## Webinar Transcript: Rural America at a Glance: 2021 Edition - YouTube

Good afternoon, everyone, and welcome to our webinar: *Rural America at a Glance 2021 Edition*. My name is Valerie Negron, and I will be your host today. As a reminder, this webinar is being recorded and will be posted on the ERS website next week. If at any time during the webinar you have questions, please enter them into the chat feature at the bottom left-hand corner of the screen and our speaker will answer them at the end of today's presentation. Today our presenter is Elizabeth Dobis. Elizabeth is a Research Agriculture Economist with our Resource and Rural Economics Division. Her research interests center on spatial economic analysis, particularly pertaining to health, demography, and communities. Elizabeth holds a PhD and a master's degree in Ag-Economics Purdue University and a bachelor's degree in Economics and Geography as well as a minor in Mathematics from the University of Minnesota. Thank you for joining us today, Elizabeth the floor is yours.

Thanks, Valerie. As Valerie mentioned, my name is Elizabeth Dobis and I am a Research Agricultural Economist in the Rural Economy Branch at ERS focusing on rural health. I am an editor, as well as one of the authors who worked on one of this on this year's edition of *Rural America at a Glance*. Let's get started talking about this year's edition.

Rural America at a Glance is an annual product ERS releases to give a snapshot of what has been happening in rural America. This year's edition was released yesterday, Wednesday, November 17<sup>th</sup>. Content varies from year to year based on the opportunities and challenges that rural America is facing. And this year, we are focusing on resiliency and recovery of rural communities in the wake of the COVID-19 pandemic. This year's topics include population change in rural and urban areas between the 2010 and 2020 decennial censuses, trends in the intensity of COVID-19 case and vaccination rates, changes in nonmetro unemployment and employment rates in the wake of the pandemic, internet availability and adoption in rural America just prior to the pandemic, and the racial composition and regional concentration of high-minority, persistent poverty counties. In this presentation, we will be discussing the findings associated with these topics in more detail. And just a housekeeping note, in this publication we define rural to mean counties outside of metropolitan areas. So, throughout this presentation, I may use the terms rural and nonmetro interchangeably, as well as urban and metro.

Next, I'd like to tell you a little bit about persistent poverty counties. Persistent poverty counties are counties that had an all age poverty rate of 20 percent or more, for four consecutive decennial U.S. Census measurements, dating back to 1980. As of 2015, there were 353 persistent poverty counties in the United States with approximately 300 of those in rural areas. Persistently poor counties often have fewer resources for weathering economic and social stress, making them less resilient to these stresses and slower to recover. So, to highlight differences in resiliency and recovery among rural counties in the wake of the COVID-19 pandemic. Throughout much of the report we distinguish between persistent poverty counties and counties that are not persistently

poor. We'll start our exploration of this year's *Rural America at a Glance* with population change over the last decade. This will present a picture of the attractiveness and overall prosperity of rural America, prior to the pandemic.

This table shows the population statistics for counties by persistent poverty and metropolitan status from 2010 to 2020. Nonmetro values are shaded in light orange, while metro values are shaded white. People living in smaller, and more isolated rural settings often experience economic development challenges including difficulty accessing goods and services or commuting to work. In 2020, there were 46 million U.S. residents living in rural areas, comprising about 14 percent of the population. Rural areas experienced a slight population loss between 2010 and 2020, with a decline of 0.6 percent. While urban areas grew 8.8 percent. However, these numbers mask significant geographic differences in population change across rural America. Rural counties that were not persistently poor actually grew 0.1 percent, while persistently poor rural counties declined 5.7 percent. This decline did not necessarily stem from poverty but may also be related to the nature of the local economy.

