Good morning everyone and welcome to our webinar Household Food Security in the United States in 2016. My name is Nancy McNiff and I will be your moderator today. The webinar is being recorded and will be posted on the ERS website next week. At any time during this webinar you may enter a question into the chat feature at the bottom left corner of your screen and our speaker will answer at the end of the presentation. Our speaker today is Alisha Coleman-Jensen. Alisha is a social science analyst with the Food Assistance Branch at the Economic Research Service U.S. Department of Agriculture. Her research focuses on the measurement and determinants of food insecurity in the United States. She is the lead author of USDA's annual report on household food security analyzing the prevalence and severity of food insecurity in U.S. households. The report includes changes in food insecurity from previous years, the prevalence of food insecurity by selected household characteristics and food insecurity among children. I think we're ready to start now so Alisha you can begin your presentation.

Thank you Nancy, excuse me. Good morning to everyone and thank you, thank you for joining us today. So the report they released this morning describes the
food security of U.S. households during calendar year 2016 and it's based on USDA's most recent annual food security survey which was conducted in December 2016. The report provides information on how many U.S. households had difficulty putting enough food on the table in 2016 and food security statistics reflect the extent to which difficult economic conditions result in material hardship in U.S. households. So the percentage of U.S. households that was food insecure with essentially unchanged from 2015 to 2016 that's say that change was not statistically significant.

This shows the outline of what we'll be talking today so the key question we're asking is how many U.S. households were consistently able to put adequate food on the table? We'll talk about how food security is measured, the main findings from the annual food security report. We'll talk about the food security survey and then a summary and then at the end I'll talk about just briefly about some other recent reports on food security that ERS released this summer.

This pie chart shows the statistics for all U.S. households. In 2016, 87.7 percent of U.S. households were food secure throughout the year. Food secure means that they had consistent access
to adequate food for active healthy living for all household members throughout the year.

Food insecure households are those that were unable at some time during the year to provide adequate quantity or quality of food for one or more household members due to a lack of resources and in 2016, 12.3 percent of U.S. households were food insecure that's about 15.5 million households.

We measure food insecurity at differing degrees of severity. For about two thirds of food insecure households inadequate food met primarily inadequate in quality, variety or desirability and these households reported few if any reductions in food intake. So this presented 7.4 percent of households and they're labeled with low food security on the chart and those are represented by the gold slice of the pie chart.

And that 7.4 percent of U.S. households in 2016. However in a little more than a third of food insecure households, inadequate food and that not enough food and this subset of food insecure households was in the more severe range of food insecurity described as a very low food security and this is represented by the red slice in the pie chart. 4.9 percent of all U.S. households had very low food security in 2016 that's about 6.1 million households.

Households classified as having a very low food security reported the normal eating patterns of
some household members were disrupted at times during the year and their food intake reduced below levels they considered appropriate. What we mean by disrupted eating patterns is that respondents reported skipping meals and in some situations going a whole day without eating. Most households with very low food security reported that an adult in the household had been hungry at times but did not eat because there wasn’t enough money for food.

The next slide shows food security definitions. And I just want to stop and note that Nancy shared the audio call-in number if you’re having issues you can call that number and enter that code, if you’re having problems. So turning back now to this slide, this shows the definitions of food security that I just spoke about. Food insecurity is considered a household level, economic and social condition while hunger is an individual level physiological condition that is not measured directly in the survey. Very low food security describes a severe range of food insecurity which is a condition in which mainly leads to hunger. And again very low food security describes the subset of food insecure households in the severe range of food insecurity.

This slide provides a sort of picture of how food
security is measured. So like many things
food security is a continuum. Early research
showed that food insecurity was a managed
process which means households have some
control over how food insecurity is experienced.
So for example as food security deteriorates households
may become anxious about the household food supply
and try to stretch their food and food budget. They
may try to juggle the household spending to
maintain food security to the extent they can. As
food insecurity worsens households may
reduce the quality and variety of food or rely on
low cost foods to feed their family.
And if food insecurity becomes more severe adults
may reduce their own food intake while trying
to ensure children get enough to eat and then in
the most severe situations we see reduced food intake
among children. Research has shown that
parents will try to shield their children from food
insecurity to the extent they can and adults
will reduce their own food intake in order to try to
protect their children.

