SLIDE 1: Good afternoon everyone and welcome to our webinar: Rural America at a Glance, 2018 Edition. My name is Nancy McNiff and I will be your host. Our speaker today is John Cromartie. John is a geographer with ERS's Resource and Rural Economics Division, he holds a PhD from the University of North Carolina at Chapel Hill. John conducts research on rural population change, rural housing, and rural urban classifications. As an expert on rural definitions he has developed new classification schemes, and briefed policymakers on definitions used in USDA's rural development programs. During the webinar, if you have a question please type it in at any time using the chat feature located in the bottom left-hand corner of your screen and John will address it after the presentation. I think we're ready to start, so John you may begin now.

Thank you Nancy, and thanks to everyone for participating in this webinar.

SLIDE 2: The 2018 Rural America at a Glance was released yesterday and it's the latest of the ERS at-a-glance series. Which in addition to these annual summaries, also includes specialized topics such as those last year on rural manufacturing and rural education.

SLIDE 3: This year we cover a number of topics: the link to opportunities and challenges currently facing rural areas, this includes population change and its components, it includes rural-urban differences in employment growth, we also look at population employment, poverty trends by race and ethnicity this year, and we have a final section on rural aging. As you'll see when we get to the first map, we're defining "rural" in this report at the county level using the current set of non-metropolitan counties, so I will be using the terms "rural" and "non-metro" interchangeably here.

SLIDE 4: Moving to our first discussion of recent population change, one of the headlines from this report is that rural America increased its population in 2017 after six years of population loss. You can see that if you follow the black line on this graph to the far right for the first period of population increase in 2017. It's a small increase, but it's continuing, as this graph shows, it's continuing an upturn in rural population since 2013. And in this report I focus a lot on this five year period that coincides with this population upturn, in line with improvements, generally in labor market conditions. What this graph is showing with the other two lines is that all the recent upturn in rural population, comes from higher rates of net migration. That's inmigrants minus out-migrants as opposed to, and that's the green line, as opposed to natural change, which is births minus deaths on the red line. The green line showing that net migration has been on this upturn in recent years increasing to essentially zero in the latest year, but during the same period population growth from natural change, births minus deaths at the red line, continued this long-term downward trajectory due to a lot of things: due to lower fertility rates, an aging population, more recently to increasing mortality rates among some age groups. So with natural change projected to continue this decline, it's easy to see how future population growth in rural America will increasingly depend on positive net migration.

SLIDE 5: So how does this trend look at the local level? This map is showing net migration trends, but first off this map is showing how rural is defined here as counties outside of metropolitan areas, those are shown in gray, non-metro counties cover about three quarters of U.S. territory, but includes just 14 percent of residents. So this map shows the change in net migration rates, again between 2013 and 2017, and it makes clear just how much population trends vary at the local level. The most rural counties are showing improvements in net migration during this period, in line with the overall national trend, these are the counties in yellow, in light green, and in dark green. So the counties in yellow are still losing population through net out-migration, but at lower rates of net out-migration. Many of them are found in more remote areas such as New England, or in high poverty areas in the South. Another close to 500 rural counties switched from net out-migration to net in-migration during this period, these are the ones in light green. Most of these are in high amenity regions such as in Florida, the Upper Great Lakes, the Ozarks, Pacific

Northwest, and they are found along with dark green counties that showed they had net in-migration in both periods, but showed an improving rate of net in-migration. So to despite that overall trend, we see here that quite a few rural counties are showing a decrease in net migration rates, these are the counties shown in red, and are primarily in low-density remote areas such as the Great Plains, in Appalachia from Eastern Kentucky all the way up to Maine, and in high poverty areas in the Southeast and border areas of the Southwest. Now some of these areas, including parts of North Dakota, Montana, New Mexico, Texas, have lost jobs in recent years related to cutbacks in oil and gas production, that explains some of the net outmigration. Other regions such as Eastern Kentucky and West Virginia have been hard hit by the opioid epidemic.