Next, we discuss population change by state. This table shows the states that the highest, and lowest, non-natural population change from 2010 to 2020. The top five fastest growing states are shown in light orange. They include North Dakota which has the largest increase in nonmetro population at 12.5 percent, as well as Utah, Idaho, Montana, and Washington. Most of these states are located in the west where abundant scenic amenities and related recreation and retirement-based economies have attracted migrants for decades. The one exception, North Dakota, had a large influx of workers that were attracted by a booming energy sector. On the other hand, the top five states that lost nonmetro population are shown in gray. West Virginia experienced the largest loss in population at 6.6 percent, while Illinois, Louisiana, Arkansas, and Pennsylvania, round out the top five. These states have economies that are more dependent on farming, manufacturing, and natural resource extraction. Next, we'll be focusing on the COVID-19 case rate.

As of early October 2021, there were over 43 million COVID-19 cases and more than 700,000 deaths. This chart shows the weekly cumulative COVID-19 cases, per 100,000, residents by persistent poverty and metropolitan status. From March 15, 2020, to October 3<sup>rd</sup>, 2021. Here, and throughout the rest of this report, when we are comparing metro and nonmetro statistics metro will generally be shown in blue and nonmetro in orange. And in distinguishing statistics by persistent poverty status, we use a solid line to represent persistent poverty counties, while a dotted, or dashed, line represents counties that are not persistently poor. There have been four surges in new cases throughout the pandemic and each has contributed to the cumulative case rate differently. The initial surge, from March to May 2020, occurred mainly in large metropolitan areas, with persistently poor urban counties leading weekly rates of new infections. This is apparent at the far left of the chart where the solid blue line is higher than any of the others. During the second surge, in July and August 2020, the pandemic spread to rural areas. With persistently poor rural counties leading weekly rates of new infection and gradually closing

in on the cumulative case rate in persistently poor urban counties. This is illustrated in the chart as the solid orange line increases and gets closer to the solid blue line. By late September 2020, when the third and most severe surge started, persistently poor rural counties led the nation in cumulative cases per hundred thousand residents. This is when the solid orange line surpasses the solid blue line. However, no particular county type led this new co- the surge in new COVID-19 cases during the surge. And after a steep decline in new infection in late January and February 2021, the third surge ended, and cumulative cases leveled out. A fourth surge began in July 2021, with the spread of the new highly infectious Delta variant. Rural, persistently poor counties, again led new cases through much of the surge, as is apparent in the higher slope of the orange line at the far right of the chart, especially when compared to other lines. Thus, as of early October 2020, the disparity in cumulative cases between rural, persistently poor counties, and all other counties, reached its highest level since the pandemic started.

Next, we will touch upon COVID-19 vaccination rates. This chart shows the share of the population that is fully vaccinated in the United States by persistent poverty and metropolitan status between January 3<sup>rd</sup>, and October 3<sup>rd</sup>, 2021. Emergency use approval was given to the first COVID-19 vaccine on December 11th, 2020. And the first non-trial doses of that- of the vaccine were administered a few days later. During the early phases of vaccination, the percentage of fully vaccinated people increased at roughly the same rate, regardless of persistent poverty or metropolitan status. This is apparent at the far left of the chart, where all of the lines are increasing together and by mid-April 2021, vaccination rates were slightly above 20 percent. All adults became eligible for vaccination, nationwide, on April 19, 2021. Subsequently, the share of fully vaccinated residents increased faster in urban than rural areas. While vaccination rates in poor- persistently poor counties were a few percentage points lower than in other counties. The chart reflects this change as the blue lines increase faster than the orange ones, while dashed lines are higher than the solid lines. This trend changed with the emergence of the Delta variant and the fourth surge in new COVID-19 cases. And the gap between persistently poor counties and counties that are not persistently poor, started to close in mid-August. This is shown at the far right of the chart as the solid and dashed lines begin to converge. However, as of early October 2021, the 42 percent vaccination rate, in rural counties, still trailed behind the urban rate of 53 percent.

