



RURAL RESURGENCE: RECENT POPULATION GROWTH IN RURAL N.C.

PREPARED BY
Dalton Bailey
Research & Data Manager

Executive Summary

Introduction: From 2010 to 2020, rural America experienced a slight population decline, contrary to decades of growth. This decline, attributed to reduced natural change and negative net migration, posed economic challenges. However, recent data indicates a shift, with rural areas experiencing growth again, largely due to increased net migration.

Methodology: This report uses U.S. Census Bureau data to analyze population trends in rural North Carolina from 2010 to 2023. Population estimates and components of change data were examined for rural, suburban, and urban counties.

Analysis & Results: The population in North Carolina's 78 rural counties grew by 106,632 people from 2010-2020, a 2.9 percent increase. Despite this growth, many rural counties lost population during this time, and rural growth lagged that of suburban and urban counties. From 2020-2023, growth in rural North Carolina accelerated to 2.7 percent, adding almost as many people in just three years as in the previous decade. The difference between rural, suburban, and urban growth was narrower during this time. Further analysis shows that increased net migration into rural counties was the primary cause of rural growth. Rural net migration started growing in the late-2010s, but accelerated after the COVID-19 pandemic and has continued to rise, leading to the greatest rural population growth in over a decade.

Conclusion: Rural population growth has been positive for many communities, as growth can help cultivate economic opportunities. While growth can be positive, it can also produce challenges such as housing affordability, infrastructure sustainability, and more. Historical data shows that this rapid rural growth will likely not last forever, but it remains important for rural communities to find ways to withstand growth and prepare for a time when growth may slow again.

Rural Resurgence

From 2010-2020, rural America's population declined for the first time in at least 50 years. The decline was slight, with only a 0.6 percent decline in the rural population, but it came after decades of rural population growth.¹ Population decline in rural communities can pose significant economic challenges, including a declining workforce, less economic activity, and a diminishing tax base.² Researchers have tied this decade of population loss to the excess of births over deaths (natural change) diminishing and negative net migration, meaning fewer people moved into rural America than moved out.

This trend, however, has shifted in the past few years. Recent research has shown that rural America is growing again, spurred on by greater net migration into rural areas. Notably, this migration has been great enough to outweigh a negative natural change influenced by the pandemic.^{3, 4} In other words, enough people are moving into rural America that it is growing despite there being more deaths than births.

This shifting trend has been largely tied to the adoption of virtual working options stemming from the pandemic.^{5, 6} Americans have had unprecedented opportunities to live where they want while retaining their jobs, and many are seeking communities with lower costs of living (which tend to be suburbs and rural areas).⁷ Considering that an estimated 27.5 percent of private establishments in August-September 2022 had employees working virtually at least part-time,⁸ it is easy to see how remote work could influence migration patterns and population change.

While the growth of rural communities has been significant, it may not last. Recent U.S. Census Bureau data suggests that national population trends are returning to pre-pandemic normalcy. International migration has rebounded, more states are growing, and natural change has improved.⁹ If trends return for rural areas soon, it could mean a return to population decline.

While rural population trends at the national level provide some useful insight, states could be experiencing different trends than the rest of the nation. This publication investigates recent population trends in rural North Carolina at the county level. The report uses recently released population estimates data from the U.S. Census Bureau to examine rural population trends in the state, and if those trends are shifting since the COVID-19 pandemic.

Methodology

The U.S. Census Bureau publishes annual county population totals and components of change data. These estimates not only provide an official annual estimate of every U.S. county's population (as of July 1 for the given year), but also population change and the components of population change.

This report uses two of these county population totals reports. The most recently released version of this data is the Vintage 2023 county population totals, which includes official population estimates and components of population change data for years 2020-2023. The report also uses the Vintage 2020 county population totals, which includes official population estimates and components of population change data for years 2010-2020. All data used in this analysis are pulled from these reports, and specific measures are defined below.

Measures

Population

The estimated population for each year is captured in the reports. Each population estimate is for July 1 of the given year. So, if County A has a 2010 population of 100,000 people, that is an estimate specifically for July 1, 2010.

