Investing to Revitalize Rural America:

Practical ways to tackle the growing urban/rural divide

- Over the past few years, the public has become more aware of the widening gap in economic opportunities that rural Americans have experienced versus their urban counterparts. Obstacles to growth facing rural America include lack of access to capital to create jobs and poor infrastructure such as a lack of broadband Internet, quality healthcare, and local banking services. These challenges are exacerbated by the opioid epidemic.
- This economic divide could weigh on the U.S. economy and exacerbate divisions within American society.
- To analyze this issue, we have researched economic, government and academic reports on the topic and had relevant discussions with managers of rural foundations, CDFIs and asset management firms which invest in rural America.
- In this report, we highlight approaches to rural revitalization that have proven effective, particularly asset-based community development, which often involves a combination of philanthropic, public and private capital. We also highlight investment strategies that support this theme, as shown below.

	Job and Business Creation	Infrastructure	Health Care
Public Equity	▪ Banks which actively engage in farm lending and/or maintain a branch network in rural communities.	▪ Equity portfolios that invest in rural infrastructure. ▪ ETFs focused on infrastructure inclusive of rural areas.	
Alternative Investments	▪ Agribusiness venture capital or private equity funds focused on providing capital to businesses in rural areas. ▪ Rural Business Investment companies (RBICs) focused on providing equity or fixed income capital to small enterprises in rural communities.	▪ Real asset REIT that provides leases/mortgage to organic farmers especially funding needed during critical period of transition from conventional to organic farming. ▪ Real assets funds focused on providing capital for rural infrastructure.	▪ Healthcare oriented fund that invests in developing facilities for underserved communities inclusive of rural areas, with the goal of improving health outcomes.
Fixed Income	▪ Community Development Financial Institutions (CDFIs) that benefit rural populations by investing in environmentally sustainable enterprises and help grow good jobs in rural communities. Additionally, funding for affordable housing helps support local economies.	▪ Municipal securities that benefit rural areas, especially those targeting education systems, renewable energy infrastructure and clean water infrastructure. Fixed income fund can customize portfolio to invest in rural farmland and rural infrastructure in specific areas.	▪ Municipal bonds that benefit rural areas, especially those targeting hospitals and health care services.
Cash	▪ Banks that maintain a presence in rural communities and use deposits to fund lending to local enterprises and entrepreneurs to grow the local economies.	▪ Banks that maintain a presence in rural communities and utilize funding from deposits to fund local infrastructure needs in rural areas.	▪ CDFI that invests in healthcare services and facilities for underserved communities including rural ones.

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Summary: Investing to revitalize rural America

Rising income and wealth inequality is a widely recognized social concern in the United States. This is a multi-faceted issue, with root causes that vary according to demographics, and one that impact investors have shown strong interest in addressing.

Since the 1990s, there has been a growing disparity in economic opportunity for rural Americans. This demographic issue has gained public awareness in mainstream social discourse in the recent past. In this report, we lay out the key challenges faced by rural America, highlight approaches to revitalization that have proven effective, and describe existing investment strategies.

Key challenges

The decline of manufacturing and shift to a knowledge- and service-based economy left many rural communities unable to recover adequately from the Great Recession of the late ’00s. The resulting challenges can be summarized as: 1) Lack of jobs, or a mismatch in skills with available jobs; 2) Poor infrastructure, with rural communities often lacking high-speed internet, access to quality healthcare, and local banking services; and 3) Drug addiction, specifically opioids, which compounds the effect of limited health care access.

Effective strategies for revitalization

Asset-based community development (ABCD) is a “self-help” strategy that sets the stage to attract private loans and investments by taking advantage of a community’s existing strengths. Initially a community might use government or foundation funding to develop community assets, e.g., supporting existing local entrepreneurs or developing local natural resources to offer an attractive quality of life. Once an initiative proves viable it may be possible to attract private investment.

Community Development Finance Institutions (CDFIs) and other local intermediaries can help aggregate capital to support local investment. Aggregators attract capital to an investment theme and allocate sums to projects that need funding.

Real estate development is another possible path to revitalization, with Opportunity Zones potentially attracting investment that might not otherwise be economically feasible.

We highlight several initiatives that are under way related to **broadband projects** in small communities that may finally begin to deploy this critical infrastructure.

