Cover photos are from Adobe Stock. All other photos within this report are from Adobe Stock, the U.S. Department of Agriculture (USDA), and the U.S. Department of Labor (DOL).

Use of commercial and trade names does not imply approval or constitute endorsement by USDA.

To ensure the quality of its research reports and satisfy governmentwide standards, ERS requires that all research reports with substantively new material be reviewed by qualified technical research peers. This technical peer review process, coordinated by ERS’ Peer Review Coordinating Council, allows experts who possess the technical background, perspective, and expertise to provide an objective and meaningful assessment of the output’s substantive content and clarity of communication during the publication’s review.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA’s TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer, and lender.
This report looks at recent population trends, the changing structure of economic sectors, the labor force, and job growth in rural areas. After a decade of overall population loss from 2010 to 2020, nonmetropolitan areas grew at a faster rate than metropolitan areas during 2020–21 due to a sharp turnaround in migration flows occurring in the first year and a half of the Coronavirus (COVID-19) pandemic. The rural population is aging, and the working-age population is declining. The fastest growing rural industries are smaller in employment size than many of the slower growing rural industries—except for health care and social assistance, which is a large and growing industry. Industries in rural areas have been growing; however, agriculture and manufacturing grew in output and productivity but not in jobs. The diversity of the rural workforce is increasing. Rural job growth from 2012 to 2019 for all other races and/or Hispanic workers was higher than for White workers in every industry except agriculture.
Overview

The population in rural (nonmetro) counties stood at 46.1 million in July 2021, with 14 percent of the U.S. population residing in 72 percent of the Nation’s land area. During the 2010s, the U.S. Department of Commerce, Bureau of the Census’s data showed the population in nonmetro counties declined by 0.6 percent, the first such decade of overall nonmetro population decline. The gap in annual population growth between metropolitan (metro) and nonmetro areas was quite large during most of the 2010s, as metro areas grew by 8.8 percent during that decade and nonmetro areas averaged negative or near-zero growth. The difference in metro and nonmetro population rates of growth began closing after 2016 as birth rates took a steep decline nationwide; as a result, metro population growth declined. The overall U.S. population aged over the last 20 years as the baby-boom generation entered their 60s and 70s. Historical patterns of outmigration among young adults and in-migration of older adults to rural retirement destinations have accelerated this aging trend in rural areas. “Rural” and nonmetropolitan (nonmetro) are used interchangeably in this report and are defined the same on the basis of counties.¹

¹ Nonmetropolitan (nonmetro) counties are defined by the Office of Management and Budget and include a combination of open countryside, rural towns (places with fewer than 2,500 people), and urban areas with populations less than 50,000 that are not part of larger labor market areas (metropolitan areas).
The overall decline in population growth and increase in average age in rural areas affect the makeup and availability of the rural labor force. In 2021, people 65 years and older made up more than 20 percent of the nonmetro population for the first time in U.S. census history, up from 16 percent in 2010. In metro areas, just 16 percent of the population was 65 and older in 2021. During the 2010–20 decade, the nonmetro working-age population declined by 4.9 percent and the population under age 18 declined by 5.7 percent, while the population 65 years and older grew by 22 percent. The working-age population continued increasing in metro areas during the 2010s, although at a much lower rate than for adults aged 65 and older.

In 2019, rural (nonmetropolitan) total employment was 23.6 million jobs, compared with 178 million metro jobs. Rural America has become more economically diverse over time, with increasing employment in health care, hospitality, and other service industries. Since 2001, the number of jobs in agriculture, retail, and manufacturing all declined, but a slight recovery occurred in manufacturing after 2010. Government jobs, which include Federal, State, and local government, remained steady over the last two decades. Increased labor productivity since 2001 was one important driver for decreases in rural agricultural and manufacturing jobs.

The rural workforce has also become more diverse in the share of employment categorized as all other races and/or Hispanic in recent years, though it remains less diverse than the urban workforce. Between 2012 and 2019, the rural Black, Asian, and Hispanic workforces each increased, with rural growth in the Hispanic workforce outpacing metro area growth. In addition, employment growth rates were higher for all other races and/or Hispanic workers than for White workers in every rural industry except agriculture.