Population Change

Population change refers to the difference between an area's population from one year to another. In this report, the percentage change is most commonly examined, but occasionally the numeric change is reported too. For example, assume County A had a population of 100,000 in 2010 and a population of 110,000 in 2020. The numeric population change would be a 10,000 person increase and the percentage change would be a 10 percent increase. For the purposes of this report, population change for 2010-2020, 2020-2023, and annual population change (ex. 2010-2011, 2011-2012) are reported. Population change is composed of natural change and net migration, defined below.

Natural Change

Natural change refers to the difference between the number of births and the number of deaths in an area. A positive natural change indicates more births than deaths, while a negative natural change indicates more deaths than births. This measure is reported as a percentage change in this report. Returning to the example above, assume County A has a 2010 population of 100,000 and a 2020 population of 110,000. Population change as a percentage would be 10 percent, and the numeric change would be 10,000 people. Now, assume 6,000 of the 10,000 new residents are attributed to natural change

(the remaining 4,000 would be attributed to net migration). That would mean the natural change would be a 6 percent growth.

Net Migration

Net migration is the difference between the number of people moving into an area (in-migration) and the number of people moving out of that same area (out-migration). If net migration is positive, it indicates more people are moving into the area than out, while negative net migration means the opposite. This measure is reported as a percentage change in this report. The percentage is in relation to the original population of a given area. Returning to the example above, assume 4,000 of the 10,000 new residents in County A are attributed to net migration (the remaining 6,000 would be attributed to natural change). That would mean the net migration would be 4 percent growth.

County Classification

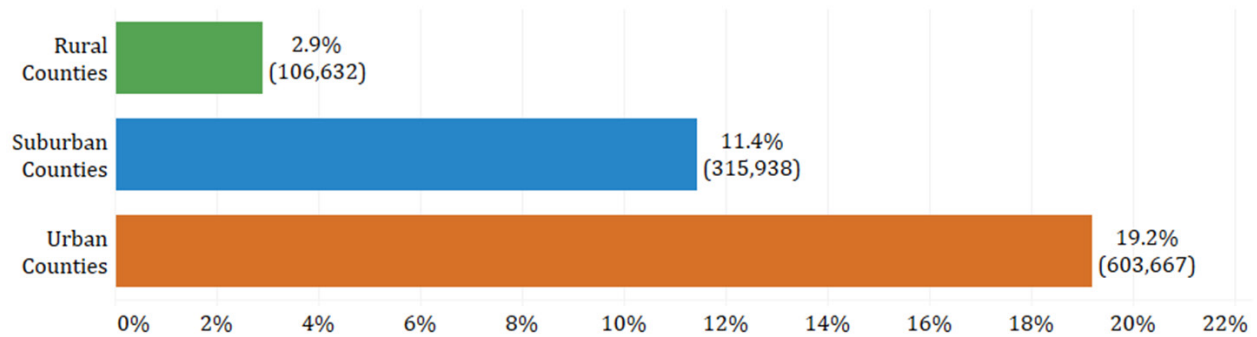
This report uses the NC Rural Center (NCRC) county classifications to examine population change in rural, suburban, and urban counties. The NC Rural Center has three different classifications based on county population density: rural, suburban, and urban. There are 78 rural counties with a population density of 250 people or fewer per square mile. There are 16 suburban counties with a population density between 250 and 750 people per square mile (exclusive). There are six urban counties with a population density of 750 people or more per square mile.

Analysis & Results

Population Change: 2010-2020

As discussed in the introduction, data suggest rural America's population declined from 2010-2020. Did rural North Carolina experience the same decline? This analysis (completed with NCRC county classifications) suggests that it did not. From 2010-2020, rural N.C. grew by an estimated 106,632 people (a 2.9 percent increase), as evident in Figure 1.