Lastly, we highlight how some communities are making a concerted effort to **attract a younger population** and stem the “brain drain” of rural youth to urban areas.

Investment opportunities

For investors interested in promoting capital investment in infrastructure and businesses that create jobs in rural America, there are various strategies one can consider across asset classes. We describe these strategies in this report; some are general categories of investment, and in other cases we refer to specific strategies.

Framing the issue: Why is rural America struggling?

Historical context

In 1910 more than 50% of the U.S. population was rural. In 2010, rural areas were home to less than 20% of the population.[1] This shift reflects high growth in urban centers due to migration from both rural areas and from outside the U.S., along with a natural decrease (more deaths than births) in rural America.[2]

Within this span of 100 years, rural economies have experienced extended periods of growth and stability relative to urban areas. In the 1960s and 1970s, the cities experienced outmigration of the middle class as people moved to the suburbs and rural areas. Many cities lost jobs and taxpayers, which contributed to socioeconomic deterioration. From the 1980s into the mid-1990s, America's big cities experienced the highest concentration of divorces, the highest rates of teenage births, and more deaths from cardiovascular disease and cancer than suburban and rural areas, according to the U.S. Census Bureau. By the mid-1990s, the nation's smallest counties housed nearly one-third of all new businesses, over twice the share created in the largest counties, according to the Economic Innovation Group, a bipartisan public-policy organization.[3]

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By the late 1990s, however, the shift to a knowledge-based economy had transformed cities into strong economic centers offering high-wage jobs. Metropolitan areas offered diversity, density and culture, attracting young college-educated adults. Real estate prices rose while affordable housing became scarce, pushing lower-income residents to the outskirts. Crime rates declined and policymakers offered campaigns to combat urban ills such as teen pregnancy and drug addiction. As cities saw an upswing in key measures of quality of life, rural areas struggled to find ways to adapt to the changing economy.[4]

Defining rural and urban

The U.S. Census Bureau defines rural simply as "not urban." Rural areas encompass all population, housing and territory not included within an urban area. To classify urban areas, the Census Bureau looks at population thresholds. Urban areas have 50,000 or more people and urban "clusters" a minimum of 2,500 but less than 50,000 people. The next consideration is density—a minimum of 1,000 people per square mile. Distance of developed land areas from one another is another factor.

Figure 1: Attributes of the urban and rural populations in the United States[5]

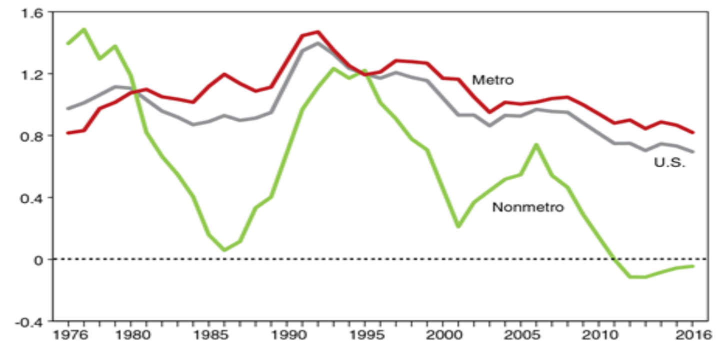
	Urban	Rural
Land area (%)	3%	97%
Population (millions)	251	60
Population (%)	80.7%	19.3%
Adults age 18 or older (millions)	189	47
Median age (years)	45	51
Age 65 or older (%)*	13.8%	17.5%
Population with disability (%)*	12%	15%
Race: White non-Hispanic (%)*	72.5%	89.9%
Race: People of color (%)*	27.3%	10.1%
Bachelor's degree +	29%	19%
Civilian employed (18-64 years)	70.0%	67.6%
No internet access**	17.3%	23.8%

Source: American Community Survey 2011-2015 5-year estimates (except * 1 year 2014 Survey estimate & ** 1 year 2015 Survey estimate) and the 2010 United States Census.