---

2 Throughout this report “all other races” includes all race classifications excluding White.
Rural Population Declined During the 2010s but Increased Dramatically During 2020–21

Metropolitan (metro) and nonmetropolitan (nonmetro) population trends shifted dramatically with the onset of the pandemic in 2020. Population growth in metro areas was 0.5 percent from July 2018 to July 2019 but fell to an unprecedented low of 0.1 percent growth during the same period from 2020 to 2021. Increasing death rates from the pandemic combined with record-low births and outmigration from metro areas contributed to the decline of population growth to near zero.

Natural population change (births minus deaths) also declined in nonmetro areas in recent years. In fact, nonmetro areas began showing an overall natural decrease (more deaths than births) for the first time beginning in 2017. The rate remained close to zero until, with the arrival of COVID-19, the natural change went from a 0.005-percent decline in 2018–19 to a 0.3-percent decline over 2020–21.
Despite this natural decrease, overall population growth in nonmetro counties took a dramatic upswing during 2020–21, from a 0.1-percent decline from July 2019 to July 2020 to a 0.3-percent increase in the following 12 months. Nonmetro areas began growing at a faster rate than metro areas for the first time since the mid-1990s. A turnaround in migration flows between metro and nonmetro counties occurred during the first year and a half of the pandemic, leading to nonmetro population gains from net in-migration that more than offset losses from the natural decrease. During 2020–21, many people moved to nonmetro areas to reside in places with less population density as COVID-19 infection rates accelerated.

Figure 1
Overall population growth in nonmetropolitan counties increased rapidly during 2020–21 due to an increase in net migration

Note: The metropolitan status changes for some counties in 2000 and 2010.
Figure 2
The period 2010–20 was the first decade of overall nonmetropolitan population decline

Note: The metropolitan status changes for some counties in 2000 and 2010.
Rural Working-Age Population Declined During the 2010s and During the First Year and a Half of the COVID-19 Pandemic

The overall U.S. population has been aging as the baby-boom generation entered their 60s and 70s. In nonmetro areas, this aging trend was accelerated by historical patterns of outmigration among young adults and in-migration of older adults to rural retirement destinations. In 2021, people 65 years and older made up over 20 percent of the nonmetro population for the first time in history, compared with 16 percent of the metro population. Corresponding declines in the relative size of the working-age population (18–64 years) were also higher in nonmetro areas. In 2021, 58 percent of nonmetro residents were 18–64 years old, compared with 61 percent of metro residents.
An overall decline in the working-age population began earlier in nonmetro areas compared with metro areas. During the 2010–20 decade, the nonmetro working-age population declined by 4.9 percent and the population under age 18 declined by 5.7 percent, while the population 65 years and older grew by 22 percent. The working-age population continued increasing (6.0 percent) in metro areas during the 2010s but at a much lower rate than the age 65+ population (37.1 percent).

By 2021, the trend of population declines among children and working-age adults first seen in nonmetro areas had extended to the Nation as a whole. The increase in net migration into nonmetro counties during the pandemic added to the nonmetro working-age population but was not enough to offset the number of residents turning 65 during this same period. The aging of the baby-boom generation not yet aged 65 in 2021 will continue to contribute to the loss of working-age adults through the end of this decade.

Figure 3
The nonmetro working-age population declined 2010–20


Figure 4
Metropolitan and nonmetropolitan young and working-age populations declined in the first year of the Coronavirus pandemic

Note: Population change by metropolitan status and age group, July 2020–July 2021.

Declines in the working-age population may make it harder to meet labor demands in some rural industries and local labor markets. At the same time, many rural areas lack sufficient health care capacity, broadband service, community centers, and other services to address the challenges associated with an aging population.
Rural and Urban Employment Shares Vary by Industry

From an employment perspective, the rural economy in 2019 was dominated by four industries: government (3.7 million jobs), manufacturing (2.6 million), retail (2.5 million), and health care and social assistance (2.4 million). Employment in these industries has been a mainstay for rural economies, with the top four rural industries unchanged since 2001. Families on small- to mid-sized farms often depend on non-agricultural jobs in their local economies as off-farm sources of income.

