

Rural America at a Glance, 2023 Edition

Good afternoon everyone, my name is Valerie Negron – your host for today’s webinar. On behalf of USDA’s Economic Research Service, welcome and thank you for joining us.

Today’s webinar presents findings from our latest report, Rural America at a Glance: 2023. A copy of this annual report can be found in the resources tab at the bottom left-hand corner of your screen. Before we begin, I’d like to note that this webinar is being recorded and will be posted on the ERS website next week. If you have any questions, please enter them into the chat feature at the bottom, left-hand corner of the screen and our presenter will answer them during a Q&A session after the presentation.

Now, I’d like to introduce Jim Davis – our speaker today. Jim is a Research Agricultural Economist in the Rural Economy Branch of the Resource and Rural Economics Division. His research interests center on rural development, industrial structure, jobs and worker earnings, and STEM labor markets. Prior to joining ERS, he was an economist at the U.S. Census Bureau and an administrator for the Boston Federal Statistical Research Data Center. Thanks for joining us today. I’ll turn it over to you now Jim.

Thank you Valerie. I am Jim Davis and I’ll be presenting our newly released report titled Rural America at a Glance: 2023 Edition.

The 2023 edition of Rural America at a Glance was released yesterday on the 15th, and was written by Tracey Farrigan, Justin Winikoff and I on the webinar today, as well as John Cromartie, Brandon Genetin, and Austin Sanders, all of us in the Resource and Rural Economics Division here at ERS. The report is released annually, and provides a summary of rural demographic and economic trends with additional topics each year that highlight opportunities and challenges facing rural America. This 2023 edition focuses on population, poverty and labor trends in recent years.

Specifically, the report includes population trends with a focus on migration, an update on rural poverty, housing insecurity which I will define in a few minutes, rural employment and clean energy jobs. Throughout the report, and this webinar, I use the terms “rural” and “nonmetropolitan” or “nonmetro” interchangeably. I define “rural” and “nonmetro” here as the set of U.S. counties outside of metropolitan areas. As you will see shortly, the county maps I will show will indicate rural areas in colors and urban areas in white.

This first figure presents annual total population growth rates in blue, from July through the following June, for three annual periods between 2019 and 2022. Population changes for metro areas are on the left, and those for nonmetro to the right of the vertical dashed line. Focusing on the rural population on the right, we see that annual growth was negative for 2019 to 2020. The first positive population growth for rural areas started in 2020, with a 0.14% growth in the early part of the COVID-19 pandemic, and 0.12% growth from 2021 to 2022. This is around one eighth of a percent per year, which doesn’t sound like a lot, however this represents over 50,000 people. The chart breaks the total change into two parts: the contribution of net migration in gold, and the contribution of natural change in green. Net migration is defined as the number of

people moving into the county minus the number of people moving out. Natural population change is defined as births minus deaths. Natural [population] change remained negative due to more deaths than births in nonmetro counties. The increase in net migration into nonmetro areas from essentially zero to almost a half a percent per year made up for the declines in the natural rate of growth such that overall rural population grew about a quarter of a percent between 2020 and 2022.

We can further break down net migration into the part due to domestic migration and that due to international migration. As shown in the figure in gold, to the left of the vertical dashed line, net domestic migration was negative for metro areas from July 2020 through June of 2022.

Conversely net domestic migration for nonmetro counties to the right of the dashed line was positive, where fewer people moved out of rural counties for urban destinations than did people that moved from urban places to rural ones. These increases in rural net domestic migration comprised most of the total net rural migration in blue. We saw in the previous figure that net migration resulted in rural population growth. Though some urban areas lost some population to rural counties, the overall metro population also grew because of international migration into the U.S.

The map shows the net domestic migration rate by county for 2020 to 2022 for the growth rate categories as listed in the legend. It gives a sense of the variation across rural counties for domestic migration. The blue counties were migration destinations. The yellow and gold counties experienced domestic out-migration. Domestic migration favored recreation and retirement destinations, as well as rural locations adjacent to metro areas.