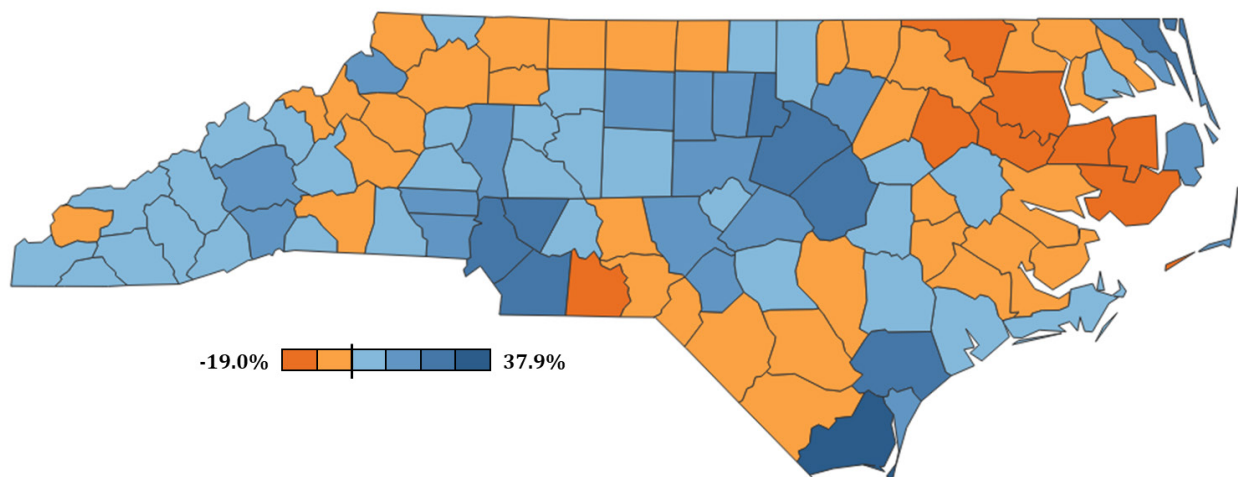
Figure 1. Population Change by County Classification: 2010-2020



While rural counties grew in the aggregate, it is evident that suburban and urban counties grew at a much faster rate. North Carolina, along with several other states in the southeastern United States, experienced substantial growth from 2010-2020, but rural places did not see much of that growth. Rather, the population growth in North Carolina was largely centralized in urban counties, and to a lesser extent in suburban counties. Still, it appears some of our rural places were insulated from extreme population loss.

Rural population growth does not mean, however, that all rural counties grew. In fact, several rural counties lost a substantial share of their population during this time. Figure 2 shows the population change for each county from 2010-2020. The greatest declines were observed in the northeast region of the state, but counties in the southeast and northwestern portions of the state declined as well. Counties high in natural amenities (coastal and mountain counties), as well as counties along the Interstate 85 corridor, an urbanizing region of the state, tended to experience the greatest growth.

Figure 2. Population Change by County: 2010-2020



The map shows that 42 counties in North Carolina lost population from 2010-2020. All 42 of these counties are classified as rural, meaning that all suburban and urban counties grew during this timeframe. Altogether, 53.8 percent of rural counties in North Carolina lost population from 2010-2020.

Population Change: 2020-2023

Despite bucking the national trend of rural population decline, growth in rural North Carolina was limited and over half of all rural counties in the state lost population from 2010-2020. In some ways, this shows that rural North Carolina's population was trending in a way similar to the rest of the U.S. Has North Carolina also followed the trend of accelerated rural growth since 2020? The most recent data suggest that it has.

From 2020-2023, rural North Carolina grew by 98,372 people, a 2.7 percent increase. Recall that from 2010-2020, rural counties in N.C. grew by 106,632 people, a 2.9 percent increase. This means that, in just three years, rural N.C. added nearly as many people as it did over the previous decade, showing rural population growth has accelerated since 2020. Figure 3 shows the population change for rural, suburban, and urban counties from 2020-2023.