Next, we will discuss the economy in the wake of the pandemic. This chart shows monthly unemployment rates from January 2019, to July 2021, by persistent poverty and metropolitan status. Nearly a decade of uninterrupted decline in rural unemployment rates occurred prior to the COVID-19 pandemic. However, once the pandemic took hold unemployment rates reached levels not seen since the great depression, peaking in April 2020 at 13.6 percent in rural areas and 14.6 percent in urban areas. While the overall rural and urban trends are quite similar, things vary more when also accounting for persistent poverty status. Prior to the COVID-19 shock, unemployment rates in persistently poor counties were higher than in counties that were not persistently poor. This is apparent at the far left of the chart where the solid lines are above the

dashed lines. By the time the economic downturn took full- a firm hold in April 2020, the unemployment rate for rural persistently poorer counties had doubled, while it had tripled for other rural counties. Urban counties displayed similar increases, suggesting that the employment shock at the start of the pandemic was not as large in persistently poor counties as in other counties. The initial employment recovery repaired0- stronger appeared stronger in rural counties than urban counties. But since October 2020, unemployment rates have been lower in counties that are not persistently poor. You can see this in the chart where the orange lines are lower than the blue lines immediately after the spike in the unemployment rate, but after a few months the dashed lines are lower than the solid lines. As of July 2020, the unemployment rate was lowest in rural counties that were not persistently poor at 4.7 percent, followed by urban not persistently poor counties at 5.7 percent, and persistently poor rural counties at 6.7 percent. Finally, persistently poor urban counties had the highest unemployment rate at nine percent. These rates are still higher than their pre-pandemic values, but they demonstrate greater recovery in rural areas than in urban areas.

Next, we will discuss change in employment label- levels. Because unemployment rates are calculated using the labor force participation- participation rate, and therefore accounts for changes to the share of the working age population that is actively looking for work, they only tell part of the story. So, looking at changes in unemployment- in employment levels helps us understand the impact of the pandemic-driven downturn on jobs. This chart shows the percentage change in employed workers by county, persistent poverty, and metropolitan status, from January 2020 to January 2021. The orange bars indicate rural values, while the blue bars indicate urban values. Regardless of whether a county was urban or rural, persistently poor, or not, employment was lower in January 2021 compared to a year earlier.

However, the decrease in employed workers was much smaller in rural counties than urban counties. And rural persistent poverty counties lost the fewest workers at 2.9 percent, while urban persistent poverty counties lost the most at 9 percent. These changes mirror the trends that we saw in unemployment rates.

Next, we will focus on broadband availability and adoption prior to the pandemic. Internet availability and adoption has been particularly important during the pandemic as work, commerce, schools, and entertainment, moved online. Households with slow internet, or no internet, connection may have had difficulty completing work and assignments without internet access through public facilities such as schools or libraries. Additionally, these residents may not have been able to reduce the risk of contracting COVID-19 by using services like e-commerce and telehealth. Therefore, households that may not be able to afford an internet subscription, and communities without internet access or with slower internet speeds, may be less resilient to personal and economic stresses during the pandemic. In June 2019, more than 90 percent of U.S. residents had moderate or high-speed broadband internet service available in their census blocks. However, 72 percent of rural residents and 63 of residents in persistently poor rural counties had such access. The average share of residents in census blocks with moderate or high speed

broadband was lower in rural counties than urban counties, as well as in persistent poverty counties when compared to counties that are not persistently poor.

Next, we will discuss regional variation in broadband availability. This map shows moderate or high high-speed broadband availability in nonmetro counties by persistent poverty status in June 2019. A county is considered to have high internet availability if the share of its residents with moderate or high speed internet available in their census block is higher than the national county average. Looking at the dark yellow counties, we can see that persistently poor counties with high internet availability were clustered in and around eastern Kentucky and southern Texas, while clusters of low internet availability, which are indicated by a light yellow shade, were in the deep south and southwest. Dark gray indicates counties with high internet availability that were not persistently poor. These counties were clustered in the upper Great Plains and eastern Mountain States, as well as scattered throughout the eastern half of the country. Clusters of low internet-low internet availability among counties that were not persistently poor were in the lower Great Plains and western Mountain States. These counties are a lighter shade of gray.