SLIDE 6: So demographic trends not only vary from place to place, but they vary significantly by race and ethnicity. These pie charts show that rural America is less racially diverse than urban areas; whites make up nearly 80 percent of the rural population, that's the blue section of the pie chart on the left, but less than 60 percent of the urban population. Hispanics are the fastest growing segment of the rural population, but they still make up just nine percent of the rural population, the gray segment, compared with 20 percent in urban areas. Blacks constitute eight percent of the rural population, that's orange, while American Indians, shown in light blue, are the only minority group with a higher rural than urban share.

SLIDE 7: The overall rate of population change in rural areas maps differences among race ethnicity groups. This graph is showing the annual rate of population growth, from again 2013 to 2017, for the total population on the left side, that's that first group of bars, so you see that first period of population growth in 2017 over there on the left side, and for four race ethnicity groups. What we see is that the population losses among whites and blacks are balanced by population gains among American Indians and Hispanics. The white population continues to decline, but showed an improvement in the rate of population change. This improvement is likely due entirely to that upturn in net migration that we saw in the first graph, because natural change is contributing less over time to population growth among rural whites. The rural black population continued to lose population in 2017 as well, but at a higher rate of loss than earlier. American Indians increased their rural population throughout this period, but at diminishing rates, and the Hispanic rate of growth remain near two percent per year throughout the period.

SLIDE 8: Moving now to look at employment trends. If we were looking at unemployment trends, we would see that the rural unemployment rate has declined quite a bit during this decade, by more than half in fact, and this is very similar to the urban trend, but that's not what this graph is showing. What it's showing is employment change, and its employment change relative to the employment level in 2008, and this is painting a very different picture. Urban employment has grown steadily at 1.6 percent per year since 2009, while the rural employment rate has grown at about a half a percent per year, so much slower. So why do we have this mismatch between declining unemployment in both rural and urban areas, but much slower employment growth in rural areas?

SLIDE 9: This table shows that it's partly tied to differences in population trends. So here we are dividing employment growth into portions corresponding to three factors, to change in population overall, and this is for people aged 16 and older. So the change in the overall population, change in labor force participation rates because not everyone is in the labor force, and changes in the unemployment rate. So in non-metro areas, and this again is covering the period of the last five years, 2013 to 2017, and in non-metro areas during that period the unemployment rate fell from 8.5 percent to 5.5 percent. And what this table shows is that that would have corresponded to an increase in employment of roughly of 622,000 if the size of the labor force had remained unchanged. But the non-metro labor force did change, and one way it changed is that the population grew older and lots of baby boomers started retiring. As a result the labor force

participation rate drops considerably, and this corresponds to a reduction in rural employment of 277,000 during this period. So rural aging, along with other factors, offset almost half of the employment growth that would have come from the falling unemployment rate. The table shows that metro areas also saw decline in the labor force, but this offset a much smaller percent of metro employment growth. We have a very little change in rural employment associated with population change, and that's because population change was close to zero. In metro areas by contrast, population growth corresponding to nearly six million additional jobs and that accounts for more than half of the total employment growth. So these demographic factors help explain why rural employment rate has been able to fall without a matching increase in employment growth.

SLIDE 10: Switching now to look at poverty traps, the rural poverty rate was over 16 percent in 2017 compared with less than 13 percent for urban areas. The rural poverty rate fell two percentage points from 2013 to 2017, and that's what this graph is showing, the first blue and orange bar on the left is for the total population and it drops two percentage points that translates almost a million fewer residents in poverty in just five years. However, urban poverty rates, it's not shown on this graph, but urban poverty rates declined at a higher rate causing an increase in the rural-urban poverty gap. The chart is showing that poverty rates declined for all race ethnicity groups, but remains highest among racial and ethnic minority groups. The rural black populations showed the largest drop in poverty, declining by more than five percentage points, but blacks continued to have the highest poverty rate of among all rural race ethnicity groups. They comprise eight percent of the rural population, but 15 percent of the poor population. Whites have historically had much lower poverty rates than that, and their rate fell almost two percentage points during this period, despite this much lower poverty rate the majority of the rural poor are white, they make up 80 percent of the rural population, and 65 percent of the rural population in poverty.