We also performed an analysis in the report of the rural changes due to the new metro area classifications announced by the Office of Management and Budget (OMB) this past July. New metro area definitions are released by OMB every ten years. Most of the figures and maps in the report were created using the prior 2013 OMB definitions. What we found in the analysis is the new 2023 definitions had a relatively minor effect on the total rural population as defined by nonmetro counties. The 2023 definition is based on implementing the OMB 2020 delineation standards announced in 2021 and using the data from the 2020 Decennial Census to define 387 metro areas covering 1,167 metro counties. The definition of a metropolitan area is based on defining central counties with populations greater than or equal 50,000, and adding contiguous outlying counties that are economically connected to the central counties as defined by at least 25% of workers commuting from the outlying county to a central county. The 2023 reclassification resulted in only a 0.4% loss in rural population, by far the smallest change in comparison to the previous historical reclassifications performed since 1950. This is due to a lower national population growth rate between 2010 and 2020, as well as lower levels of suburbanization in this prior decade.

This map shows the counties that remained, metro in grey, and those 72 counties that changed from nonmetro to metro status in blue. It also shows in yellow those counties that remained nonmetro from 2013 to 2023, and the 52 counties that were reclassified from metro to nonmetro status in gold. These 2023 changes in metro area classifications resulted in a relatively small reduction in the nonmetro population of 162 thousand people. By way of comparison, the 2013

edition of Rural America at a Glance reported a decline of 4.9 million people due to metro area reclassification changes from the 2003 delineations to those of 2013, a rural decline of 10%.

The next part of the report discusses how some improvements have occurred for rural poverty over the last ten years. High poverty area status is a measure for resident well-being, and is defined for a county where at least 20% of residents are below the poverty line. We measure area poverty using income data every ten years from the decennial census for 1980, 1990 and 2000, and from the American Community Survey (ACS) 5-year estimates for 2010 and 2020. The 2010 measure is constructed from the 2007 to 2011 ACS estimates, and 2020 from the 2017-2021 5-year estimates which in the report we describe as for the year 2021. We find a downward trend in poverty; however, what we do in the report is use a better indication of area poverty using a measure of persistent poverty over time. This is defined for counties where 20% or more of the population was in poverty for each decennial census measure for the prior 3 decades. For example, for a county to be experiencing persistent poverty in 2021, that county would have high poverty area status for all four ten-year data points of 1990, 2000, 2011 and 2021. In the report we compare county changes in persistent poverty status from 2011 to ten years later in 2021. We find 29 more counties left persistent poverty status than entered persistent poverty designation.

The map shows those rural counties that have experienced persistent poverty over time. It compares persistent poverty status in 2021 relative to its status in 2011. Most persistent poverty counties shown in either green or gold are in the south, though not all. The good news are the counties shown in blue. These are the ones that used to be persistently poor and improved enough that they are no longer so. Overall, 26 counties became persistently poor, and 55 left persistent poverty status. There were 9.7% fewer persistent poverty counties in 2021 than there were ten years prior.

Another measure of interest is housing insecurity. We measure housing insecurity using Comprehensive Housing Affordability Strategy data released by the U.S. Department of Housing and Urban Development (HUD). Housing insecurity is defined in our report as housing that has one of four problems: severe housing cost burden, lack of full kitchen facilities, lack of full plumbing facilities, or overcrowding. These problems can lead to shelter instability and health concerns for households.

This next figure breaks down the percent of households experiencing housing insecurity by income categories and is shown separately for renters in yellow and owners in green. The income categories are as defined relative to the HUD area median family income. The very low and extremely low-income groups together represent the bottom quartile of the income distribution. We see at the bottom of the figure that for the extreme low-income group half of households experience at least one of the four housing problems. A quarter of very low-income households that rent have housing insecurity.

In this figure we show that severe housing unit problems are more common for American Indian or Alaska Native and Hispanic households than for other racial groups. Housing insecurity was about 10 percentage points higher for these groups of households than for all other racial groups.

Next, we show what happened to employment during the COVID-19 pandemic. The two lines in the chart show metro and nonmetro employment over time relative to where it started in the first quarter of 2019, shown as 100%. For nonmetro employment we see the employment effects of the onset of the pandemic in the second quarter of 2020, about a 10% decline relative to the first quarter of 2019 or about 10.5 percent from pre-pandemic peak employment in the fourth quarter of 2019. By the second quarter of this year, rural employment had nearly recovered to pre-pandemic levels. Urban employment had a slightly harder fall, then recovered a little faster, reaching pre-pandemic levels by the second quarter of 2022.

This next map shows rural employment growth hasn't been uniform across states. The map shows the employment change from 2019 to 2022 for the rural portion of each state. This is comparing post-pandemic employment to pre-pandemic employment, essentially skipping over the trough in 2020 we saw in the previous chart. In the map, the blue and green states are those that have experienced nonmetro employment growth.