Next, we discuss whether households subscribe to internet services, which is also called internet adoption. This chart shows internet subscription and access for households by county, persistent poverty and metropolitan status, over the five years from 2015 to 2019. It differentiates between households with an internet subscription at home, shown in green, households that do not have an internet subscription, but can still access the internet at home through service provided by another, like a community or a university, shown in orange and households without internet access at home, shown in blue. Members of these households must access the internet outside the home in locations like a public library or a coffee shop. Fewer rural households had an internet subscription than urban households. And persistent poverty counties had a larger share of households without internet adoption than counties that were not persistently poor. Therefore, we can see that only 64 percent of households in rural persistent poverty counties and 76 percent of households in urban persistent poverty counties have an internet subscription. While 77 percent of other rural counties and 85 percent of other urban counties have an internet subscription. These gaps, in internet subscriptions, suggest that households in persistently poor counties had additional barriers to internet adoption, like affordability and digital literacy.

Next, we will discuss the types of internet services households adopt. This chart shows the type of internet subscription for households with internet service, by county metropolitan status, over the five years from 2015 to 2019. Rural values are shown in orange, and urban values in blue. Wired sources such as cable, fiber optic, or DSL, are the most common internet subscription type in both rural and urban areas, with 82 percent of rural households and 56 percent of urban households adopting this type of internet connection. However, many urban households have subscribed only to a cellular data plan for their internet access. In fact, nearly five times as many urban households as rural households have adopted the internet in this way. This may be attributed to the lower volume of cell towers in rural areas or being unable to afford only- or only being able to afford one type of subscription. Satellite internet service is another option

households may choose for internet adoption, especially in rural areas where wired services may not be available or cellular data coverage is bad. One and a half times more rural households access the internet via satellite connections than only cellular data plans.

Next, we will focus on race in nonmetro persistent poverty counties. The geography of persistent poverty counties is strongly associated with historical patterns of settlement and minority groups are often highly concentrated in persistent poverty clusters. This map shows nonmetro counties by persistent poverty status and predominant race or ethnicity. The predominant race or ethnicity was determined at the state level and indicates the race or ethnicity that has been historically predominant in those locations. In the rural persistent poverty counties, located in the southeastern Coastal Plains, non-Hispanic Blacks make up 43 percent of the population. These counties are shown in yellow and stretch from North Caroline to Louisiana and Arkansas. On Texas, New Mexico, and Colorado, 63 percent of the population in rural persistent poverty counties is Hispanic. These counties are shown in teal. The non-Hispanic American Indians and Alaskan Natives make up 46 percent of residents in rural persistent poverty counties scattered across Alaska, Arizona, Oklahoma, Utah, and the northern Great Plains, shown here in light blue.

The remaining rural persistent poverty counties shown, in navy blue, which is a very dark shade, pretty close to black and some- when you look at it in some lights, are mostly in the southern Appalachians and the Ozarks and are predominantly non-Hispanic Whites.

Finally, we will discuss the racial and ethnic composition of rural counties. This chart shows the share of the population, by race and ethnicity, in nonmetro counties by persistent poverty status in 2020. The pie chart on the left shows values for rural areas that are not persistently poor, while the chart on the right shows values for persistently poor rural areas. Comparing the two pie charts, it is easy to see that the persistently poor rural areas are more racially and ethnically diverse than places that are not persistently poor. In fact, when comparing the blue wedges of the pie charts, which represent non-Hispanic Whites, to all the other colors, we see that the overall share of racial and ethnic minorities in persistently poor places is more than double the share in other rural places. Diving into the numbers, we see that among rural counties that are not persistently poor, non-Hispanic Whites are 79 percent of the population, while they are only 53 percent of the population among persistently poor rural counties. Non-Hispanic Blacks, which are represented by the orange wedge, are only nine percent of the rural population outside of persistent poverty counties, but they can comprise 25 percent of the population among persistent poverty counties. The share of Hispanics among rural persistent poverty counties is 12 percent compared to the 9 percent among counties that are not persistently poor. They are represented in green. The red wedge represents the share of non-Hispanic American Indians or Alaskan Natives and among rural persistent poverty counties it is nearly five times the share it is among other counties. Finally, because the share of non-Hispanic Asians living in rural counties is quite small, they are combined with the individuals of more than one race, to create the non-Hispanic other category, which is shown in yellow. This category is slightly larger among counties that are not persistently poor than among counties that have persistent poverty. Since the overall presence of racial and ethnic minorities is larger in rural persistent poverty counties, the findings in this report reflect, to a large extent, the ongoing challenges rural minorities are facing.