Figure 3. Population Change by County Classification: 2020-2023

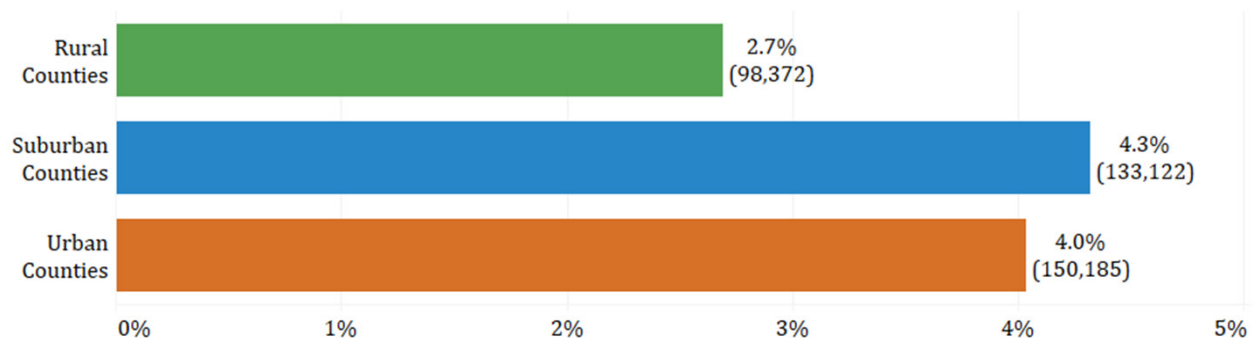
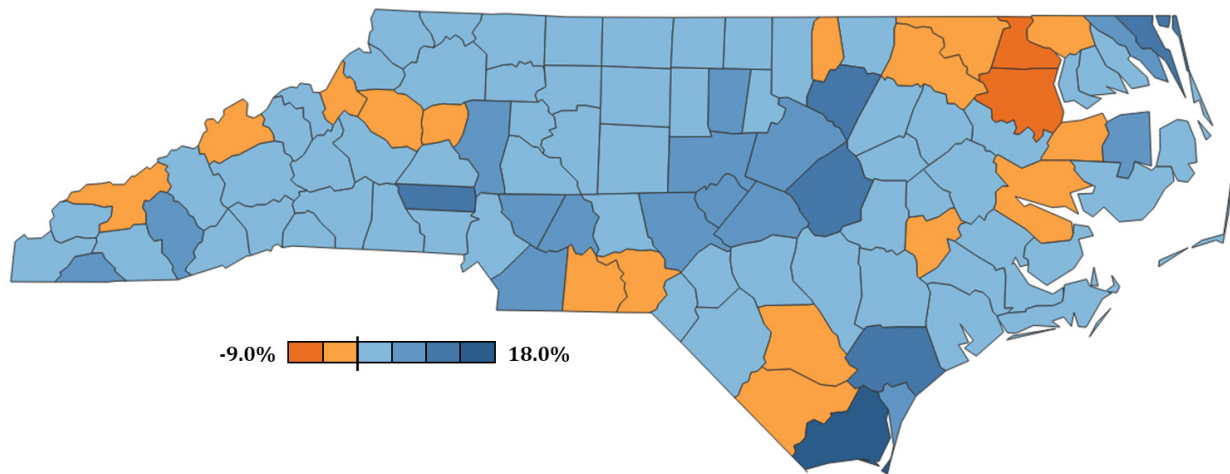


Figure 3 highlights some interesting trends for population changes for 2020-2023. First, while still lagging behind suburban and urban county growth, the difference between rural and non-rural county population growth is much smaller than it was from 2010-2020. As North Carolina continues to grow at a fast pace, rural counties now seem to be attracting growth as well. Second, suburban counties grew at a higher rate than urban counties. Although the difference was slight, this growth in suburban areas, along with growth in rural areas, indicates a shift in population dynamics in the early 2020s. Rather than rapid, concentrated growth in urban centers, a more balanced

distribution of population growth is occurring.

While rural population growth has accelerated, this growth is not evenly distributed among rural counties. Figure 4 shows population change for each county from 2020-2023. The map clearly shows that more counties gained population from 2020-2023 compared to 2010-2020. While growth was expansive, the counties with the largest population increases appear to be those rural and suburban counties around major urban centers. Although several counties still lost population from 2020-2023, the data show that for the most part these losses were small. The northeastern part of the state is the only region with significant population decline from 2020-2023.

Figure 4. Population Change by County: 2020-2023



The map shows that 18 counties in North Carolina lost population from 2020-2023. All counties with a declining population are classified as rural, meaning that all suburban and urban counties grew. However, the proportion of rural counties that lost population during this time period was much smaller than from 2010-2020, with only 23.1 percent losing population from 2020-2023 (compared to 53.8 percent).

