists, excuse me, for variety of data products. If interested, a full schedule of these series can be found on our web page. We will share that link shortly. Before I introduce our speaker, I'd like to remind you that this webinar is being recorded and will be posted on the ERS website next week. If you have any questions during the webinar, please enter them into the chat feature at the bottom left hand corner of the screen and our Economists will answer them during a Q&A session after the presentation. Now, it's a pleasure to introduce our speaker, Alana Rhone. Alana is an Agricultural Economist in the food assistance branch of our Food Economics division. Her research focuses on measuring and examining food access in the U.S. Thank you for joining us today, Alana. The floor is yours.

Thanks Valerie. Good afternoon, everyone, and thanks for joining us in today's seminar featuring the Food Access Research Atlas and the Food Environment Atlas. Again, I am Alana Rhone, and I am the data product manager for both Atlases.

Here are the objectives for today's webinar. First, I'll go over the motivation and why we study food access in the food environment. Then, I'll provide some background information on the Food Access Research Atlas and the Food Environment Atlas. And then, I will demonstrate how to use both tools.

Food store access is important because limited access to retailers selling healthy and affordable food may make it harder for some people in the U.S. to achieve food security and a healthy diet. Limited food access to a food store impacts between 5 to 17% of the U.S. population. Some determinants of access include distance to the nearest source of healthy and affordable food, access to a vehicle or other form of transportation, or limited resources to pay for transportation to get to a food store. And these factors could affect the choice of stores at which a person may choose to shop for food, the time and monetary cost to travel to get to a food store, and the frequency a person may do their shopping. Each of these could reduce food security and diet quality.

To help understand how many people in communities may be affected by limited food store access, the Economic Research Service created a mapping tool and the data within it, calling it the Food Access Research Atlas. The Atlas allows users to investigate access to food stores at the census tract level using different measures of income, distance to stores, vehicle access, and other relevant indicators. It also provides maps and data that can be viewed, downloaded or even printed.

Users of the Atlas can create maps, as I mentioned, showing food access indicators. They can also view these indicators of food access for selected subpopulations such as age, race and ethnicity, and also supplemental nutrition assistance program participation, also known as SNAP.

Users can also compare food access measures based on 2019 data with the previous 2015 measures, so this is a neat feature and it's shown on the map on the screen.

Users can also download census-tract-level data on all food access measures, and all of the data included in the Atlas are aggregated into an Excel spreadsheet for easy download just like on the image on the screen.

So, you may be wondering has USDA stopped using the term food desert. Well, the term food desert has been a past and convenient way to name low-income and low-access areas. Low-income and low-access is more neutral and accurate. Since 2013, ERS has used the term low-income and low-access to designate these areas with limited access to healthy food as it more accurately reflects what is statistically measured in the Food Access Research Atlas. Also, individual based measures such as the number or share of people that live from a food store or the number of households that do not have access to a car can more directly measure food access.

With the help of the Food Access Research Atlas federal, state and local policy makers; community planners; researchers; the media; the general public; anybody that you can think of, just name it, you can use the Atlas to identify communities that have limited food store access and help target where programs or policies may be the most needed. Some examples of how the Food Access Research Atlas have been used are in researching how food access influences food related outcomes, diet, and health. Specifically, it has been used in research looking at adverse health outcomes in patients residing in low-income and low-access census tracts within the United States. It has also been used to look at the association between low-income and low-access areas and childhood hip fractures that can occur in teens and preteens, who are still growing and need nutritious foods to help their body grow. It has also been used to explore the store environment. Some users, food store businesses like grocery stores, and even organizations have used the Atlas to find areas where a food store, like a grocery store, or even a farmer's market may be the most needed. It has also been used to explore racial equity and food access.

The Food Access Research Atlas has been used to better understand grocery store access from a racial equity perspective, and it has been used to investigate and better understand how different population attributes and social factors contribute to higher likelihoods of low-income and low-access communities.

Now, let's shift our focus to look at how food store access is measured at the Economic Research Service. Food store access is measured at the census-tract-level, which are subdivisions of counties. The size of a census tract is similar to the size of the neighborhood that you live in. So, there are two components to the Economic Research Service's census tract food store access measures. We have low-income, and we have low-access. So, there's a subset of census tracts that are low-income and another subset that is low-access. Low-income and low-access are measured separately with the overlap of tracts that are both low-income and low-access comprising- comprising low-income and low-access tracts. So, in other words, the intersection of these two sets of tracts make low-income and low-access census tracts.