These are some examples of the food security survey
questions. Households are asked a series of ten questions
about food insecurity for the household as a whole
and adults in the household and households
with children are asked an additional eight items
about children food insecurity. And these questions follow
along that same continuum and represent the varying degrees of food insecurity. So for example, asking about worrying about food, we couldn't afford to eat balanced meals. Did you ever cut the size of the meals or skip meals and did you ever not, did you ever not eat for a whole day because there wasn't enough money for food? A couple things I want to point out about all the questions is that they asked about the last 12 months. And as I mentioned of the outset, our surveys conducted each December so these questions are for the prior calendar year. So from January to December 2016, and each question stipulates that food insecurity or the food insecure condition was the result of not having enough money or resources for food. So these are not representing you know issues like just not having time to eat or fasting or dieting or things of that nature. This is food insecurity due to resource constraints.

So turning now to trends in food insecurity. So just to orient you to the graph, the blue line at the top is food insecurity which includes both low and very low food security. And the red line towards the bottom shows the prevalence of very low food security which again is the more severe range of food insecurity. The yellow shaded portion of the graph represents the recession from December 2007 through January 2009.
And then on the trend lines I've included some key numbers that we'll talk about. So let's look first at the prevalence of food insecurity. So in 2007 before the recession the full effects of the recession set in 11.1 percent of U.S. households were food insecure. Food insecurity increase substantially with the economic recession and in 2011 peaked at 14.9 percent. Since that time we've seen a decline in food insecurity to 12.7 percent in 2015 and now 12.3 percent in 2016. The year to year change from 12.7 percent to 12.3 percent was not statistically significant. But the overall decline from 14.9 percent to 12.3 percent was statistically significant and if you can see we are continuing the downward trend in food insecurity. For very low food security in 2007, 4.1 percent of U.S. households report a very low food security that peaked at 5.7 percent during and after the recession and in 2015 with 5 percent in 2016 the prevalence of very low food security was 4.9 percent. Again the change from 2015 to 2016 with not statistically significant that could have resulted from family variation that's a decline from the peak of 5.7 percent down to 4.9 percent is a statistically significant decline.

This next slide has a lot going on and it may be
sort of small on your screen. If you're interested in looking at these numbers in greater detail, all the numbers are taken from Table Two in the annual food security report. So if you look at Table Two you can find all the numbers behind this chart. So this graph shows both the changes and prevalence of food insecurity by household characteristics between 2015 and 2016 and the bars marked with an asterisk show a statistically significant decline. And then the other sort of takeaway from this chart is just to examine the sort of the groups are some populations that have higher or lower food insecurity rates compared to other groups in 2016. So I'm going to start at the top of the chart and pull out some of the numbers that, that may be of interest. So first, actually I take that back, I'm not going to start at the top. So first I want to draw your attention to the asterisks on the chart which are for white non Hispanic head of households and for households not in principal cities. Those were the two categories that had statistically significant declines from 2015. None of the other differences from 2015 to 2016 were statistically significant and I'll note that statistical significance is related both to the size of the change and also to the margin of error around the estimates. So I'll turn now and start
at the top of the chart. So in 2016, 12.3 percent of all households were food insecure.
We see the highest prevalence rates for female headed households with children, those are single mother households in 2016, 31.6 percent were food insecure. And 21.7 percent of single father households were food insecure. 9.9 percent of married couple families with children were food insecure. And that’s a consistent finding that we see higher food insecurity rates for single parent households compared to marry parent households. Turning now to households without children. We see higher food insecurity rates for women and men living alone. About 14 percent than we do compared with a households with more than one adult but no children. In 2016, 8 percent of households with more than one adult and no children were food insecure. But similarly we see some lower prevalence rates for households with elderly compared to households with children. In 2016, 7.8 percent of households with elderly were food insecure. Turning now to race ethnicity of households head or household reference person in the survey we see higher food insecurity rates for black non Hispanic headed households at 22.5 percent and for Hispanic headed households at 18.5 percent. We see somewhat lower food
insecurity rates for households headed by white non Hispanics 9.3 percent in 2016.
Some of the differences across household composition and across race ethnicity are related to income differences across those groups. And these statistics do not control for differences across income. They're simply showing the prevalence across, of food insecurity across these different groups. You can see that for households with incomes under the federal poverty line that's under 1.0 is under the federal poverty line and 1.85 and over is 185 percent of poverty line and above. Those are incomes below the federal poverty level of 38.3 percent were food insecure in 2016 compared with 5.6 percent were food insecure for those with incomes 185 percent of the poverty line and over. Finally at the bottom of the chart we have the prevalence of food insecurity by metropolitan and non metropolitan residence. So in principal cities are the sort of cities within metropolitan areas not in principal cities are more suburban areas outside the cities and metropolitan areas and then outside metropolitan area is a non metropolitan or you can think of as a rural county. We tend to see higher food insecurity rates for both cities and the more rural areas 14.2 percent of households in principal cities were
food insecure and 15 percent of households in non metropolitan counties were food insecure compared with 9.5 percent of households in more suburban areas being food insecure. And again if you want to look at those numbers in more detail turn to Table Two in the annual food security report.