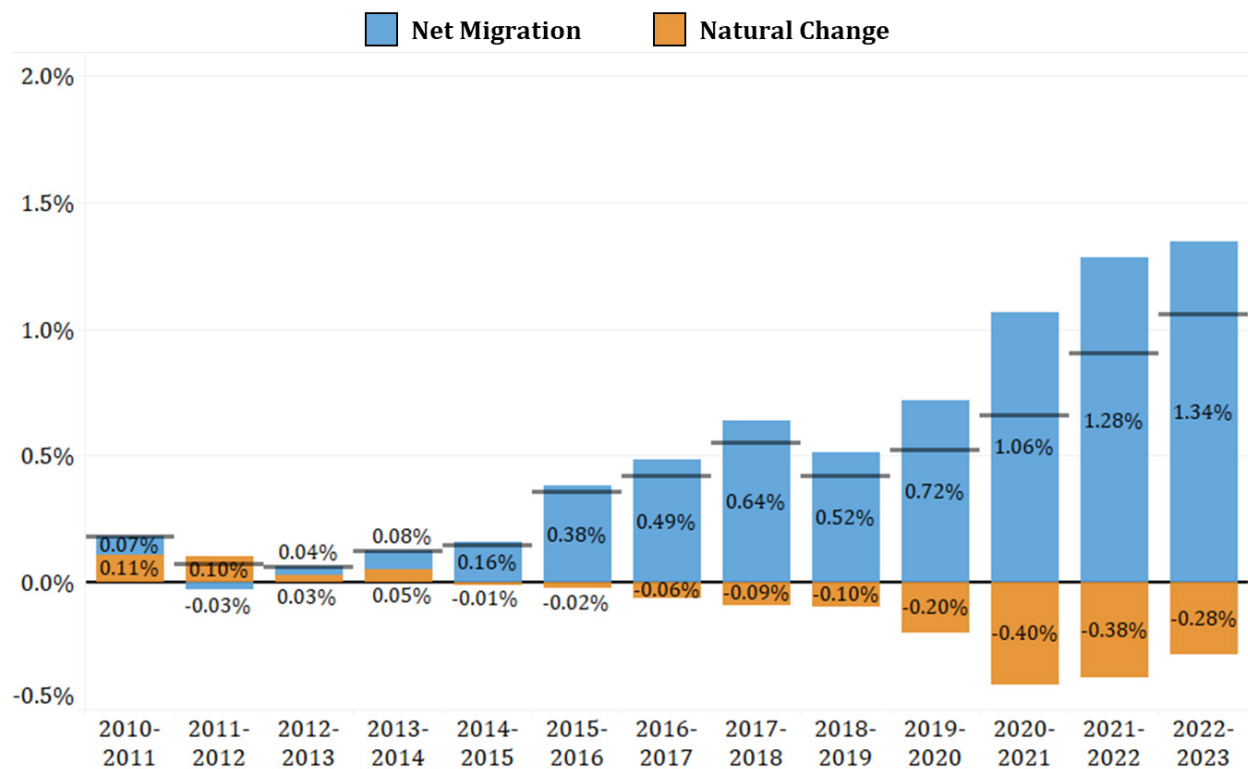
Components of Population Change

Population change provides useful insights into whether communities are growing or declining, and to what extent. However, it alone does not indicate what is causing underlying population change. For that information, one needs to examine the components of population change, natural change and net migration. Examining the trends of these components of change over time is useful in understanding long-term changes.

In the figures below, the annual components of change are examined for rural, suburban and urban counties. Each of the figures show the percentage change for each component, natural change (in orange) and net migration (in blue). The black lines in the graph indicate the total population change, which is the sum of natural change and net migration. So, if a county experienced 0.50 percent growth in natural change and 0.50 percent growth in net migration from 2011-2012, then the total population growth for that time period would be 1.0 percent (and the black line would represent that). If a county experienced a -0.50 percent decline in natural change and a 0.50 percent growth in net migration, the total population growth for that time period would be 0.0 percent.

The components of change for rural counties highlights some significant trends in rural counties, visualized in Figure 5 below. First, notice that from 2010-2015, population growth in rural counties is positive, but minimal. Both net migration and natural change is very small, but for the most part positive. This indicates population stagnation for rural counties during this time period, with roughly the same number of people moving into rural areas as moving out, and roughly the same number of births and deaths.