Our low-income status component is defined using poverty rates in median family income of a census tract. Tracts with poverty rates greater or equal to 20% are tracted with median family income that is at or below 80% of the state's or metropolitan area's median income level are considered low-income, and this definition is consistent with the definition that is used by the U.S Department of Treasury's New Markets Tax Credit Program.

Low-access status of a tract is measured four different ways. Three of these measures are based solely on how far people in the census's tract are from the nearest supermarket, supercenter or large grocery stores. These three different measures vary by the distance marker used -- half and one mile for urban areas, and 10 and 20 miles for rural areas. For example, low-access census tracts at the half mile and 10 miles measure are census tracts where a significant number, at least 500 people, or share of the population, at least 33% of the population, is more than half a mile from the nearest food store if in an urban area or more than 10 miles from the nearest food store if in a rural area. The low-access at 1 and 10 miles and low-access at 1 and 20 miles follow that same pattern. A census tract is considered rural if that track is in an area with a population of less than 2,500 people. All other tracts are considered urban tracts, and information on the location of supermarkets, supercenters and large grocery stores is obtained from two store directories that we use.

The fourth measure considers vehicle access. It is a little slightly more complex measure, but it incorporates vehicle access directly into the measure. Vehicle availability is an important measure of how readily a household can access a supermarket or a food store. The Economic Research Service has found that most households drive their own vehicle to do their regular food shopping. So, this measure has two conceptual pieces, the first one being some households do not have access to a vehicle, excuse me, and are far from a store and they may face barriers to

getting to a food store. Second, some people who are so far from a food store that even with the car there are significant time and transportation costs to getting to a store that it may become a burden to even shop for groceries. So, we call this measure low-access using vehicle access and 20 miles measure. So, these are census tracts with at least 100 households that do not have access to a vehicle and who live more than a half a mile from the nearest food store or where there is at least a significant number, which is 500 people, or shared 33% of the population, the tract population, are more than 20 miles from the nearest food store.

Here's some information you can even pull from the Food Access Research Atlas. I mean, you can pull this information from the data download spreadsheet, which is available on the Economic Research Service website. This bar graph looks at the percent of people by race and ethnicity in the U.S. that live far from a food store in 2019. As you can see, 49% of American Indian and Alaskan Natives live more than one mile from the nearest food store and they have the greatest share followed by White individuals at 45% and Blacks at 29%. Native Hawaiian and other Pacific Islander is at 28% that live more than one mile from the nearest food store. Asians- Asian individuals had the least share of individuals that live more than one mile from the nearest food store.

Now, let's walk through the overview web page of the Food Access Research Atlas and the items that can be found on it. So, this slide just shows the overview web page that will come up once you go in to access the Food Access Research Atlas.

The-, like I mentioned before, the overview page will come up once you access the Food Access Research Atlas. Then, you have the go to the Atlas. This link or the "Enter the Atlas" link takes you directly to the mapping tool. And the "About the Atlas" section gives more information about the Atlas. The "Documentation" section provides complete information on all of the data sources and definitions that are used in the Food Access Research Atlas. And the download the data spreadsheet included in- so, all data that is included in the Food Access Research Atlas are aggregated, as I mentioned before, into an Excel spreadsheet for easy download, which can be, you know, downloaded from the download the data section, and you can find access data for years 2006, 2010, 2015, and 2000- and our latest 2019. State level estimates of low-income and low-access populations using 2015 estimates can be found here. And the Food Access Research Atlas interactive guide provides an overview of the Food Access Research Atlas to assist users in understanding its background information and its low-income and low-access measures. I will go into more detail about the interactive guide later on in my presentation.