The last part of the report explores what's happening with rural clean energy jobs. Clean energy jobs are defined by the Department of Energy in the U.S. Energy and Employment Report and include jobs in industries like wind, solar and biofuels. We found that 1% of rural jobs are in clean energy employment. Though there is variation in rural clean energy job shares across states as shown in the map, the jobs are somewhat evenly distributed throughout the country in proportion to total rural state employment. North Dakota, Vermont, and Hawaii are outliers with the highest shares. Texas had a total of 15,000 clean energy jobs, the most of any state.

This chart focuses in on three clean energy industries, solar, corn ethanol and wind, and shows the changes in employment in these industries from 2017 through 2021. In 2021 at the right of the chart, there were almost 30,000 rural jobs in the solar industry, almost 20,000 in ethanol, and 13,000 in wind. We see in the chart that ethanol jobs were most impacted by the pandemic in 2020 as a result of the decline in fuel demand at the time.

This last chart shows the percent of energy jobs by industry category in metro and nonmetro areas in 2021. Each bar is 100% of employment in the industry shown at the bottom. The top portion of each bar in yellow is the metro percentage, and the bottom portion of the bar in green is the nonmetro share. Overall rural jobs in clean energy at 11.3% of all jobs nationally is similar to the distribution of national employment with 11.7% of all jobs located in rural counties as indicated in the figure by the horizontal dashed line. For clean energy industries, ethanol jobs are disproportionately located in rural counties. We can also see in the figure that fossil fuel jobs are more rural.

To summarize, the report includes five main findings. First, the rural population is growing again, after a period of rural population declines or near-zero growth from 2010 to 2020. The rural population grew by a quarter percent from 2020 to 2022. The growth was a result of net domestic migration in favor of rural counties, which overcame some population losses due to more deaths than births.

The report presents evidence of a decline in rural poverty. In 2021, 9.7% fewer rural counties were persistent poverty counties in comparison to 10 years before. Another finding in the report

is that half of extremely low-income rural households experienced housing insecurity, either because their housing was more expensive than they could afford, or the housing was of low quality, or they had too many people living together under the same roof. Housing insecurity was greater for American Indian or Alaska Native and Hispanic households.

We also show in the report that rural employment has mostly recovered from the COVID-19 pandemic, with employment levels and growth rates again similar to those familiar from before the pandemic. Rural unemployment is historically low at 3.8 percent throughout 2022 and for the first half of 2023. In a final analysis, we found 1% of rural workers hold jobs in clean energy industries. The scale of clean energy jobs in nonmetro areas at 243,000 [jobs] is similar in size to the number of nonmetro jobs in coal, oil and gas at 239,000.

This year's Rural America at a Glance report was released yesterday and is available on the ERS website. If you have questions and wish to reach us we have include our email addresses on the slide. I will now turn back to Valerie for the Q&A portion of the webinar.

Thank you Jim. Let's go ahead and take some question from our participants now. As a reminder, questions can be submitted through the chat feature located at the bottom left-hand corner of your screen. Before we begin, I'd like to introduce our panelists, Tracey Farrigan and Justin Winikoff, who will be supporting Jim with today's questions.

Tracey is a geographer with the Rural Economy Branch of the Resource and Rural Economics Division. She conducts research related to rural household well-being with a primary focus on economically distressed communities and vulnerable populations. Tracey's current work includes research on rural communities in the context of enduring poverty, climate change, housing security, food access, and cancer prevention.

Justin is a research agricultural economist in the Rural Economy Branch of the Resource and Rural Economics Division. Prior to joining ERS in July 2020, Justin completed his doctorate in agricultural and applied economics at the University of Wisconsin-Madison. His primary research interests are energy and natural resource economics, with an emphasis on the interactions between energy production and local communities.

Thank you, Tracey, and Justin, for joining us. Now, for our first question. How is individual or family poverty defined and how is that different from persistent poverty?

Thank you for the question, Valerie and also thank you for introducing Tracey [and Justin]. I'd like to ask Tracey if you'd be willing to answer this question?