Generally, rural areas are sparsely populated and are far from urban areas. According to the 2010 U.S. Census Bureau survey, urban areas made up 3% of the land area in the country but contained 80.7% of the population, while rural areas extend across 97% of the land area and were home to 19.3% of the population.[6]

Researchers from the Economic Research Service (ERS), which is part of the U.S. Department of Agriculture (USDA) and an agency of the Federal Statistical System of the U.S., and others who analyze conditions in rural America most often use data on "nonmetro" areas, defined somewhat differently than the Census Bureau's urban/rural guideline. Nonmetro areas are defined as counties outside the commuting zones of cities of 50,000 or more; there are 1,800 such counties.

Figure 2: Metro vs nonmetro population trends (% chg from prior year)



Note: Metro status changed from some counties in 1980, 1990, 2000 and 2010.
Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

Population growth rates in rural/nonmetro counties have been significantly lower than in urban/metro counties since the mid-1990s, and the gap has widened considerably in recent years. According to the ERS, the annual rates of population change in rural areas fell from 0.7% to below 0% for the first time over the last several years, while urban growth rates fell only slightly from 1% to 0.8% between 2006 and 2016. According to the U.S. Census Bureau's latest population estimate, rural America saw its sixth consecutive year of modest population loss in 2016.[7] This trend continued in 2017 according to the ERS.[8]

Rural vs urban poverty rates

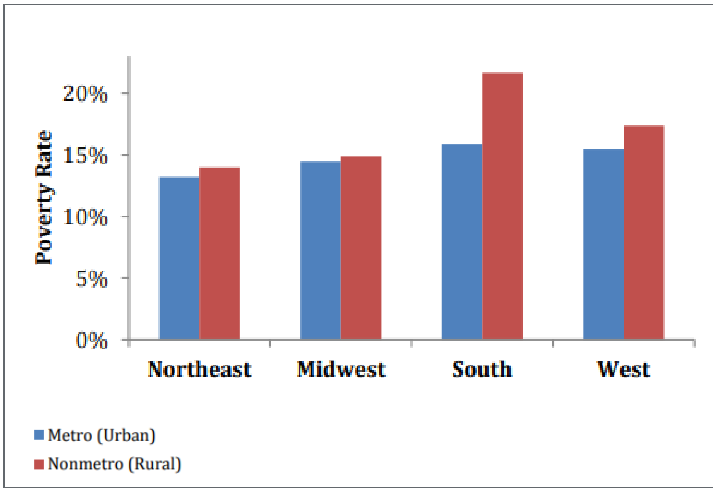
Rates of poverty have historically been higher in rural than urban areas

Rates of poverty have historically been higher in rural than urban areas. In fact, levels of rural poverty were often double those in urban areas throughout the 1950s and 1960s.[9] While these rural-urban gaps have diminished, substantial differences persist (Figure 3), particularly in the south. In 2015,[10] 16.7% of the employed rural population was poor, compared with 13.0% of the urban population and 10.8% of those living in suburban areas outside of principal cities.[11]

This gap exists for employed as well as the unemployed (Figure 4). In the early 1980s, the share of rural poor who were employed exceeded that in urban areas by more than 15%. Since then, more and more poor people in rural areas are also unemployed.

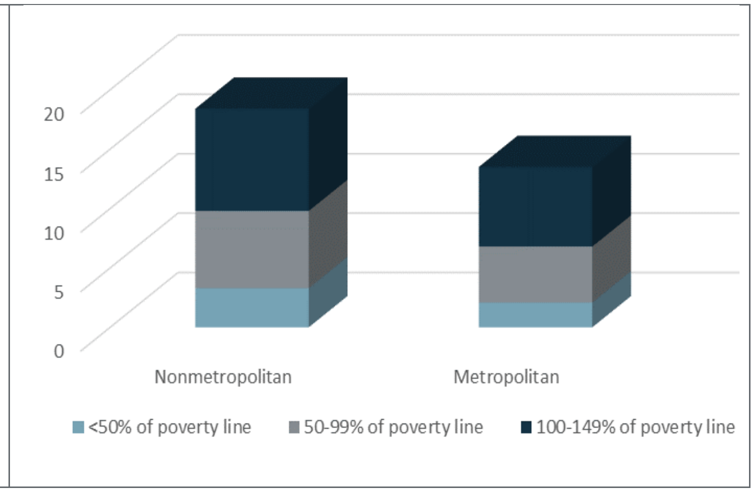
Large shares of the rural workforce also live in economically precarious circumstances just above the poverty line. Nearly one in five rural working householders lived in families with incomes less than 150% of the poverty line. That's almost five percentage points more than among urban workers (13.5%).[12]