This next slide shows the prevalence of food insecurity across the states. First I want to note that the state data relies on three years of data averaged. We do that to ensure that there are large enough sample sizes for all states to produce reliable estimates. So this is data average from 2014, 2015 and 2016.

So let's walk through the map first. This is the prevalence of food insecurity. Very low food security is not shown on the map but it's available in the report if you're interested. And all the, the figures and the numbers on this slide come from Tables Four and Five in the annual food security report.

So you can see the key below the map. The lighter orange states have food insecurity below the U.S. average. So in terms of food insecurity those states are better off. The medium orange states have food insecurity near the U.S. average and the darker orange or red states have food insecurity above the U.S. average. So in terms of food insecurity these states are worse off.
Food insecurity prevalence ranges from a high, excuse me, a low of 8.7 percent in Hawaii to our high of 18.7 percent in Mississippi. As you can see on the right side of the slide and again these statistics are in Tables Four and Five in the report. We, in the report we include comparisons to the immediate three year period so in this case 2011, 2012 and 2013 averaged and then we also compare to the previous ten year period, so 2004 to 2006. There was an significant increase in food insecurity from 2011 to 2013, to 2014 to 2016. In one state, in New Mexico, and we saw significant declines in food insecurity from 2011 to 2013, to 2014 to 2016 in sixteen states and those are listed here on the slide.

Very low food security again it's not shown on the map but prevalence ranges from 3 percent in Hawaii and Delaware to 7.7 percent in Louisiana and Alabama.

I want to turn now and talk about households with children specifically. Measuring food insecurity in households with children is somewhat more complicated than in measuring food insecurity in all households as we measure food insecurity among adults and among children separately. So parents often as I've mentioned will try to protect their children from food insecurity even when parents themselves
experience reduced dietary quality and intake and in some food insecure households only adults are food insecure. So households with food insecurity among children report that households are unable at some time during the year to provide adequate nutritious food for their children. Households with very low food security among children again that's the more severe range of food insecurity. Caregivers reported that children were hungry, skipped a meal or did not eat for a whole day because there was not enough money for food. So I'm going to turn now and talk about food insecurity and statistics of households with children. So in 2016, 83.5 percent of households with children were food secure. 16.5 percent of households with children were food insecure. So that represents households in which adults or children or both were food insecure. Within that 8.5 percent of households with children reported food insecurity among adults only while 8 percent of households with children reported food insecurity among children where children's nutrition was affected by household food insecurity. And then in the more, that represented 3.1 million households. And food insecurity among children was unchanged from 7.8 percent in 2015 and I'll show the
trends on the next slide. Children along with adults experienced very low food security in .8 percent of households with children.
That's about 298,000 households in 2016 and this group of households, parents reported that children were hungry.
Very low food security among children was unchanged from .7 percent in 2015.