Of course Jim, I'd be happy to. Poverty as used in this report, refers to the official poverty measure which is published by the U.S. Census Bureau. The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who's in poverty, and the thresholds represent the federal government's estimate of the point below which a family of a given size has cash income insufficient to meet basic needs. So then, poverty status is determined by first calculating family total income, which includes money income before taxes and does not

include capital gains or cash benefits. So, if a family's total income is less than the family's threshold, then that family and every individual in it is counted as being in poverty. So, this information forms the basis for calculating the incidence of poverty for geographic area or rather the spatial aggregation of families or individuals in poverty. So, the incidence of poverty is reported as an areawide headcount or as a percentage of an area's population, otherwise known as a poverty rate, which is the term most of us are familiar with. If the areawide poverty rate is 20% or higher, then the area is considered to be a high poverty area. And persistent poverty status is then determined by considering the consistency of high poverty area status over a 30-year period. Specifically, in the report, persistent poverty counties in the current period are defined by a county poverty rate of 20% or more for four data periods spanning 30 years at the baseline, plus three evaluation periods including 1990, 2000, 2007-11 and 2017-2021.

Thanks Tracey, for our next question, just give me one second here, which data did you use to measure housing insecurity?

Thank you Valerie, I'd also like to ask you Tracy, if you could answer this.

Sure. We use data that is produced by the Department of Housing and Urban Development that looks at various geographies based on the different indicators that we include in our measure that's used in the report.

Thank you Tracy, now for our next question, how does ERS Define clean energy jobs?

Thank you for the question Valerie, at this time I appreciate you introducing Justin, and Justin would you be willing to answer this question?

Yes, thank you Jim. So, our definition of clean energy jobs is not one we created at ERS, it comes from the Department of Energy and is defined in their 2022 U.S. Energy and Employment report. Their definition actually refers to what they call "net zero aligned jobs" that are associated with the goal of achieving net zero greenhouse gas emissions by 2050; and it includes jobs related to renewable energy, grid technology and storage, traditional transmission and non-fossil fuel distribution, nuclear energy a subset of energy efficiency, biofuels, and hybrid electric vehicles and fuel cell vehicles.

Thanks Justin, now for our next question, why are severe housing problems so much more prevalent for Natives and Hispanic populations than for other groups?

Tracy, could you take this question?

Certainly. The report highlights differences in incidence of severe housing problems among select groups, but it does not offer an explanation as to why these differences exist. However, it's well documented in other publications by ERS, that American Indian and Alaskan native, as well as Hispanic populations, are among those with the highest incidence of poverty in the nation, which means that their income level is not sufficient to meet basic needs which includes housing. Keeping that in mind, severe housing problems are defined in the report by housing costs that exceeds 50% of household income, overcrowding, and lack of full kitchen and plumbing facilities. So, these two population groups, are likely to qualify as having severe housing

problems based on the housing cost income factor alone. Further, the American Indian and Native Alaskan population, often faces the most complex housing situations where multiple problems exist including overcrowding, and insufficient kitchen and plumbing facilities, among other concerns. In a Native American housing needs study, which is produced by the Department of Housing and Urban Development is where much of this information comes from. It's a congressionally mandated report that provides greater insight into these issues.

Thank you so much Tracy. Now for our next question, do the numbers shown represent the total number of clean energy jobs in rural areas?

Justin, would you be willing to answer this?

Thank you Jim. So not quite. This is a pretty comprehensive definition of clean energy jobs, but we do know the county level data from the U.S. Energy and Employment report does not report county level aggregates for certain technologies. So, for example, we know that nuclear energy, certain transmission and distribution related to renewables, geothermal energy, electric vehicles, and a subset of energy efficiency jobs are not included in this definition. So, the number reported here is actually a slight underestimate of the number of total clean energy jobs in the United States.

Thank you Justin. Now for our next question. Did the census Urban rural definition change have any impact on the rural analysis ERS completed?

Thank you for the question Valerie. We haven't redone the analysis using the new definitions because they're so new, but given the modest adjustment in the number of counties that switched from either metro status to non-metro, or vice versa, had a reasonably modest impact on total rural population. We don't believe that the new definitions would give a very different picture from what we have in the report.

Thanks Jim. For our next question, do we have any sense of why rural employment has not return to 2019 levels? Are there particular industries that have not recovered? Were these jobs listed to Metro areas?