Figure 3: Urban vs rural poverty rates, 2011-15



Source: USDA, 2016

Figure 4: Percent of U.S. households age 25-54 that worked at least part of 2015, by poverty threshold



Source: U.S. Census Current Population Survey- 2015 & U.S. News & World Report

Today's challenges for rural populations

The U.S. Congress Joint Economic Committee (May 2017 Minority Staff report) succinctly states that the main issue facing rural America is: "limited economic diversification which makes rural communities vulnerable to economic shock and decline."[13] In other words, dependency on one or two large employers (a factory, distribution center, etc.) or industries such as farming or the extraction industries limits opportunities for job stability or growth.

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Many rural counties are in crisis, with aging populations, a growing number of unemployed working-age adults, and deteriorating trends in crime and drug abuse. Deaths by suicide and drug addiction are on the rise; access to banking and healthcare services is on the decline; and broadband internet access, critical to economic development today, is spotty at best.[14] All of this leads to a decline in tax revenue, which further stresses these rural areas. A survey of rural residents by Pew Research[15] identified the main problems facing rural communities:

1. **Lack of jobs, or a mismatch in skills with available jobs.** Many rural towns lack good quality jobs and businesses to create those jobs. Other towns may be home to a business that cannot find qualified workers.

2. **Poor infrastructure**, including lack of high speed internet, lack of access to quality healthcare and poor or no public transportation. To this add lack of banking services, as banks provide the capital needed to sustain and grow a community.

3. **Drug addiction**, specifically opioids, which degrades the quality of life in these communities. The lack of access to health care services compounds the problem.

Points 1 and 2 leads to a "brain drain" as young people move to urban areas to find jobs, obtain an education or join the military. Add to this trend declining birth rates, increasing mortality rates among working-age adults, and an aging population, and the result is a natural decrease (more deaths than births) in hundreds of rural U.S. counties.[16] The abandoned main streets of these rural towns and counties are stark illustrations of an economy and public policy that has shifted away from rural America.[17]

Approaches to strengthen rural economies

Given the challenges outlined in this report, one might wonder whether rural America is in an irreversible downward spiral. While there is much cause for concern, our research also highlighted approaches that are working. In many cases, solutions require a combination of philanthropic, public and private investment working in a coordinated manner. In this section we highlight positive approaches and examples that illustrate the potential to reshape the narrative for rural economies.

Asset-based community development (ABCD)

The premise of ABCD is that communities drive the development process

One way to create jobs in rural communities may be to adopt an Asset-Based Community Development (ABCD) approach.[18] The premise of this strategy is that communities drive the development process themselves by identifying and mobilizing existing, but often unrecognized assets, thereby responding to and creating local economic opportunity. For this process to succeed, committed local leaders are critical, working in partnership with foundations, CDFIs and investors, including fixed income and alternative investors such as venture capitalists.[19]

Adopting an ABCD approach requires local leaders to focus on targeted issues and develop a long-term plan to address them. Oftentimes the first steps are to leverage existing community assets and the talents of local entrepreneurs and workers operating in industries that are rooted in the history of the area. This is in contrast to blunt initiatives, like attempting to bring in a large manufacturer, where the community lacks the workforce or infrastructure to support it. Lending programs such as those sponsored by the Minnesota Rural Finance Authority, bring government and private capital together. Lending to local agriculture-related businesses allows for communities to leverage their existing businesses and infrastructures and reinvest to make these local businesses more efficient and competitive. Building better local ventures helps build optimism in the community and flips the psychology from a negative outlook to a positive one.[20]

Community leaders may also consider introducing replacement industries suited to their location. Examples include outdoor recreational infrastructure such as developing bike trails, or suitable manufacturing businesses that cater to the outdoor recreational industry. In rural farming areas, sustainable agriculture and food systems might be developed to create more profitable opportunities for small farmers and ranchers. [21]