Figure 5. Components of Population Change: Rural Counties



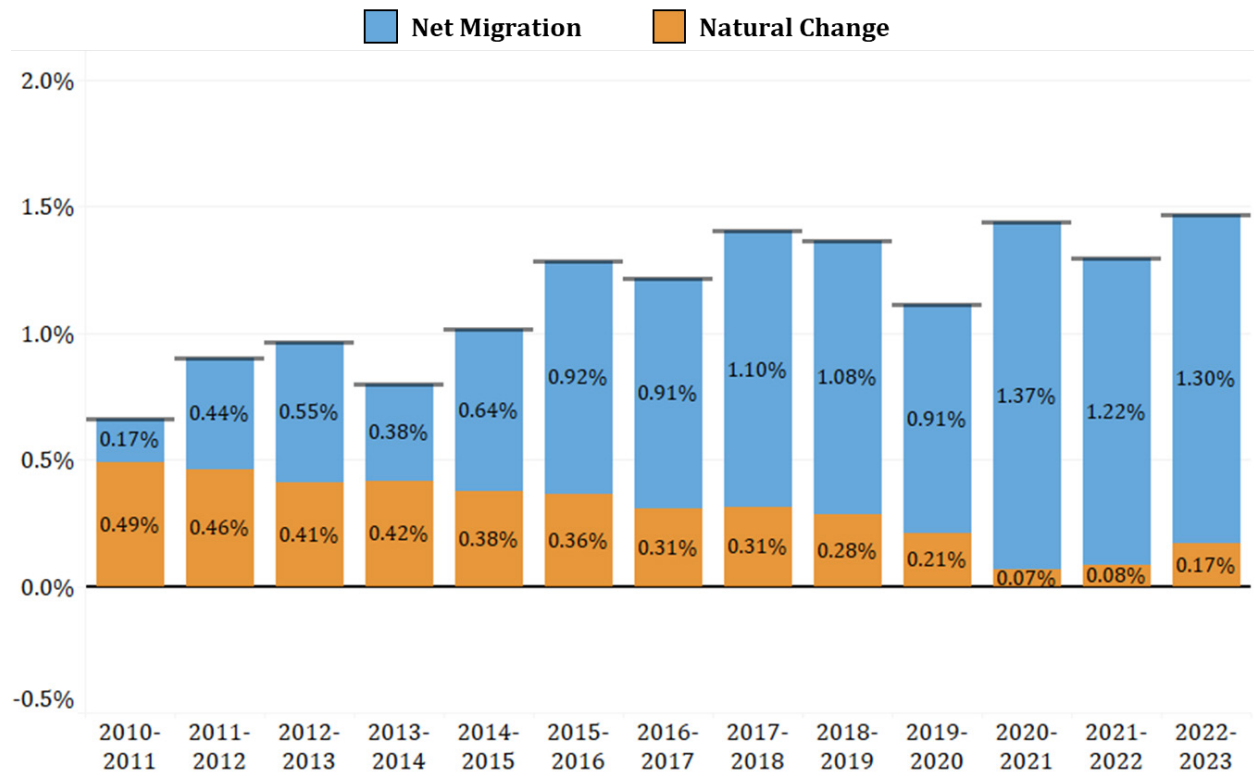
From 2015-2016, changes become more apparent. Net migration increases while natural change begins declining. Both of these changes are steady, but the growth in net migration outpaced the decline in natural change, leading to steady population growth. Notably, there was a slight population decline from 2018-2019, the year before COVID-19, thanks to a small decrease in net migration.

In 2019-2020, the initial impacts of COVID-19 are observed. There is a positive jump in net migration and a negative jump in natural change. From this point, net migration increases at a rapid pace, suggesting that an influx of people started to move into rural counties from 2020-2023. At the same time, natural change sharply declined in 2020-2021 and continued into 2021-2022, likely caused by an increase of deaths due to COVID-19. However, natural change improved in 2022-2023, hopefully the beginning of a long term trend of improvement. Net migration continued to grow from 2022-2023 at the same time of the natural change improvement, leading to the greatest population growth for rural counties in well over a decade.

These findings suggest that, while state trends might be moving back to pre-pandemic norms, rural North Carolina is continuing its accelerated growth. Rural counties are experiencing population growth, thanks to a vast increase in net migration.

Population trends have changed dramatically in rural counties through the past decade. How have suburban and urban counties changed? Figure 6 shows the annual components of change for suburban counties. While the changes are not *as* dramatic, there are still some interesting findings.