Thank you for the for the question. Most of the pandemic recovery was largely driven by restoration of economic activity and the pandemic lost jobs. But what's really interesting in your question, is if the pandemic changed the economy or if the rural economy is now back to doing its thing based on trends that were already happening before the pandemic hit. In last year's Rural America at a glance report, the 2022 edition, we included information on employment growth by industry sector before the pandemic for the decade from 2010 to 2020. We found the fastest growing rural industries were healthcare – a large rural industry, as well as some smaller services industries with strong employment growth – such as real estate and leasing, education and professional services. So, to your question, we see some employment adjustment as a result of the pandemic and trends that were started well before the pandemic in in the rural economy.

Thank you so much

...and generally speaking,...

Oh sorry Jim, I did not mean to cut you off, please continue.

I just want to make sure I answered the question, do you mind repeating the question?

Sure, the question I believe is, what role do you think the pandemic played an increasing role in migration? Sorry Jim, I'll go ahead and ask another question.

Yeah, I do have a corollary to the response which maybe focuses in more specifically on that. I think the pandemic changed people's calculation about space. People view congestion to be less benign a cost than they used to. So, some rural residents have rethought to move to urban places, and with unemployment so low, finding a rural job may be less of an issue than it had been in the past. Some urban households are looking for more space, and then some places are facing high urban housing costs. And some groups face high housing insecurity as well, as we've seen in the figures and as Tracy has discussed a little more in the Q&A. So, the extent to which the recent population growth, and employment growth figures, the beginning of a sustained trend is currently not known, but there are some interesting signals. In last year's Rural America report we showed that rural population growth by age, from 2010 to 2021. And clearly, the strongest rural population growth was for older people. So rural growth may be resilient based on rural residents staying rural, and more experienced remote workers and retirees, choosing high amenity rural locations. We also saw in last year's report, strong rural growth for health care services employment, which I discussed just a minute ago. So, some younger workers will follow the jobs and could benefit from more cost-effective living options as well. So, this is an active and exciting area of research and we will learn more about these topics over time. It's an excellent question.

Thanks Jim. Our next question, other than rural housing was there any data relating to the American Indian demographics?

Tracy, would you like to address that question?

Sure, there was nothing else presented in this year's report. We have had some demographic information breakdowns in past Rural America at a Glance reports, as well as them being available through other outputs by ERS such as on our rural poverty and well-being topic page, and our charting the essentials output.

Wonderful Tracy. Our next question, what type of jobs are included in the clean energy jobs? Are these jobs in extraction, manufacturing, utility, or something else?

Justin, would you be willing to answer this?

Sure, thanks Jim. So, the answer to that question is yes, all the above and then a few other types of categories. So, it doesn't just include the end use job, it includes jobs all along the production process. So, it includes jobs in extraction and utilities that you might think of, but it also includes jobs in manufacturing, construction, pipeline transportation, and professional services among other things. So, it's really trying to capture all the jobs associated with clean energy production.

Thank you Justin. For our next question, the poverty map shows changes in persistent poverty over time, how has the rural poverty rate changed overall?

Tracy would you be willing to answer this?

Sure, again, this report this year does not discuss the overall or aggregate change in the rural poverty rate, but rather it focuses more on the geography of where positive or negative changes in the rural poverty rate have taken place. However, to answer your question, according to American Community Survey one-year estimates published by The Census Bureau, in various places but specifically on their Explore Census Data website, the non-metropolitan area poverty rate was 18.3% in 2011 and then in 2021 it was 15.5%. So, that's a decrease of about 2 million rural residents in poverty over that 10-year period. And the report offers insight into where this decrease has been most significant at the county level. And again, we have additional information on these types of trends in terms of aggregate rural poverty rates over time on our Rural Poverty and Well-being topic page, as well as data on this is available in our Poverty Area Measures data product, and our Rural and Small Town Atlas. Thank you.

Thank you Tracy. For our next question, the housing chart by income shows that severe problems are more common among renters. How much of the rural population does that group comprise? Are there substantially more renters in rural America than there are homeowners?

So, the way that our report presents this information, sorry Jim, I just went ahead and jumped in there. So, this information as it's specifically shown in the report is based on within renter and within owner household groups, instead of across. So, the statistics that are requested are not specifically provided in the report, but it's well documented, again by the Census Bureau and others, that nationwide homeowner owners make up a larger share of households than do renters. Further, that ratio of homeowner households to renters is higher in rural areas than in than it is in urban areas.

Thank you Tracy. Our next question relates to the clean energy jobs. What was the number of rural jobs in clean energy?