In Minnesota, the introduction of advanced manufacturing, which uses innovative technology to improve products or manufacturing processes, has been highly effective for economic revival in rural communities. For example, one such company creates high-quality molds for larger manufacturers using computer technology. Advanced manufacturing creates well-paying jobs that do not require college degrees. Workers can be trained through a two-year program that perhaps leads to a certification in a particular skill set. Advanced manufacturing employment held up well in the last economic recession, and has resulted in low unemployment in many rural areas of Minnesota.[22]

Once a specific project, such as a water treatment facility or broadband infrastructure, has been clearly identified and a plan is developed, community leadership can seek programmatic funding from foundations, organizations and regional angel investors, as well as government grant money. Communities can also use local sales taxes, property taxes and bonding authority to build capital to improve infrastructure – and to demonstrate their commitment to potential investors. When the project is functioning and generating some predictable cash flows, it may attract private capital such as community bank loans, bond investments or venture capital money.[23] Cooperatives and micro-loans for small businesses may also be possible sources of capital for rural communities.

Successful community development projects should boost job growth as local enterprises are seeded and grow. The successful launch of a carefully planned project may also lead to the classic multiplier effect in the community, where an increase in one type of economic activity in a region prompts an increase in demand for goods and services, which then triggers the development of other types of economic activity in the same area.[24]

Connecting investors with those needing capital

Successful community development projects should boost job growth as local enterprises are seeded and grow

There is a disconnect between those who want to invest and those who need the investment, due to a lack of developed deal flow or awareness regarding opportunities. In some areas, Community Development Finance Institutions (CDFIs) and other local intermediaries can help aggregate capital to support local investment. Network Kansas[25] is an example of an aggregator model that attracts impact investment from philanthropic organizations and other investors. Aggregators attract capital to an investment theme and allocate sums to projects that need funding. For example, an investment theme of "healthy foods" might include investments in local grocery stores, drug stores, organic farms or mills.[26]

In rural areas, some foundations have taken the lead in early-stage lending, venture capital and place-based investing

In rural areas, some foundations have taken the lead in early-stage lending, venture capital and place-based investing. One example is the Telluride Foundation,[27] a Colorado-based community foundation that focuses on diversifying the local vacation-based real estate economy. Telluride works with small towns in the region on economic development encompassing program grants, direct investment and operational initiatives such as training unskilled workers to develop job skills. The foundation created Telluride Venture Accelerators (TVA),[28] tasked to create jobs in rural communities and diversify the local economy beyond Telluride's tourism core. TVA invests in a variety of small and startup businesses with the stipulation that the businesses remain in the Telluride area for a set period. These businesses need access to capital, particularly working capital and/or revenue-based finances to fund growth, which is difficult to come by for remote areas and slower-growth companies. Telluride Foundation is a general partner in an early-stage venture fund to help facilitate local early-stage investing to support the TVA companies; many of the investors are foundation donors. In addition, the foundation has launched a working capital loan fund capitalized with a program related investment (PRI) to allow flexible and low-cost terms for eligible entrepreneurs. TVA offers boot camps for these startups and small businesses, mentorship, and flexible capital in the form of either equity or revenue-based investments. This type of foundation/venture partnership can offer a good model for rural economies to attract, retain and grow viable small enterprises which can diversify and enrich the local community by offering jobs and commerce.

Real estate development offers another potential path

Investing to revive and create a vibrant downtown can be key to attracting small businesses and creating a better quality of life

Real estate development is important for economic success. Investing to revive and create a vibrant downtown can be key to attracting small businesses and creating a better quality of life. In 2019, Opportunity Zones[29] may provide a catalyst for investments in commercial real estate, housing and businesses in rural towns with limited economic growth. Opportunity Zones are designed to encourage and incentivize long-term private investment in low-income community development.

Towns might look to partner with foundations or others to develop work/life space to house businesses while creating housing that is not just affordable, but also high quality. Downtown planning and revitalization of historic buildings may also help attract new residents as well as foster tourism.

Rural broadband development

Some local telephone companies and other organizations have risen to the challenge of developing broadband infrastructure in rural communities. Some examples of non-profit, government and corporate broadband projects that may help build out this important infrastructure are noted below.