So this graph shows trends in food insecurity for households with children, just to orient you to this chart, the top blue line it shows the food insecurity in a household with children. Again where adults or children or both were food insecure. And then the middle red line shows food insecurity among children and the darker sort of burgundy or brown at the bottom shows a very low food security among children.
So similar to the previous trend chart I showed you, each of the lines include the number of households that were, the prevalence of household with food insecurity before the full effects of the Recession set in. It shows the peak and then food insecurity in 2015 and 2016. So for households, for food insecurity in households with children, in 2007, 15.8 percent were food insecure that peaked at 21.3 percent during the Recession. In 2015, 16.6 percent of households with children were food insecure and in 2016 that was 16.5 percent.
And the change from 2015 to 2016
is not statistically significant. The red line showing food insecurity among children in 2007 8.3 percent were food insecure that peaked at 11 percent in 2008 and in 2015, 7.8 percent children were food insecure in 7.8 percent of households with children and in 2016 that was 8 percent.

Very low food security, the line at the bottom, in 2007, .8 percent of households with children were food insecure that peaked at 1.3 percent and in 2015 0.7 percent of households with children reported very low food security among children and in 2016 that was 0.8 percent. It's worth noting that food insecurity and very low food security among children are both back down to the pre-recession levels in 2007.

So so far all of the statistics we've been talking about are about food insecurity in the last twelve months or in the the calendar year 2016. This slide shows food insecurity anytime in the thirty days prior to the survey and the estimated average daily prevalence of very low food security. So in addition to asking about the last twelve months when the survey was conducted, respondents are also asked about food insecurity experience in the thirty days prior to the survey. The survey is conducted in
mid-December each year, so the thirty days prior
to the survey of mid-November to mid-December,
so in that thirty day period in 2016, 6.7
percent of U.S.
households were food insecure and 2.8 percent of U.S.
households were very low food secure.
Compared with 2015, there were no,
there were no statistically significant changes
in 2015, 7 percent of U.S. households were food
insecure in the thirty days before the survey and
2.9 percent were very low food secure
in the thirty days before the survey.
We estimate the average daily prevalence of very
low food security to be between 0.6 to
0.9 percent of U.S. households.

Turning now to talk about use of federal food or
nutrition assistance programs by food insecure
households. One caveat about these
numbers that these are self reported survey
data and there is under reporting of participation
in assistance programs in the survey data.
But in 2016, among food insecure
households, 59 percent reported
participating in one of the three, in one of three, of
the three largest USDA programs.
So those were SNAP, the Supplemental Nutrition
Assistance Program formerly Food Stamps, free or reduced price
school lunch program and the WIC program for women,
infants and children. So the bulk of food insecure households reported participating in SNAP, 43.6 percent, 29.8 percent of food insecure households reported accessing free or reduced price school meals and 9.5 percent of food insecure household reported receiving WIC. So 41 percent of food insecure households reported not participating in any of these programs. Some of those households may have been ineligible and some may choose not to participate for other reasons.

We also ask about use of community food assistance programs which would be food pantries or food banks, emergency kitchens or soup kitchens. Typically we see lower use of these program than we do the federal nutrition assistance programs but and variation across food security status with the most frequent use among those who are reported to be food insecure. So among all U.S. households 4.8 percent reported using a food pantry in 2016 and 0.6 percent reported using an emergency kitchen or soup kitchen. For households that are food insecure 26.5 percent reported using a food pantry. And about 36 percent of those with very low food security reported using a food pantry in 2016. Use of emergency kitchens or soup kitchens was less frequent but still, follow that similar
pattern in terms of greater use and access among those with food insecurity. So 3.5 percent of food insecure households reported using a soup kitchen and 5.9 percent of very low food secure households reported using soup kitchens.