Figure 5
Compared with metropolitan employment, nonmetropolitan employment depends more on agriculture, manufacturing, and government.

Notes: The chart shows the percent of employment in each industry, as defined by the North American Industry Classification System (NAICS), as a share of total employment calculated separately for metropolitan (metro) and nonmetropolitan (nonmetro) areas. The largest rural differences are defined as the rural industry employment percent minus the urban percent divided by the urban percent. Metropolitan Areas are defined (geographically delineated) by the Office of Management and Budget (OMB) bulletin no. 20–01 issued March 6, 2020.


Although the industry structure of metro and nonmetro areas in 2019 was similar in many respects, there were

---

3 The North American Industry Classification System (NAICS) is used to define industries throughout this report at a two-digit classification level. For example, “agriculture” is defined by NAICS 11 as including agriculture, forestry, fishing, and hunting.

also notable differences. Metro economies were more specialized in professional services (7.7 percent of metro workers but only 3.4 percent of nonmetro workers) and finance and insurance (5.5 percent of the urban employed compared with 3.2 percent of rural workers). Information and media, the management of companies, and administrative and waste management sectors were also more concentrated in metro areas. In contrast, nonmetro economies were more specialized in government (15.6 percent nonmetro and 11.8 percent metro); in manufacturing (10.9 percent nonmetro compared with 6.1 percent metro); in agriculture (7.0 percent of employment compared with 1.1 percent in metro counties); and in mining (1.7 percent nonmetro compared with 0.4 percent metro). Nonmetro employment is higher in agriculture, mining, and manufacturing due to comparative advantages (e.g., availability of resources, lower wages, and land costs). Nonmetro employment is higher in government partly because spatial distances and lower population concentration limit economies of scale in government service provision.
Rural Employment Growth Varies by Industry

Many rural economies underwent substantial job reallocation across industries over the last two decades. Figure 6 shows the six largest rural industries and their change in employment over time relative to each industry’s baseline employment in 2001. Two of the top six largest industries grew. Health care and social assistance experienced the strongest growth, with rural employment 21.5 percent higher in 2019 than in 2001. Hotel and restaurant jobs showed strong growth through most of the 2010s but were negatively affected from 2019 to 2020 by changes in demand due to COVID-19 transmission and social-distancing recommendations. Manufacturing declines were substantial, most notably during the 2007–09 Great Recession. Some recovery of manufacturing jobs occurred after 2010 through 2019 until the onset of the pandemic in 2020. In contrast to employment in rural economies, employment in five of the top six largest urban industries grew over the last two decades.

Figure 6
The six rural largest employment industries are agriculture, manufacturing, retail, health, hospitality, and government

NAICS = North American Industry Classification System.
The strongest rural job gains from 2001 to 2019 were mostly in smaller industries. The highest growth was in real estate, rental, and leasing services, which includes lessors of nonresidential buildings, real estate agents, brokers and property managers, truck leasing, and commercial and industrial machinery and equipment rental and leasing. Also showing rapid growth were jobs in administrative services, which includes office administration, facilities support, business support services, security services, conventions and trade shows, and waste management and treatment. Health care and social assistance was the only one of the six largest rural industries that was also one of the six fastest growing industries.

Figure 7
The rural six highest growth industries are real estate, education, administrative, professional services, health, and finance

Additional rural industries that grew over the past two decades were professional, scientific, and technical services, educational services, and finance and insurance. The growth of these industries represented a shift in the composition of rural production toward industries that employ higher shares of high-skill workers. Consistent with this shift, the rural percent of college-educated workers increased from 21.5 percent in 2012 to 23.8 percent in 2019, though these rates have remained lower than the share of college-educated urban workers (38 percent in 2019).
Output Increased in Primary Goods Production Since 2001 Despite Lagging Employment Trends

One important driver for changes in agricultural jobs was increased productivity. Though agricultural employment fell over time, agricultural output increased substantially. Nonmetro agricultural labor productivity, defined here as output (industry GDP) per worker, increased because of technological innovation, some of which included labor-saving technologies. As seen in figure 8, agricultural labor productivity increased between 2001 and 2006, slowed through the Great Recession, and grew again after 2012.