- Region 10 League for Economic Assistance and Planning is a non-profit organization offering public programs to support six counties in Western Colorado. The programs are cost-effective, reduce the burden on local governments and leverage available resources to meet the needs of the counties' residents. Its Region 10 Broadband Project is building out a fiber network to implement broadband connectivity in its rural areas. The organization is working with a local contractor company, Deeply Digital LLC, along with state and local funding.30

- Microsoft is investing in initiatives to help bring high-speed internet services to rural America.31 Microsoft, as advised by Boston Consulting Group, sees a $10 billion path to bringing broadband to rural America by using a mix of technologies including 4G LTE, TV White Spaces (which uses VHF and UHF spectrum that was set aside for TV broadcast but is unused) and Satellite (in the least densely populated areas). Microsoft is already partnering with various broadband companies to help extend broadband service to a variety of rural communities.

- The FCC announced that will invest $4.53 billion through a "Mobility Fund" to create broadband and advanced 4G LTE service for 700,000 homes and businesses.

By working with foundations, some corporations, and state and local government, rural communities may be able to help their populace access vital broadband services. If the baseline is set for some access to broadband, additional private capital may be attracted to continue the buildout and help attract small businesses that will help grow the local economy and create jobs.

Retaining and attracting young workers

Jobs and a vibrant community are key to retaining and attracting young workers and entrepreneurs. Young adults typically move out of their rural home towns after college or a stint in the military. However, after years of working in a big city, some prefer to return to raise a family in the rural area where they grew up. If the rural community can provide opportunities and engage local people at a younger age, they may be successful in attracting and eventually retaining a younger populace. Encouraging high school students to get involved with community development by including them on advisory boards may be a way to engage and retain young people in their rural community. Young people often want to contribute to building and enhancing their community. Early involvement in the community may encourage young people to return to the area after college graduation and working elsewhere.[32] Further, older business owners might offer younger people training to learn about their businesses and offer a pathway to an equity ownership in those businesses. [33]

Case study in asset- based community development: Ord, Nebraska

Ord in Valley County, Nebraska is a prime example of a rural community that successfully applied the ABCD model. This central Nebraska town lost 35% of its population between 1950 and 2000, most of whom were ages 15 to 25.

Town leaders decided to act to reverse its decline. In early 2001, Ord put in place two tools that catalyzed the community's turnaround. First, Ord and Valley County, in partnership with the Chamber of Commerce, agreed to work together and to share the costs of and revenues from community and economic development. The city, county and chamber each agreed to contribute $15,000 per year for a three-year contract to build a cohesive program. Second, residents passed a $0.01 local option sales tax for economic development. Revenue from this tax is used for business loans and other incentives, or leveraged as matching monies for grant funding. The leaders focused on four areas: youth outreach, entrepreneurship, leadership development and philanthropy.

The Ord Chamber of Commerce and the Valley County Economic Development Board are the major forces behind the town's economic and community development. These organizations share two paid professional employees, each of whom coordinates volunteer-led efforts. "Economic and community development in Ord have to be one and the same because nobody wants to live where there are no amenities," said Bethanne Kunz, the executive director of both organizations.

The town is building a community endowment by tapping into the wealth transfer from land-rich farmers, who transfer or donate their land to raise funds via a sale or allow the land to be leased for the benefit of the endowment. The proceeds from the land sale or the interest from the lease is used to finance economic development projects. Thanks to a growing revenue stream from the local option sales tax, the town staffed an economic development office that markets the area to outsiders, works with existing small businesses and entrepreneurs, and attracts new industries into the town.

In the schools, local leaders created a curriculum in entrepreneurship and business development. Students are taught personal finance, business law and how to develop a business plan while conducting market analysis. Students select their own project, write a business plan and have a banker counsel them as they develop the project and learn about marketing.

Ord also has a leadership development program to create future community leaders, including a nine-month class covering policy making, business and public service. Participants range from high school students to retirees. To develop philanthropy, Ord created a community endowment seeded with over $1 million donated by some residents. Earnings are used to provide relocation assistance to attract young professions to Ord. A founder's club, which costs $1,000 to join, attracted 65 members after a few years.

Finally, the Chamber of Commerce developed a community team of lenders, accountants and lawyers to offer one hour of free service to small business owners and entrepreneurs to aid the development and growth of local business. The town actively markets and supports business recruitment efforts. The Valley County Youth Initiative keeps in contact with high school alumni who are in college to keep them apprised of job openings and business ownership opportunities in the community. Communication with residents of the community creates a positive flow of information.