In the survey we also asked about people's food spending including spending on food at home and away from home. Median weekly food spending was higher among households that were food secure which you might expect then somewhat lower among food insecure households. Taking into account estimated food need which means taking into account the age, composition of the household, the number of members and so forth, the typical food secure household spent 29 percent more for food then the typical food insecure household.

This slide shows some of the details on the annual food security survey which is used for these estimates. It's part of the current population survey food security supplement. This survey is conducted by the Census Bureau each year and it's sponsored by the Economic Research Service of USDA. About 40,000 households are interviewed and it's representative of the U.S. civilian population. You may have heard of the CPS
before as it's also the source of unemployment statistics that are reported monthly as well as poverty statistics. And as I mentioned it's conducted annually in December.

So just to summarize the main findings from the report. The percentage of U.S. households who were food insecure in 2016, 12.3 percent was essentially unchanged from 2015 but continued a downward trend from a high of 14.9 percent in 2011. Children who were food insecure at times during the year in 8 percent of U.S. households with children which again was essentially unchanged from 2015. But as in 2015, the 2016 prevalence of food insecurity among children was near the 2007 pre recession levels.

This next slide shows three report covers from reports that were released this summer by ERS and they all focus on food security research. So the first is food insecurity, chronic diseases and health among working age adults and that report examines the connection between food insecurity and chronic disease and we find that adults that are in food insecure households are more likely to report having a chronic disease as well as more likely to report poor health. The effects of energy price shocks on household food security in low income households was
also released this summer and that report finds that higher energy prices are related to higher food insecurity. And that the findings are, most strongest for low income households those that wouldn't have the greatest constraints on their resources. And then finally children, children's food security and USDA child nutrition programs presents mostly a literature view synthesizing the research on food security and child nutrition programs and finds that overwhelmingly the research shows that those programs do help to reduce food insecurity and for children in food insecure households, the school meals program provide an important source of nutrition.

And I also want to direct your attention to an Amber Waves article that was released today on the food security report. I think Nancy has a link that she can share in the Q and A section if you want to download it or or access it. It's an Amber Waves is the, Amber Waves is the ERS magazine highlighting some of our research findings and there is an article titled, "Understanding the Prevalence, Severity and Distribution of Food Insecurity in the United States" that was released this morning and it highlights some of the findings from our annual report.
There are a lot of other resources on the ERS website including media resources about how to interpret the food security statistics and how to report on them. As well as links to lots of other reports and graphics. I do want to note that we have data visualizations on our website. Those interactive data visualizations will be updated at 3 P.M. today. They couldn't be updated at the same time as the food security report because they are posted on a public server that we didn't want posted until after the food security report was released. So look for those updated interactive data visualizations later today. The static graphics on our website and the key statistics and graphics area are currently updated to 2016 and there is my contact information if you have any questions feel free to reach out to myself or any of my co-authors on the food security report. we'd all be happy to help you with whatever you have questions about. I think I'm going to turn it over to Nancy now. And she might have some questions for us.

-Thank you.

-Thank you very much Alisha

Yes we are now going to turn to questions. As a reminder please enter any questions that you have into the left hand bottom corner chat feature. And I will relay the questions to Alisha and we have a few questions already. The first one is about food prices of the been declining recently, how might
that have affected food insecurity in 2016 and going forward?