SLIDE 11: Our last section is on rural aging. So population aging is an emerging national trend, but rural communities are on the leading edge of the trend, so to speak. In the United States 19 percent of the rural population is 65 years or older, compared with 15 percent in urban areas. And rural counties, which is what this map is showing, rural counties make up 85 percent of what I call "older-age counties," those with more than 20 percent of their population aged 65 and older, or older. Many rural areas, will always have the sufficient capacity to address many of the growing challenges associated with aging, so what this map is showing is that very different population trends lead to rural aging. So there are different pathways to become an older-age county, on the one hand many rural counties grow older as a result of retiree attraction, or attracting older-age migrants, usually this is to more scenic destinations. One-third of the older-age counties, and they're shown here in blue, are classified by ERS as either retirement destinations or as having recreation based economies, and you can see these in the Upper Great Lakes, in Appalachia, and the Ozarks, in Texas Hill Country, in the center of that state, and throughout the Rocky Mountain West. Most of these counties have seen an upturn in their population growth caused by higher net in-migration since 2013. Another set of counties grow older for a different reason due to chronic out-migration, because out-migration consists overwhelmingly of young adults, the loss of young adults, and in effect their future children leaves behind an older population; it's often referred to as an aging in place population. Again, another third of older-age counties are classified as persistent population loss counties, and these are shown in green. They are primarily located in the Northern Great Plains and the Corn Belt, and many of these counties saw decreases in net migration since 2013. So you have these different, very different processes; you have retiree in-migration, you have young adult out-migration, they overlap in some places but this map shows that are there very distinct regional patterns associated with these trends, and that these patterns also reflect differences in rural well-being and in economic development prospects. For instance, older age retirement and recreation counties have larger populations on average. 18,000 people

for the average retirement county compared with less than 6,000 people in older-age persistent population loss counties. The persistent population loss counties are also more remote on average, and these differences can affect socio-economic outcomes and they come with policy implications for programs serving the needs of older populations. Issues like transportation and healthcare, access to retail services, and other needed services, these are generally harder to access and maintain in areas that are more sparsely settled or more remote, where these population loss counties are concentrated.

SLIDE 12: So in summary, we're seeing an upturn in rural population trends since 2013 in line with improvements generally in the rural economy. However, population loss from natural changes will continue falling, so future growth will rely more and more on positive net migration on more people moving into rural areas than moving out. But it's also important to keep in mind that net migration tends to favor more densely settled rural areas, areas with attractive scenic qualities, or areas that are near large cities. Fewer migrants are attracted to sparsely settled, less scenic and more remote location, and this sort of compounds economic development challenges in those areas. And then you have aging and other demographic factors which are swelling rural employment growth, as we saw, by reducing the size of the potential labor force. And finally rural aging is happening in different places for very different reasons, and these differences affect rural well-being and economic development prospects. So thanks very much for participating and I'm happy to answer questions, or try to answer questions.

Thank you very much John. As John said, we're going to take some of your questions now. Again, if you have questions you can type it into the chat feature at the bottom left-hand corner of your screen. And we already have some questions for you, the first one is, what is your definition of rural counties and does that vary from your non-metro definition?

No, as I mentioned at the outset, I was using the terms "rural" and "non-metro" interchangeably in this presentation, I'm sorry if that's confusing. So non-metropolitan areas are outside of the commuting range, basically of cities of 50,000 or more. And this is a definition that is set by the Office of Management and Budget and is used as a sort of standard way of defining urban labor market areas and the areas that fall outside of those larger cities.

Okay we have two questions, and I believe they're about slide number eight so I'm going to bring slide number eight up.

SLIDE 8: The first question is, does the employment growth graph show place of residence or place of employment? Could people living in non-metro counties be employed in metro counties?

This is from a current population survey, this is from the LAUS data, and I do believe that that is based on place of employment. So you're right that there will be some differences, there would be slight differences if we were to show this chart by place of residence. So that does affect it to some degree what we're seeing here yes, but I don't think it is a large effect.

Okay and the second question is, this person was curious about how metro and non-metro seemed to decline similarly during the recession, but then diverged after the recession. Can you comment on that at all?