Since inception in 2000, outcomes include a sizeable increase in retail sales and personal income in the county, the addition of new and expanding businesses, attraction of millions of dollars in new investment and job creation.

The key to Ord's success included diversifying the traditional farm economy, creating a financial structure to aid in community development and building a community consensus around the strategy for economic development. The partnership with local government and the Chamber of Commerce helped seal the deal. Financial resources and organization helped lead to success. [34]

Investment opportunities to support rural communities

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Job and business creation

In the private equity realm there is a fund that focuses on lower middle-market agriculture or ag-related industries. The firm's investment strategy zeros in on the "inputs" segment of the agriculture value chain, rather than real assets such as farmland or agricultural commodities, to drive sales growth and improve operations to deliver superior investment returns. Examples of inputs include testing systems and services, fertilizers, and irrigation systems.

A Rural Business Investment Company (RBIC) is a venture capital organization that helps meet the equity capital investment needs in rural communities. The goal is to help fill the need for business and development capital in underserved rural areas through public-private partnerships with state and federal economic development organizations. One RBIC with which we are familiar invests primarily in the food and agribusiness sector. The fund's double-bottom-line objective is to improve local communities through the impact of sustainable local business and employment growth while producing strong returns for investors. At least 75% of the funds must be invested in rural areas with a population of less than 50,000 inhabitants.

There are many Community Development Financial Institutions (CDFIs) that aggregate capital from private and public sources to invest in local businesses to promote rural economic growth. CDFIs are private financial institutions that provide affordable lending to underserved communities with the goal of financing local businesses to spur economic growth and make loans for property development and affordable housing. One CDFI helped create and preserve over 5,000 full-time jobs and developed nearly 2 million square feet of property in an underserved rural area. Its venture subsidiary invests in companies at various stages of development to help enrich distressed communities and foster environmental sustainability.

There are several publicly and privately held commercial banks that rank among the top 100 farm lenders by dollar volume in the U.S. Investors could invest in publicly held bank stocks related to these institutions or place deposits with banks that maintain business in rural communities.

Infrastructure

Investors can place capital in passively managed funds that include securities of infrastructure providers such as telecom/cable providers along with broadband companies which offer service in rural areas. These companies are critical to building out high-speed internet services to underserved communities.

Investors interested in exposure to U.S. infrastructure companies can put funds in an ETF which tracks an index of U.S equities that have infrastructure exposures. This exposure typically will be broad based and won't focus specifically on rural areas but will include rural investments in the broader range of securities.

Municipal bond funds that raise money for rural counties could be another good way to address needs in counties lacking adequate broadband and other basic infrastructure. Investors can focus on municipal securities that benefit rural areas, especially those targeting hospitals, education systems, renewable energy infrastructure, and clean water infrastructure. Alternatively, fixed income investors can access a fund that offers customized mortgage backed securities investments in specific rural zip codes and in affordable housing projects.

In terms of real assets funds, investors can participate in a fund focused on the purchase of agricultural land and conversion to organic crop land and large-scale sustainable agriculture. This helps rural farmers monetize their assets. There are also real assets funds that focus on infrastructure, some of which include investment into rural areas.

As large regional banks acquire smaller community banks, local bank branches are disappearing from rural towns. Public equity investors can invest in banks that maintain a presence in small towns and those that actively engage in agricultural lending. Investors can also put deposits in those institutions or in CDFIs that focus on rural community development.

Health care

Since access to health care and substance abuse therapy is sorely limited in rural America, fixed Income, investors can focus on municipal securities that benefit rural areas, especially those targeting hospitals and health care facilities. Additionally, there are CDFIs that focus on providing funding for health care services in rural communities. Another possibility is a real estate fund that helps develop high quality healthcare facilities in underserved communities, which may be inclusive of rural areas.

Appendix: Exploring the issues facing rural Americans

Case study: A tale of two cities

Consider a typical former industrial city and a classic rural town that have evolved differently in terms of demographics and population growth since the mid-twentieth century.