That's an important question so, food insecure or sorry food prices were somewhat lower in 2016 particular for food at home. We haven't done research on 2016 yet to say actually what cause changes in food insecurity. We focus first on getting the annual report out and then doing some of that sort of supplementary research later. So I can't say definitively for 2016 but prior research has shown that food prices do have an impact on food insecurity and lower food prices are likely to be linked to lower food insecurity. That's both at the national level comparing changes in food prices over time and in local areas comparing food prices across geography in places with higher food prices compared to places with lower prices. So we would expect that declining food prices could be linked to declining food insecurity but again we can't say definitively for 2016 that, that's the case. Thank you Alisha. Another question. How many children are food insecure? What's the number? Right. So it's difficult to say precisely how many children are food insecure in the U.S. because the survey asked if any children in the household are experiencing
food insecurity. So in households with more than one child we don't know for sure whether all of the children were food insecure. But we can provide a range of the number of food insecure children in U.S. households. So 3.1 million households reported food insecurity among children and that there were 6.5 million children within those households. Now it's unlikely that every child in those households experience would insecurity. In some cases, there may have been food insecurity among older siblings and somewhat less food insecurity among younger siblings. So the range of the number of food insecure children in the U.S. in 2016 would be between 3.1 million and 6.5 million children. It's safer to refer to these children as children in food insecure households rather than food insecure children. Okay. We have a question. I think it's specifically on slide number 8 and you did sort of go over it and I'm going to bring it now. You did go over it but I want to make sure that it's covered fully because we had a question about what exactly a principal city is? So it's at the bottom of that bar chart. So principal cities are, so let me back up. The Census and other federal agencies define metropolitan areas and then within them, within
metropolitan areas there are principal cities and then metropolitan areas not in principal cities. So principal city if you can think of as the sort of, sort of urban center within a metropolitan area. So... you could, so that would be sort of the most densely populated part of the metro area and then not in principal cities would be still in the metropolitan area and link to that larger city but more suburban area. So you can think of the areas where people might live and then commute into the city would be that the not in principal city areas around the metropolitan area. And then outside metropolitan area would be non metropolitan county that you might think of as you know borough. So you could think of you know even though these are kind of more technical and not very clear terms it's basically are referring to cities, suburbs and rural areas on that chart and we see higher food insecurity in the cities and the rural areas and relatively lower food insecurity in suburbs. Do you know why that's the case for the suburban areas?

We know that food insecurity is closely linked with economic resources and rural, excuse me, suburban areas tend to have somewhat lower poverty rates as well compared with principal cities and rural areas are non metropolitan areas. So we have a question about why do you think the
level of children who were food insecure is below or back below or near the pre-recession level but that's not the case for people overall for households overall? I think that's a really important question and that's something we've been thinking about as well. I don't have a definitive answer for why food insecurity is back to pre-recession levels for food insecurity among children. It could be that you know many nutrition assistance programs are targeted specifically toward children or toward households with children and so it could be those greater resources. It could also be that protective factor among adults that parents and others are trying to protect their children to the extent they can.

But we can't say for sure at this point exactly what, why those levels have returned for children but not for all households.

Our next question is a specific about the CPS design. How do you think the CPS design, for example civilian address space sampling contribute to the report of the emergency food program use? That's a really important point so the question the person is asking is related to the CPS samples that it's an address space sample. So, households end up in the sample because their residence
is sampled. And what that means is that people who are homeless for example are excluded from the survey. And that could impact estimates in a couple of areas. So one is just the estimates of food insecurity if you might imagine people who are homeless may or likely would have higher food insecurity rates than households who are not homeless and those homeless individuals or homeless families are excluded from the survey. We do include a note about that in the report. And as the questioner notes it also could have impacts on the estimates of soup kitchen use. It may have less of an impact on estimates of food pantries because a lot of the food available in food pantries require cooking facilities but certainly I would say that this is, could be an underestimate of the full extent of use of the emergency food assistance programs since those who are homeless are excluded. Okay. We have a question based on employment levels. Given that we're near full employment, are we reaching a level at which it's going to be hard for food insecurity to drop much further? What goes into the, determines food insecurity? Right it's difficult to say. We know from prior research that unemployment certainly is related to food insecurity. And ERS conducted a study a few years ago where we looked at trends in unemployment and trends in food prices and trends, food prices
relative to other goods and also trends and inflation overall. And we found that declining unemployment is related to declining food insecurity but that other factors are also important. So as we mentioned food prices are another factor and prices overall. So even as there, there maybe changes in some areas but not others that you know all interact together to affect food insecurity. But we can't you know it would be conjecture to say what full employment if it would prevent food insecurity from dropping further. There are a number of other factors besides unemployment that also relates to food insecurity.

Okay, thank you Alisha. Those are actually all the questions that we have. If you have further questions for Alisha please feel free to email her or one of our co-authors and that's all we have. Thank you all for joining us today and have a great day.