So, once you go into the mapping tool, the Food Access Research Atlas it will look something like this. You can expand and collapse map categories here. The map will be populated with green areas just by default because the low-income and low-access at the 1 and 10 miles measure is checked. To view different maps, you will just check the box for the measure that you want to

view, and to hide a map, you will just uncheck it. The component layers category separately identifies the components of each combined low-income and low-access layer. Also included is an indicator of census tracts with high shares of people residing in group quarters. The question mark located beside the component provides a brief definition of- of the measure or component that you- you would like some more information about. And you can adjust the transparency of the map. You may use this feature if you want to look at two, three or all maps all together. The possibilities are endless. So, you would just adjust the transparency sliders to make one measure show up or if you would like to hide it even more. You can expand the pullouts to show 2000-2015 layers, and you will use this if you would like to compare 2015 layers with 2019 layers. To change the background of the map, you will use the change the background button. We have two different maps or options to choose from, the topographic and satellites. The topographic is useful for identifying county boundaries and city locations. The satellite background is used- is good for viewing physical objects like malls or lakes and even housing development, and the topographic map is being used in this tutorial. You can print or export a map using this button. The print tool will create a printable or downloadable view of your current map that you're looking at. So, if you do happen to forget everything that I said today it's okay, no worries. We have a helpful help button that will guide you through the Atlas on all of its features. You can zoom in and out of a map here. You can also zoom to Alaska, the continental U.S. or Hawaii. Now that we have gone over all the features displayed on the map, let's dive into how to find a specific location and if that location or area is a low-income or low-access area. You will first type an address, city, zip code into the find a place dialog box. A drop-down list will then appear in auto populate with matching known addresses. You will then just select the address that you want and press enter.

Now, let's explore the Little Rock, Arkansas area. This map shows low-income areas where there's a significant share of population that live more than one mile if it is an urban area or more than 10 miles if it is a rural area from the nearest supermarket. This map also shows- also uses low-income census tract where there's a significant number of households that do not have access to a vehicle or there is a significant number or share of people that live more than 20 miles away from the nearest food store. So, it's using the low-income and low-access at one and 10 miles measure and the low-income and low-access using vehicle access measure. This map also shows how this transparency slider can be used to show which tracts meet both definitions. The kelly green, transparent green areas are tracts that meet the low-income and low-access definition at the one and ten miles measure, and the yellow areas are census tracts that meet the low-income and low-access using vehicle access measures, and the lime green color tracts, which is not in the legend, are tracts that meet both definitions. So again, to get the lime green areas, I use the transparency sliders for both of those measures. And so, these lime green areas they could possibly or may be the worst off because they have many households that um- that do not have access to a vehicle, and there are many people who are quite far, more than one mile

from the nearest food store, that live in these census tracts at these measures. As you can see, there are plenty of these areas.

Now, let's compare 2019 data with 2015 data in Little Rock, Arkansas. The census tracts that are only green are areas that are low-income again, where a significant number or share of people live more than one mile if in an urban area or more than 10 miles if in a rural area away from the nearest food store in 2019. Census tracts that only have the red hash marks were only low-income and low-access at the one and ten miles measure in 2015. So, in 2019 they were not low-income and low-access at the one and ten miles measure anymore, so food access improved in these areas. Whereas in the tracts that were only green, food access decreased. In tracts that- that were low-income and low-access in both years, in 2015 and 2019, are designated by being green and also having the red hash marks. So, these census tracts did not change status at all.

So, let's dive even more deeper into one census tract in Little Rock, Arkansas to explore other features of the Food Access Research Atlas. Clicking anywhere on the map will provide both summary level and detailed information on each census tract for both 2019 and 2015. The summary tab provides information on the income and access status of a tract. You can click "show details" beside each indicator summary for a summary of which low-income and low-access measures the tract needs. You can see that this census tract was low-income and low-access in 2019 at all four measures as you can see by the "yeses" by those measures. So, and even though it is not shown here, this census tract, this particular census tract was low-income and low-access at all four measures in 2015 as well. Using the map pictured and the details on the map, we see that this census tract has very limited, you know, food store access because they have many households without vehicles and many people who are quite far from the nearest supermarket that I explained earlier. And in addition to that, this particular census tract was low-income and low-access in 2015 and also in 2019. So, it's you know. it also did not necessarily improve in terms of food access over the years. So, this census tract might be, you know, more interesting to learn more about.

The 2019 tract tab provides a scrollable list of all 2019 data available for that tract. There are over 145 variables to scroll in this tab so it will never get old. Here you can find information on the number instead of people that are low-income and low-access by age, such as children and seniors that live far from a food store like this map is showing. You can find information here on race and ethnicity, SNAP population, the track poverty rate, median family income of a tract, and also the number and share of housing units that receives net benefits and who live far from a store, and also the number of housing units that do not have access to a vehicle.