That's a very good question, and it's a pattern that we've seen in the previous two recessions as well. So there is this tendency too, for the recession to have a similar impact nationwide so that all areas in a sense share in the downturn at a similar rate, and yet the recovery seems to be where those spatial differences really manifest themselves. And boy, I don't have a really good set of factors why that would be the case in terms of light ideas, but I do know that is a pattern that we saw in the early 2000s as well, during the

recession that preceded this one, and in the 1980s. So yeah, it's during periods of recovery where rural areas tend to lag behind metro areas, and I'm afraid I don't have a good explanation for why that would be. Interesting question.

Okay. Another question about, what is your definition you're using for urban and rural in this report? Is there a specific number of people per county that makes it metro or non-metro?

No, it doesn't have to do with the number of people in a specific county, it has to do with whether or not you're part of a larger labor market region of cities of a particular size. And in this case the threshold divide is between cities that are 50,000 or more, and those that are less than 50,000. So non-metropolitan territory will include urban areas up to 49,000 people, and so that's that sort of the key cutoff between non-metropolitan areas and metro areas. And the cities are defined sort of as broad labor market regions or commuting sheds, so these cities, so metro territories includes suburbs, fairly broadly defined as well, so that's the key cutoff it has. It does not have to do with the actual population size of any given, within the county.

And a similar question has to do with the definitions for the racial definitions or ethnicity definitions. For example, how is black defined in the racial definitions? Is that an expansive to include potentially African immigrants or people with Caribbean heritage?

Well certainly, and this is based on census questions, and this is a self-identified race and ethnicity categories. An ethnicity question is simply asked whether you are of Hispanic origin or not, and that has a very detailed sort of geographic components to it including people from Mexico, Central America, South America, Caribbean, and that's a separate question from the race question. So you can have different race categories for non-Hispanics and for Hispanics. And for most of these, most of this analysis, we are looking at the race categories are those that say they are not of Hispanic origin, and then the Hispanic population can be of any race.

Okay. We have another question, the distance between rural and metro for economic development and employment continues to grow, at what point does this become a concern regarding equity of public services?

Boy that's a good question, and I think you're already seeing major challenges in some rural areas in terms of decline and services related to both population loss and the aging of the population. So there's been some recent data published, not by ERS, that has shown a very strong connection, say between the decline and retail services in areas and the increase in aging in those areas is a very strong correlation, and this gets to a lot of those areas that are aging because of out-migration of young adults and its associated, and our areas of population decline. And that process makes it really hard to maintain needed services such as in healthcare and other social services.

Okay, I have another question, do you have geographic trends of the highest Hispanic in migration? They're assuming that it's correlated with agricultural type industries.

Yeah, for the last 30 or so years there's been a very high level of in-migration to very specific, very to sort of areas, rural areas, with very specific sort of industrial profiles. And that, a lot of it for instance is related to food processing, especially meat packing, and yeah so to those agricultural related manufacturing industries, they have been the areas in the Midwest, in the Southeast, related primarily to meatpacking, but to other sort of low-skilled, low-wage manufacturing concerns in regions throughout the country. So yes, it's a very particular, has been a very focused form of migration of Hispanics and other immigrants to rural areas. There's also quite a bit of in-migration in places, in say high-amenity areas, where there is an

increasing demand for service workers. So you also see it in in some of these retirement and recreation areas.

Okay. We have a question about, have you examined the role of natural amenities in determining rural net migration?

Certainly, it is a major determinant of where population tends to be focused in rural America. I would point you to a study, it's a few years old now, on natural amenities in its relationship to population change by David McGranahan. And he was showing that, you know, half of the population change over a long period of time, over a 30-year period, could be attributed to simply looking at the differences in natural amenities of a given county. So a county with attractive features, scenic features such as mountains or lakes, bodies of water and of amenable climates, are those that tend to attract in-migrants, and that's sort of a very unchanging determinant of rural population growth over several decades.

Okay, there's another question about employment growth. Is there a pattern and what sorts of jobs were lost in what jobs are coming back to rural areas, for example manufacturing or service sector?