Figure 8
Rural agricultural output and productivity are increasing

GDP = Gross Domestic Product; NAICS = North American Industry Classification System.

Notes: The figure shows employment, output (industry GDP), and labor productivity (output per worker) for the agriculture, forestry, fishing, and hunting industry (NAICS 11). GDP output is deflated using a chained-dollar Fisher index method.

Although mining jobs are generally a small share of rural employment, the employment in this sector, driven by the oil and gas industry and increased unconventional drilling, nearly doubled in employment from 2001 to 2014, with only a minor pause during the Great Recession. Output lagged employment during this period due to labor-intensive prospecting and drilling. However, after 2014, labor productivity increased as new wells added output and far fewer workers were needed on site; thus, the industry lost much of the employment gained. Labor productivity continued increasing after 2015 as output stabilized and labor demand fell.

Figure 9
Rural mining was a boom and bust employment industry from 2001 to 2020

GDP = Gross Domestic Product; NAICS = North American Industry Classification System.

Notes: The figure shows employment, output (industry GDP), and labor productivity (output per worker) for the mining, quarrying, and oil and gas extraction industry (NAICS 21). GDP output is deflated using a chained-dollar Fisher index method.

Manufacturing followed a similar pattern to agriculture of declining employment but increasing output and productivity, especially during the early 2000s. Output and employment both fell during the Great Recession; however, labor productivity continued to increase. In the subsequent recovery, employment, output, and labor productivity all increased, though manufacturing job growth increased at a slower pace.

Figure 10
Rural manufacturing output and productivity are increasing

GDP = Gross Domestic Product; NAICS = North American Industry Classification System.

Notes: The figure shows employment, output (industry GDP), and labor productivity (output per worker) for the manufacturing industry (NAICS 31–33). GDP output is deflated using a chained-dollar Fisher index method.


The average rural manufacturing plant size declined from 2001 to 2019, according to data from the U.S. Bureau of the Census's County Business Patterns. There were 54 workers per plant on average in 2001 and 50 in 2019. Urban plants were smaller on average, employing 44 workers in 2001 and 40 in 2019.

Both agricultural and manufacturing output and labor productivity grew over the last two decades. However, because of technological advances—particularly labor-saving technology—uncertainty exists around the extent these industries will drive rural job growth going forward.
Race/Ethnicity Distribution of the Rural Labor Force Varies by Industry

Given the ongoing shifts in employment by industry and the interest in equity challenges expressed by rural policymakers, it is informative to highlight the labor market experience of racial and ethnic groups, especially in emerging sectors in rural America. Nonmetro areas continue to have a much higher share of White workers (81.2 percent compared with 59.8 percent in metro areas). Hispanic labor force growth has been consistently high for the past four decades, and in 2019, made up 8.3 percent of the nonmetro labor force. Similar to Hispanics, the nonmetro share of workers who were Black or African American in 2019 (7.2 percent) was roughly half the share seen in metro areas (13.2 percent). American Indian or Alaska Native workers were the only group other than Whites to have a larger share of nonmetro workers (1.5 percent) compared with metro workers (0.4 percent). Asians had a similar share of nonmetro workers (1.6 percent) but with a much higher metro share (7.4 percent).