You can download all available 2019 data for this specific tract by clicking [here](#). So, if you want more information on a specific tract, you can just click this download link button [here](#). And if

you want, you know, information on the whole United States, you will then go to the data download spreadsheet that can be downloaded on the Economic Research Service web page.

Earlier in my presentation, I briefly mentioned the Food Access Research Atlas interactive guide. The most asked questions regarding the Food Access Research Atlas can be found here. Here you can find questions such as what types of stores are included in the Food Access Research Atlas and why there are four measures of food access. You can also find more information on the low-income, and low-access low-income, and low-access designations. You can find information on the methodology among other frequently asked questions.

Now, let's turn to the Food Environment Atlas. It assembles statistics on food environment indicators to simulate research on the determinants of food choices and diet quality.

Users can create maps showing the variation in a single indicator across the United States such as the number of farmers markets in a county, you know, across the United States, that this image is showing.

You can view all the county level indicators for a selected county, and you can zoom into a specific area and export or print maps just like in the Food Access Research Atlas.

You can also download the full dataset in Excel format, so again, all of the data included in the Food Environment Atlas are aggregated into an exc- Excel spreadsheet for easy download.

The Food Environment Atlas has been used by federal, state and local governments, community planners, researchers, and the general public to provide a spatial overview of a community's ability to access healthy food and its success in doing so. And an outside report investigated the effects of food and environment characterized as food swamp on adult obesity rates. People have also used the Food Environment Atlas to explore the food environment. Most recently, specifically an epidemiologist reached out on guidance on how to use the Food Environment Atlas. They were using the Food Environment Atlas data for metrics in their Covid-19 recovery program. Also, a local county office used the Food Environment Atlas to work on their community health assessment. They were interested in looking at the growth of fast food restaurants in their county.

The Food Environment Atlas assembles statistics on three broad categories of food environment factors, the first one being food choices, indicators of a community's access to an acquisition of healthy and affordable food such as access and proximity to a grocery store. You can find the number of food stores, restaurants, convenience stores, and supercenters, and warehouse club stores in the county. You can also find food and nutrition assistance program participation information and also information on the national school lunch program and the

number of people who participate in the women, infants, and children program, also known as WIC. You can also find information on the availability of local foods such as information on food hubs, farm to school program, or the number of farms in a county with vegetables, potatoes or melons harvested for sale.

The second category is health and well-being, indicators of a community's success in maintaining healthy diets such as food insecurity, diabetes and obesity rates, and physical health, physical activities levels. And lastly community characteristics, indicators of a community's characteristics that might influence the food environment such as demographic composition, income and poverty, natural amenities, and also recreation and fitness centers.

The Atlas currently includes more than 280 indicators of the food environment. The year and geographic level of the indicators vary to better accommodate data from a variety of sources. Some indicators are at the county level while others are at the state or regional level. The most recent county level data are used whenever possible; however, they do cover varying years.

Now, let's go through a tutorial of the Food Environment Atlas. This is what you will see when you land on the Food Environment Atlas web page, so this is the overview page. To go to the Atlas, you will click on the Atlas or "Enter the Map". The "About the Atlas" section gives more information about the Atlas. The "Documentation" section provides complete information on all of the data sources and definitions for all for over the 280 indicators that we have in the Atlas. And the current version of the Food Environment Atlas data file along with six previous versions of the data and documentation are available under the data access and documentation download section.

Now let's go over how to use the Food Environment Atlas. You can choose a map to display by browsing categories or searching on a keyboard. The map selection dialog displays a categorized list of available maps. You will- you can click any map to display the map that you would like to see.

The current map title is bolded in blue, and the current map title is also displayed at the top of the map. The percent change in the number of fast food restaurants in the county from- in the county from 2011 to 2016 comes up by default. You can click the "I" button to- button to the right of the layer name to display available documentation for that map. The print feature will create a map suitable for printing or inserting it to a document. The "help" button will guide you through the Atlas on all of its features, and selecting a state from the state zoom drop-down menu near the top of the map will zoom directly to that state. And the metro and non-metro map will selectively hide, you know, metro, urban, or non-metro rural counties just to make it easy to distinguish which counties are designated as metro or non-metro. You can zoom in and out of the map and you can also zoom through the continental U.S.