Figure 6. Components of Population Change: Suburban Counties



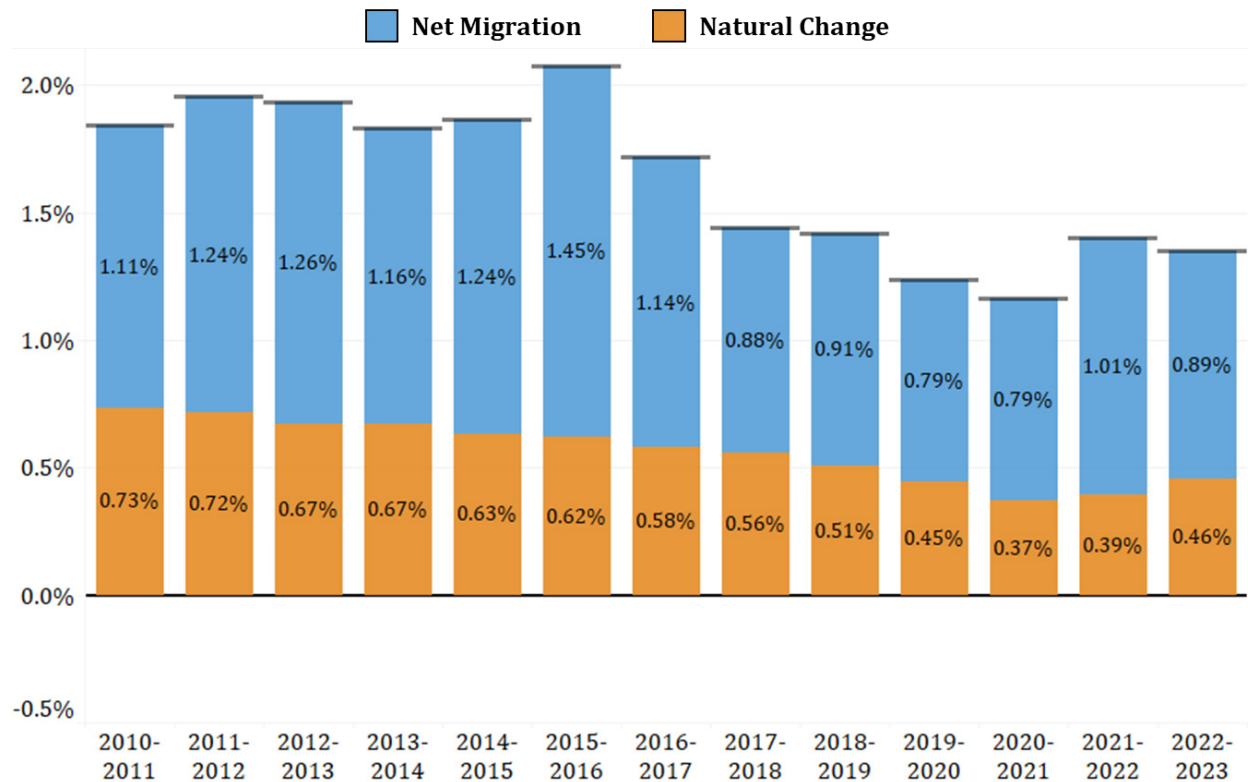
During the early 2010s, a large portion of suburban county growth was due to natural change. However, natural change in suburban counties steadily declined from 2010-2020, with a sharp decline in 2020-2021, likely caused by the COVID-19 pandemic. At the same time, net migration increased in suburban counties from 2010-2020. There was a decline in 2019-2020, but then net migration sharply increased in 2020-2021. This accelerated growth has continued since then, helping suburban counties sustain the growth experienced in the late 2010s.

There are some interesting implications from these findings. Suburban counties were already attracting new residents through migration, as the historically important natural change was chipped away at and became less of a population growth driver. While the initial onset of COVID-19 appeared to diminish net migration into suburban counties, the following years have seen even greater influxes of residents, many of which are likely moving out of urban centers into surrounding suburban areas or smaller regional markets (both of which are historically more affordable).

So rural and suburban counties are growing, especially since the start of the pandemic. Has this rapid growth coincided with an urban exodus similar

to state trends? In North Carolina, not quite, although key impacts are still observable. Below, Figure 7 shows the components of change for urban counties.

Figure 7. Components of Population Change: Urban Counties



Much like suburban counties, natural change in urban counties was highest at the start of the 2010s and steadily declined throughout the decade. There was a slightly sharper decrease starting in 2019-2020 due to COVID-19, but this decline was not as pronounced as in suburban and rural counties. By 2022-2023, natural change was again a large contributing factor in population growth for urban counties.