Figure 11
The rural workforce is less diverse than urban workers

Notes: “Rural” and “nonmetropolitan” (nonmetro) are used interchangeably to measure nonmetropolitan employment. The figures use a single race identification that codes race and Hispanic origin responses into one scheme that includes only federally defined race and Hispanic origin groups. People are assigned to a single race group. All people who reported Hispanic origin are classified as Hispanic regardless of their race response. Rural workers are defined at the individual level in the University of Minnesota harmonized Bureau of the Census American Community Survey (ACS) Integrated Public Use Microdata Sample (IPUMS) as either “not in metropolitan area” for place of work or “metropolitan status indeterminable” for place of work for nonmetro and indeterminable places of residence (indeterminable is due to privacy suppression in the public data). IPUMS derives place-of-work codes based on the metropolitan status of the place of work as directly identified in the source microdata as well as by using other available geographic information such as place-of-work county groups or Public Use Microdata Areas (PUMA). The 2019 data from U.S. Department of Commerce, Bureau of Economic Analysis (BEA) show nonmetro employment to be 23.6 million. The 2019 ACS nonmetro employment (weighted estimate) is 24 million as defined, where some metro workplaces in the outer suburbs of metro areas near the metro/nonmetro classification boundary are included. Limiting the place of work to “not in metropolitan area” includes 11 million rural workers, only half of the total and not necessarily representative of rural employment overall.

In 2019, Hispanic workers performed 14.4 percent of rural jobs in agriculture and 12.8 percent in accommodation and food services. Hispanics comprised 8.7 percent of workers in manufacturing, 7.8 percent in government, 7.5 percent in retail, and 6.2 percent in health care and social assistance. Rural Black workers were more evenly distributed, with 9.7 percent of the workforce in manufacturing, 9.4 percent in health care and social assistance, 9.5 percent in hotels and restaurants, and 8.8 percent in government. Black workers were less represented in retail (7.0 percent), and only 2.4 percent of agricultural workers were Black. Asian workers were less than 2 percent of the rural workforce in most industries, except for accommodation and food services (3.3 percent). Similarly, American Indian or Alaska Native workers were less than 2 percent of rural employment in most industries except government (3.4 percent).

Figure 12
Employment shares in the top six largest rural industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Black</th>
<th>American Indian</th>
<th>Asian</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture (NAICS 11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing (NAICS 31-33)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail (NAICS 44–45)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health care (NAICS 62)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomodation, food (NAICS 72)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government (NAICS 92)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NAICS = North American Industry Classification System.

Note: Percent of workers in each industry by worker characteristic.

For the fastest growing rural industries, Black workers have higher job shares in health and social assistance (9.4 percent) and administrative industries (8.6 percent). Hispanic workers are also well represented in the administrative, support, and waste management industry (13.3 percent), and in the real estate, rental, and leasing service industry (7.3 percent). American Indian workers hold their highest share of jobs in health care and social assistance (1.6 percent) and the lowest share in professional services (0.6 percent). Asian workers have their highest share in professional services (2.0 percent) and lowest in finance and insurance (1.2 percent).

Figure 13
Employment shares in the top six fastest growing rural industries

NAICS = North American Industry Classification System.
Note: Percent of workers in each industry by worker characteristic.
As seen in Figure 14, the rural workforce became more diverse between 2012 and 2019. Employment growth rates were higher for all other races and/or Hispanic workers together as a group than for White workers in every industry except for agriculture. The all other races and/or Hispanic workforce grew 56.9 percent in the transportation industry, 49.2 percent in professional services, and over 30 percent in each industry of construction, finance and insurance, real estate, and administrative services. Following the Great Recession and prior to the COVID-19 pandemic, all other races and/or Hispanic workers became an increasing share of the rural workforce.

**Figure 14**
**Rural all other races and Hispanic employment growth exceeds White employment growth in all industries except agriculture**

NAICS = North American Industry Classification System.

Notes: Percent of employment growth in each industry by worker characteristic. For worker characteristics, ACS data from 2012 to 2019 was used for consistent comparability across years. The 2012 ACS was the first public-use microdata year to switch to the 2010 definitions for Public Use Microdata Areas (PUMA) and the Office of Management and Budget (OMB) 2013 metropolitan area definitions.

Conclusion

Changes in rural America’s population and employment over the last decade reveal three main findings. First, rural population annual growth rates were near zero. The population share of those 65 years of age and older increased, and the share of the working-age population decreased. Second, tradable goods industries, such as agriculture and manufacturing, increased output and labor productivity while experiencing decreased employment. Rural employment growth occurred in service industries such as health care, professional services, and education. Finally, the rural workforce became more diverse, with increased employment shares of all other races and Hispanic workers.