If I search by keyword, for example, food because that's on my mind right now I can enter the text, which is food, and press enter, and the search will find any map title that contains the search text and the number of matches as you can see in each category in the color- in the red color text. Map titles that match the search text will also highlight in blue.

You can select- select the, excuse me. You can also do data for a specific county. I currently have highlighted King County, Washington. It is- it is Washington's most populated county and has the city of Seattle in it. So, let's explore that county and look at some of the features from the Atlas. Clicking on the county on the map will bring up a box similar to the Food Access Research Atlas that contains detailed data for that county. You can find the county name and zip code and also the value of the map variable for that selected county. There's also a scrollable list displays value for the entire category containing the cat- the current map. The row and red text is the current map. And you can click to download the dataset link to download a CSV format of-format file of the data for this county.

Now, let's compare the number of fast food restaurants with the number of grocery stores in King County per 1,000 residents. So, these are the rows and red tags are on- that are on both maps. As you can see, there are more fast food restaurants in King County than there are grocery stores in 2016 per 1,000 county residents. There is .81 fast food restaurants per 1,000 residents compared to .24 grocery stores per 1,000 residents.

Published estimates provided in this presentation can be found on the ERS website, and my contact information is located here, so feel free to reach out with me with any questions in the future if they should arise. I would like to thank you for your time and attention. I greatly appreciate it, and I will now pass it back to you, Valerie, for the question and answer portion of the webinar. Thanks again.

Thanks Alana, we'll go ahead and open the floor for questions now. As a reminder, questions can be submitted through the chat feature located at the bottom left hand corner of your screen. Before we begin, I'd like to introduce our panelists who will be helping us answer questions. Joining Alana, we have Food Assistant Branch Chief, Shelly Ver Ploeg, and Geographer, David Marquardt. Thank you both for joining us today. For our first question: how do you define food stores, and do you define varying types of food stores, for instance a grocery store versus a convenience store?

Yes, we do. Our directory of grocery stores include supercenters, supermarkets and large grocery stores, and you can find more information on the definitions of each of these estimates, I'm sorry, on each of these stores, sets of stores, using the interactive data guide and also in a few of our reports that are located on the ERS website.

Thanks Alana, our next question is how do you define poverty rates? Do you mean 100% of the annual federal poverty level?

Yes, I would like to direct us to a slide that defines how we look at the poverty rates. So, the poverty- our low-income definition is based on the tract poverty rate and the tract median family income, or yeah, the tract median family or state income and the census tract.

Thanks, Alana. For your next question: how often are the Food Access Research Atlas and the Food Environment Atlas updated?

Thanks for that question. We try to update the Atlas, the Food Access Research Atlas, every four to five years and the Food Environment Atlas every two to three years.

Great. For your next question: according to the FARA, the Food Access Research Atlas Map, Baltimore seems to not have any low-income low-access areas. Do you mind elaborating a bit more as to why this may be?

That is a great question. At this time, I cannot recall specifics or details from the Baltimore area. However, if you would like to email me- and email me, I will be happy to follow up with you on that particular question.

All right, here's another question. Does ERS have research about the impact of poor store access on diet or health?

Yes, I would like to direct that question to my colleague, Shelly.

Hi Alana, thank you for that question. As Alana said early in the presentation, the hypothesis is that poor store access may impact the diet quality and the health of individuals who live in those areas. ERS research has focused primarily on outcomes such as food shopping behavior, food spending, and the quality- the dietary quality of spending among households, and we have used the Food Access Research Atlas and other data such as the National Household Food Acquisition and Purchase Survey, a USDA product, to study how households that have poor access shop for food and their spending patterns. Two sort of high level findings from that research suggests that even those with poor access shop around for food. For example, those who have poor access either because they don't have a vehicle or are low income tend to bypass the closest store and shop at a store that is farther away. We also found that households with poor access do not spend similar amounts at supermarkets and supercenters as households with better access. Other research by USDA colleagues has tracked consumers over time to see how their food spending varies over time and how the food- their food environments might impact that. That study found that the food spending on some types of foods, such as fruits and vegetables, was slightly smaller

or lower than those who had better access. But when they followed them over time and could observe them shopping farther from their homes, they did not see a major change in their food spending behaviors. That suggests that preferences, income and education may be more important factors than food at food store access.