So, to summarize, rural America experienced the economic and social shocks from the COVID-19 pandemic differently than urban areas. The unique characteristics of rural America affected their resiliency too, and recovery from, these shocks. The main findings presented in the 2021 edition of *Rural America at a Glance* include: overall rural counties lost population from 2010 to 2020, however, population change varied across the nation, reflecting local economic differences and differences in county persistent poverty status. Since mid-September 2020, rural persistently poor counties have led the nation in cumulative COVID-19 case rates when compared to urban counties and counties that are not persistently poor. And as of early October 2021, the rural vaccination rate is about 10 percentage points behind the urban rate. Unemployment rates have nearly returned to pre-pandemic levels in rural counties but are still higher in urban counties.

Rural areas lost fewer jobs during the pandemic-driven economic downturn than urban areas. This is similar to what was observed in unemployment rates. Moderate and high speed broadband availability is lower in rural areas and persistent poverty counties. Household internet adoption follows the same pattern; however, more rural residents have wired broadband subscriptions at home while urban residents are more reliant on only cellular data plans. Finally, rural areas are persistently poor sorry- finally, rural areas that are persistently poor have more racially- are more racially and ethnically diverse than those that are not. And those minor-minorities are clustered throughout the country. And this concludes the presentation portion of our webinar. To access *Rural America at a Glance 2021 Edition*, or other ERS products, visit <a href="www.ers.usda.gov">www.ers.usda.gov</a>. For questions about the report, or other rural data and research, please contact either me or John Cromartie at the emails listed here. You can also find our contact information on the ERS website. We'll now move on to the Q&A portion of our webinar.

Thank you, Elizabeth, we'll go ahead and open the floor for questions now. Before we begin, I'd like to introduce John Cromartie who will be supporting Elizabeth with today's questions. John is a Geographer with ERS's Resource and Rural Economics Division and one of the co-authors of this year's edition of *Rural America at a Glance*. Thank you for joining us, John.

Now for our first question: Liz, you talked about the importance and availability of moderate and high speed broadband internet access. What do these terms mean?

Thanks, Valerie, for that excellent question. So, in *Rural America at a Glance*, this year, we defined moderate speed broadband to have a download speed of between 100 and 999 megabits per second, while high-speed broadband internet was defined as having a download speed of at least 1,000 megabits per second. And so, what you'll notice is that these thresholds are definitely higher than the federal definition of broadband which is 25 megabits per second download speed and three megabits per second upload speed.

Thank you, Liz. Next question: on slide 15 Florida did not have a green portion, what does that mean?

Thank you for the question. John was working on this portion of the report so I'm going to ask him to respond for you.

Yes, Thank you, Liz. This is John Cromartie. The persistent poverty map is showing uh- the predominant race and ethnic group by- by state. So that shows that, for Florida, the dominant race group in those counties, that our persistent poverty was non-Hispanic White, that does not necessarily reflect the demographic profile of each of the individual counties in Florida.

Thanks, John. Next question: how is wired broadband defined?

So, I'll take that question. When we're talking about wired broadband we're talking about cable, we're talking about fiber optic, we're talking about DSL, we're talking about things that are transmitted via a wire. Other types of internet that may be accessed wirelessly, like cellular data, are counted as a separate type of internet access.

Thank you, Liz. For your next question: is there a complete list of all states and their nonmetro population changes for 2010 through 2020 available?

John, would you be able to answer that one please?