There was also an existing trend for net migration. From the early-to-mid-2010s, net migration into urban counties was high, indicating large quantities of people moving into urban North Carolina. However, net migration seemingly peaked in 2015-2016, and started slowly declining. It is likely no coincidence that this is around the same time rural and suburban counties started growing thanks to increased net migration, perhaps attracting urban residents searching for a more affordable cost of living. The impact of COVID-19 is also observable in net migration for urban counties,

though the impact is not as significant as observed in rural and suburban areas. There was a small decline in net migration starting in 2019-2020, but by 2021-2022 net migration had fully rebounded. In some ways, urban counties appeared to be somewhat insulated from the changes brought about by COVID-19. That being said, only urban counties ended up with lower population growth than at the beginning of the 2010s.

While net migration in rural areas has increased substantially, in terms of overall population growth rural counties still lag behind urban and suburban counties. Suburban and urban counties are still growing at a faster rate, both in total people and proportionate growth. However, the increase in net migration for rural counties highlights an altered landscape of population growth in the state, one where rural counties are attracting new residents along with suburban and urban counties.

Conclusion

Rural North Carolina defied national trends by growing from 2010-2020, but that growth paled in comparison to urban and suburban growth. From 2020-2023, however, rural population growth increased significantly. In fact, rural North Carolina grew by about as many people in just those three years as it did the entire previous decade, and while this growth continued to lag behind suburban and urban counties, the difference between them has narrowed significantly.

COVID-19 had some undeniable effects on population change, accelerating net migration growth in rural and suburban counties and diminishing the natural change throughout the state (although less so in urban areas). However, the data show that while COVID-19 seemingly accelerated these trends, migration into rural and suburban areas actually started growing in the mid-2010s. North Carolina appeared to already be on a path of rural growth, COVID-19 just pushed it along at a faster rate.

North Carolina is a fast-growing state, consistently in the top 10 states in terms of population growth, both by percentage and numeric growth. In the previous decade, most of this growth was centralized in urban and some suburban regions. In recent years, population growth is more evenly distributed and rural counties are experiencing unprecedented growth. Not only are rural counties growing, but rural growth has continued to accelerate year-over-year since 2020.

Population growth is likely a welcome change for some rural communities, especially after many of them lost population from 2010-2020. Growth in

many of these areas could bring some economic opportunities. However, population growth can produce challenges for communities as well, such as housing affordability, unemployment and sustainable infrastructure. Population growth can be good for rural communities, but it is important to recognize that challenges and growing pains can come with growth.

Whether or not this rural growth will continue in the future is yet to be seen. If virtual work is one of the primary drivers of rural population growth, then it very well may continue for some time. Recent research has suggested that virtual work options are here to stay, which could continue to push net migration growth in rural counties. According to the most recent research on work from home prevalence, 27.9 percent of all U.S. full-time workers are on hybrid work schedules, and 12.8 percent are fully virtual. Industries such as information technology, finance, and professional/business services, traditionally based in urban areas, have the highest rate of virtual workers.¹⁰ Office vacancy rates in urban areas have also hit all-time highs, including metro areas such as Raleigh, Durham and Charlotte, further signaling the sustained impact of virtual work.¹¹ In other words, virtual and hybrid working environments appear to be here to stay, and could continue to charge rural growth in the near future.

All this being said, net migration is somewhat fickle and susceptible to changes from economic pressures. Historical data shows that net migration in rural areas has gone through several peaks and valleys since the 1970s, influenced by economic changes in the country. Natural change, however, has been on a steady decline over the same time, with some small changes.¹² This report's data shows a similar trend in rural North Carolina since 2010. Net migration in rural counties has rapidly grown, booming after the shock of COVID-19. Natural change was affected as well, though the impact was not as great and the natural change trend is seemingly returning to normal. Comparing this recent data to historical trends suggests that rural N.C. is in the midst of a new period of population growth, but also that this growth will not last forever.

It is unclear when this growth will peak, and just how long it will last. What this data does indicate is that rural communities in North Carolina are attractive to people. When people are given the opportunity to live in rural areas, regardless of what is driving them to do so, many take advantage of the opportunity. What rural communities must do is find ways to withstand this growth while it's happening, and find ways to sustain themselves when that growth dwindles.

Additional Information

An interactive dashboard was created as a supplement to this report. Readers can use this interactive dashboard to see annual population change and components of change for all 100 counties using [this dashboard](#).

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Data

The data set used in this analysis is available upon request to Dalton Bailey, Research and Data Manager, dbailey@ncruralcenter.org.

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