Thank you, Shelley, and thank you, Alana. Our next question is can I download or access the data that's in the Atlas?

Yes, you sure can. I would like to give my colleague, David, a chance to answer this question.

Thank you, Alana. On the ERS homepage, you can reach both the Food Environment Atlas and the Food Access Research Atlas. If you go to each of these Atlases, there are links on their landing pages for downloadable tabular data, and if you want to use pre-made maps for specific variables search for "ERS geospatial API" on your web browser to access links to our mapping data sources.

Thank you, David. Thank you, Alana. Next question: can you explain what is considered a large grocery store?

Yes, for just a broad overview, a large grocery store- the difference between a large grocery store, supermarket or supercenter is they can be defined by the number of registers that a store may have and also um the amount of- of money that- the annual volume of the money that they have. I would like to also give a chance for my colleague, Shelly, to answer this question as well.

Thank you, Alana. These categories are defined by the two directories that we use to- to measure where stores are. A large grocery store tends to have all major grocery departments and have annual sales of at least 2 million. Supermarkets and supercenters are larger versions of those stores.

Thank you, Alana. Thank you, Shelly. Next question. Wow, we're getting a lot of questions here. Does the Food Environment Atlas provide data on food insecurity at the zip code level?

The Food Environment Atlas has food insecurity only at the state level now that's in the Food Environment Atlas.

Thank you, Alana. Your next question: what food assistance programs are included- are included in the Food Environment Atlas?

Yes, that's a great question. We have information on SNAP; WIC, Women, Infants, and Children Program; the National School Lunch Program; the School Breakfast Program; the Summer-

Summer Food Program; and the Child and Adult Care Food Program that are in the food environment at least.

Good to know. Thank you, Alana. Next question: do you make a distinction between households and families?

I would like to direct this question to my colleague, Shelly.

Thank you, Alana. We only examine households, and technically we examine housing units, which is the census categorization of- of households. So, we do not have information in the Food Access Research Atlas that is on house- on families.

Thank you, Shelley and again Alana. And for our last question: can you talk a little bit more about what data is used in the Food Access Research Atlas and in the Food Environment Atlas?

Yes, thank you for that question, Valerie. The- I'll speak about the Food Environment Atlas, and then, I will direct the question to Shelly to speak on the data that is included in the Food Access Research Atlas. The Food Environment Atlas data comes from a variety of sources such as the Economic Research Service. Also, a few of the other sources include, but it is not limited to, like the Center for Disease Control, the United States Census Bureau, USDA's Agricultural Marketing Service, and the Food and Nutrition Service just to name a few.

Thank you, Alana, and I have one more question to ask. Overall, in the U.S, how many or what share of people lived in a low-income low-access area in 2019? As a follow-up question, how does that compare to the statistics for 2015?

Yes, about 39 million people or 12%- 12.7% of the U.S. population lives in low-income census tracts where there are a significant number or share of the population that live more than one mile if in an urban area or more than 10 miles if in a rural area and to- from a food store in 2019, and in 2015 roughly the same amounts lived in low-income and low-access census tracts at that same- at that same measure and also roughly that same amount as well so there was already only a slight difference.

Thank you, Alana. All right, that- that's all the time we have for today, and Alana, I want to thank you for a great presentation on the Food Access Research Atlas and the Food Environment Atlas. Many thanks to Shelley and David for their assistance during the Q&A session as well, and finally, thank you to our listeners for taking time out of your day to join us. We hope this has been helpful. Before closing, we'd also like to highlight the next segment of our data training webinar series. This June we'll host a webinar on two more of our programs: price spreads from farm to consumer and meat price spreads. These data products compare prices paid by

consumers for food with the prices received by farmers for their corresponding commodities. Join us to learn about farms' share of retail prices. Be sure to visit www.ers.usda.gov/datatrainingwebinars for more details in this upcoming week.

Lastly, if you haven't done so already, we'd like to invite you all to download the new ERS Chart of Note Mobile App. With this app available, free of charge, on Apple and Android devices you can receive digital snapshots, snapshots of ERS research delivered straight to your mobile device. Again, thank you for joining us today. This concludes our webinar.