Yes, I believe uh those statistics are available on the ERS State Fact Sheets but is- but also, we published- ERS published a Chart of Note this week that shows the nonmetropolitan population change rates for each state. And the nice thing is it shows it in relation to the total population change in those states. So you can see on that map, for instance, that over 20 states showed a population decline in the nonmetro portion of those states.

Thank you, John. Next question for you and Elizabeth: Why weren't COVID-19 deaths included in your analysis?

Thanks for the question, Valerie. I actually think that's a really important thing to address. We chose not to include COVID-19 deaths in the report, not because they're not important, but because COVID-19 cases were more closely linked to the resiliency and recovery in rural communities. So, and this is because published COVID-19 case rates were what drove the policies and the recommendations related to location closures, and health behaviors like wearing masks and social distancing. An additional thing is space is at a premium in this report and so we really needed to focus on what was most relevant to the resiliency and recovery of rural America.

On slide six, Liz, you showed that five states with the largest rural area population growth and declines. Can you tell us what those states are doing overall? In other words, are the states that we are seeing the largest declines in rural area population also seeing a decline in populations for the state overall?

I'm going to ask John to respond to this question as well.

Sure, yeah, again referencing the ERS Chart of Note, you can see those patterns and, in fact, among those 20 plus states that declined in nonmetro population, most of them were in states which also either declined in total population, there were three such states, and- or grew at a fairly slow rate, below 5 percent. This represents- this is seen a lot in states in the Northeast and in the Midwest. There are a couple of exceptions to this rule in the Sun Belt. For instance, in I believe, South Carolina and Arizona, you have states in which the nonmetropolitan population declined, but the overall state was growing quite rapidly over- over 10 percent.

Thank you, John. Here's your next question: Does the population loss statistics control for counties that have changed from nonmetro to metro? So, if a rural county grows, it becomes urban/ suburban. How have your measures taking this into account?

That's a very good question. In this case, the statistics in this report do not reflect changes in classification. In other words, the statistics are for a constant set of metro and nonmetro counties, and it's those that were based on the 2010 Census and were released in 2013. So in a couple of years, when the metro areas were- are updated by the Census and by the Office of Management Budget, you will see, most likely as you do every decade, a decline in the nonmetro population as many counties get reclassified from nonmetro to metro.

John, and here's a similar question: Did you treat the metro/ nonmetro area distinction as fixed at the beginning of the observation period? If not, do you know whether any nonmetro areas may have been reclassified as metro during the observation?

Right the second answer applies here. We um- are reporting these statistics with a constant set of metro uh and nonmetro counties. Those that were defined close to the beginning of this decade based on the 2010 Census statistics. So you don't see any effect of reclassification taking place.

Thank you, next question: Is there data- sorry let me rephrase that- do we have data about population change by persistent poverty status?

I don't believe that we have any that are published but certainly- certainly possible to calculate. I'm trying to remember if that was included on that, may have been included on the first table if we can share that first table again. Yes, so we did, we did show population change, the numeric and the population change rate, by persistent poverty and non-persistent poverty status in both nonmetro and metro on that initial population slide.

Thank you, John. Looks like we have one more question. Again, if you have any questions please feel free to type them in on the left hand side of your screen. Last question so far: Do you have- do we have the dominant industry in persistent poverty areas available? Do we have the data on dominant industry and persistent poverty areas?

I can go ahead and take that one. The information on persistent poverty areas, persistent child poverty areas, are all look- are all available in our ERS County Typology Codes and those particular codes also have the information on the economic typology. I can't remember if they

come in the exact same file, or if they are two separate files, however, we don't have anything that marries the two together. So what you would need to do is get the each- each file and um connect them to together to see which counties are dominant in the counties that are persistent poverty counties- which economic types are dominant in the counties that are persistent poverty counties.

All right, that's all the questions we have for today. Thank you for sharing your report with us, Elizabeth and John, and thank you to our listeners for taking time out of your day to join us. As a reminder a recording and transcript of this webinar will be available on the ERS web page next week. Again, thank you everyone, and this concludes our webinar. Thank you.