Justin this question is for you.

Yeah, thank you Jim. So, the report indicates 243,000 jobs in clean energy and rural areas in the year 2021. Again, as we know, there are certain categories that we don't have county level data for that are included in the clean energy definition such as nuclear, EVs, geothermal, and certain areas of efficiency among others. So, we know that this is an underestimate but, at least 243,000 jobs.

Thank you Justin. For our next question, did you examine whether any specific programs or policies led to the reduction in rural poverty, for example, the expanded child tax credit?

Tracy would you like to answer this.

Sure. No, we did not report on that type of information in Rural America at a glance. It's beyond the scope of this particular report.

Thank you Tracy. For our next question, is it possible to separate the changes in rural poverty levels from the influence of migration of individuals from metro areas?

Yes, we haven't looked into this in this particular report, Rural America at a Glance, which is a fairly high level. It's an interesting interaction, it's a good question, but this report doesn't actually investigate that topic specifically.

Thanks Jim. What factors seem to have contributed most heavily to counties with persistent rural poverty?

Tracy, would you like to answer this?

Yeah, so specific factors that contribute to the reduction in rural poverty over time are not discussed in this report. So, we look at a 15-year time frame and that was chosen for analysis because there were several significant macroeconomic events that occurred during that time period that could have had a negative or positive impact on poverty rates; and those events include the Great Recession, the COVID-19 pandemic, and a historic period of economic growth that happened between the two. So, the intention of the analysis presented in the report wasn't to look in detail at these different factors, but was to determine the cumulative change in poverty over that time for rural areas.

Wonderful Tracy. For our next question, do you have data on what the top five industries that are employing rural workers? So, do we have information on the top five industries that employ rural workers?

Thank you for the question. This topic was actually covered in last year's 2022 edition of Rural America at a Glance. The largest rural industries, are government, agriculture, manufacturing, health care, retail, and hospitality services. These industries have been dominant industries in the rural economy for quite some time as well.

Thank you Jim. Next up, what role does international migration have in rural and urban population trends?

Yeah, thank you for the question. So, as we saw from the earliest charts, international migration was largely going towards urban areas as opposed to rural areas, but it did play an important role in the sense that, as we saw from the figures, we had domestic net migration from urban areas to rural, which largely drove the rural population gains that we've seen in the last couple years, and even with domestic outmigration from cities, cities still grew due to international migration where many international migrants chose urban locations for their destination.

Thank you Jim. Our next question is, how many rural versus urban people are living in persistent poverty counties?

Tracy, would you like to answer this?

Sure, I'd like to answer that. I don't have those figures in the top of my head, and I would have to refer back to our analysis. We have that information in many places on our web page and I would have to look that up and get back to it. Jim, did you have those numbers available?

I don't have those at the top of my tongue either but um...

It's something we've recorded on the actual numbers and in previous Rural America at a Glance we have given those specific numbers but we didn't in this in this particular report. Jim go ahead, I'm sorry to have interrupted you.

Yeah, no, I was just going to say that I think some of these numbers are now available in the poverty data product that ERS has just recently released about a month ago. So, I'd encourage you to go to the ERS website and explore more on the topic.

Thank you Jim and Tracy. Our next question, were rural households more likely to experience one of the four housing insecurity measures than urban households? This person is wondering about the housing cost measure specifically.

Tracy would you like to answer this question?

Sure, in our report we don't make those comparisons between urban and rural households. We focus specifically on the rural renters and homeowners.

Thank you Tracy. Next question, was there any overlap between counties that experience persistent poverty and the location of low-income households experiencing housing insecurity? If so, what did the overlap look like?

Tracy, this is a question for you.

Thank you Jim. We didn't make that comparison as well. In terms of what we provided in Rural America at a Glance. That type of analysis, I know is available through the Department of Housing and Urban Development through their distress cities program where they look at rural areas particularly using their housing data.

Thank you Tracy. All right, that's all we have for today. Jim, Tracy, thank you for sharing the most recent indicators of Social and economic conditions in rural America, and thank you to our listeners for your interest in ERS research on this topic and for joining us today. Before closing, I'd like to quickly note that in addition to our website, ERS continues to deliver timely relevant research through our Charts of Note mobile app, which is free and available on Apple and Android devices. You can also follow us on socials through LinkedIn and X (formerly known as Twitter). Thank you again for joining, and this concludes our webinar.