Yes, I would say that sort of generally speaking, over the last several decades the disproportionate number of jobs, or the net increase in jobs, has been in the service sector. This has been led by growth in health services, and in the recreation and hospitality industries; those have sort of been the leading edge. We've gone through some periods of cutbacks in manufacturing over the past couple of decades, some of them quite serious cutbacks for non-metro manufacturing, but some of that is also coming back in more recent years. And there's been a boom in the oil and gas industry in the last 10 or 15 years, and that's been cyclical as well, but I would say generally speaking it's been employment growth has mostly been led by jobs in service industries.

SLIDE 11: Okay, we have a question about Slide 11, the rural aging map, which I'll bring up. What do you attribute to the counties with the populations, with the 19 percent of rural population 65 years or older? For example, a small population or higher mortality, they're asking, they're from Georgia so they're asking, I guess, what those counties would you tribute that to?

I'm not sure what we're looking at. Let's see, so there's Georgia.

Yellow, I think they mean the yellow is less than 20 percent.

Right, so I would say those are, so a lot of the counties are in high minority regions in Southeastern Georgia with a large African American population. And they are, they have a slightly younger age structure than for white population, so they are certainly aging, but they are not quite yet at that 20 percent threshold. So fertility rates decline a little bit slower in those counties and so you have a somewhat younger population in a lot of those areas, that would be one explanation. And in others it's just, a lot of those counties, although I know that there are retirement destinations in some of those places, and there is a trend of return-migration among rural elderly to those areas. It hasn't been at the level to sort of cross that threshold, or to be guite have the same older age structure as counties in other parts of the country.

Okay, there's a question on the overlap between recreation counties and retirement destination counties, how common is it find those two in a single county?

I think it's quite common, I think they do overlap. The definitions are different, for the identifying retirement destination counties is looking at patterns of net migration, so a county is considered a retirement destination if a certain percentage of population growth is from the net in-migration of people. And they actually use, we actually use a slightly younger cutoff for identifying these areas, it's people 55 years or

older, and if the net migration rate is at a certain level, they're considered retirement destinations. The recreation counties are identified by sort of their employment profile, by the existence of, sort of, hotels and motels, the importance of leisure, and recreation employment to that economy. So it's a very different take, but there's quite a bit of overlap in those two types of counties. I can't say exactly how much it is, but I would say it's probably about, it's a probably a 50 percent overlap, but I would have to look to see exactly what that number is.

Okay we have one more question, the report briefly mentions higher mortality rates in middle-aged adults in rural America, is that mainly being driven by the opioid crisis or is this speaking to something else?

I would say that the drug crisis in general is a big part of that story, yes. And you can see that in the geographic patterns of this rather unprecedented phenomenon of having a reversal in mortality rates, which of course for a century and a half have been declining as life expectancy has increased. To see that reverse is a bit of a surprise, and yes the county patterns do suggest a very high correlation between areas that are hard-hit by not just opioid crisis, but other drugs as well, and sort of broader health related mortality issues as well. But yes, there is a connection, there is a very strong connection between the opioid crisis and these rather surprising increases in mortality rates, especially for younger and middle-aged age groups.

Okay, we have just one more question, are migration rates affected by geographic closeness to metro areas? For example, counties along the East Coast are more clustered, does this lead to higher net migration in and out of these counties as opposed to say the Midwest or Western regions?

Yes, absolutely. I mean you can think about how suburbanization works for one thing, the development of suburban trends that happens in rural counties, so you do have that impact. A rural county that is, that can access the amenities that are found in urban areas, not just jobs, but you know shopping and cultural amenities, they have an advantage over more remote counties and are usually, we see that they're able to retain their population more successfully, and they attract a new suburban development, new people moving in. A high amenity county, say a county with a nice lake, or you know something, attractive scenic qualities, will develop, will attract more people if they're closer to a city than the same county located, you know, 100 miles from a large urban center. So that access, that proximity to large cities does make a very big difference in terms of population change.

Thank you, John. That is all the time we have today for questions. Thank you all for joining us, I just wanted to remind you that this webinar was recorded, and it will be closed caption and posted on our website at www.ers.usda.gov/multimedia. And thank you all again, and have a great day.