Pittsburgh, Pennsylvania, has morphed from a former industrial hub that had suffered with the decline of the steel industry into a thriving business and technology center. Meanwhile, Bruceton, a small town in Carroll County, Tennessee (discussed later in this report as well), has languished. The reasons for the different outcomes in these two towns illustrate stark differences in the trajectory of urban and rural towns over the past several decades.

Population density, diversity and location may account for some of the difference. Although far from its peak of 676,806 people in 1950, Pittsburgh still is home to well over 300,000 people as of 2017. In 2012, Forbes called Pittsburgh the "comeback city" because it had begun to reverse its population decline as out-migration and natural decline appeared to stop. Ethnically, the city is highly diverse.[35] The median age is relatively low, the percentage of people with higher education exceeds 40%,[36] and the median family income was a healthy $74,596 in 2016.[37]

Figure 5: A tale of two cities

	Pittsburgh, PA	Bruceton, TN
Population (2016)	303,125	1,413
Population density people/sq. mile	5,540	748
Median age (years)	33.2	38
% age 25+ with bachelor's degree	40%	13.4%
Median family income (2016)	$74,596	$40,278
Unemployment rate	3.9%	5.5%
Percent white non-Hispanic	64.7%	91%
Population (2016)	303,125	1,413

Source: Various including American Census Survey, U.S Census, City-Data.com

Pittsburgh is home to various universities and higher education institutions including Carnegie Mellon and University of Pittsburgh, both major institutions. Roughly 10.4% of the population works in manufacturing while 7% engage in professional, scientific and technical services.[38] Pittsburgh and the surrounding Allegheny County are home to numerous large public and private employers along with various nonprofit organizations.[39] The highly educated workforce likely attracts major employers and the dynamic environment seems to attract and retain an educated populace. Unemployment is low at 3.9% in May 2018.[40]

After experiencing population growth between 1940 and 1990, when its population peaked at 1,586, Bruceton's population declined to 1,413 as of 2016.[41] As is typical of a rural town, its population density is low at 748 people per square mile. The inhabitants are 91% white and the median age is 38 years old as of 2014. The estimated median household income was $40,278 in 2016. Roughly 13.4% of the people over 25 years old have a bachelor's degree or higher. The nearest mid-sized city is 83 miles away – Metropolitan Government, Tennessee (pop. 569,891).[42]

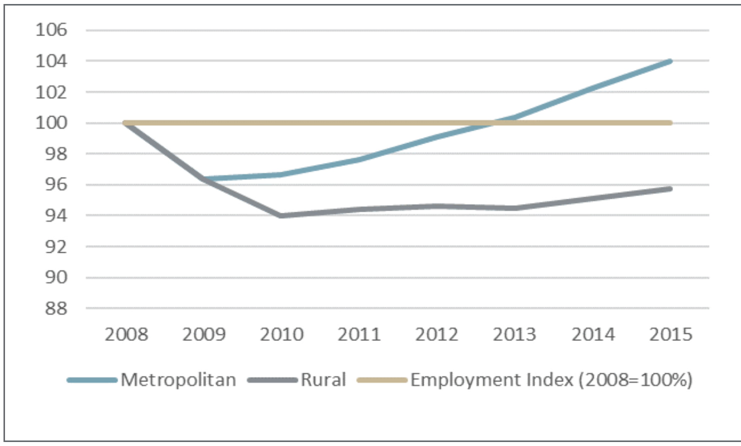
Bruceton was once headquarters to a textile company which employed 1,700. After numerous rounds of layoffs beginning in 1995, the company closed its U.S. operations and moved jobs overseas. Unemployment has improved recently, declining to 5.5%[43] from double digits in the early 2000s.[44] [45] Still, unemployment remains higher than the 3.4% and 3.9% rate experienced in Tennessee and the U.S. as a whole. Bruceton has one university, Bethel, located 17 miles outside its borders. Other colleges and universities are located 40 miles or more from the town. Employers tend to be smaller, privately held companies or companies with major operations outside of Bruceton; 22% of the population is employed in manufacturing. Bruceton's older, less educated population and its distance from larger metropolitan areas could be a deterrent to the rebound in population growth and economic improvement experienced by cities such as Pittsburgh.

Key employment challenges

Coal miners, factory workers and loggers are now stocking shelves at the local big box retailer

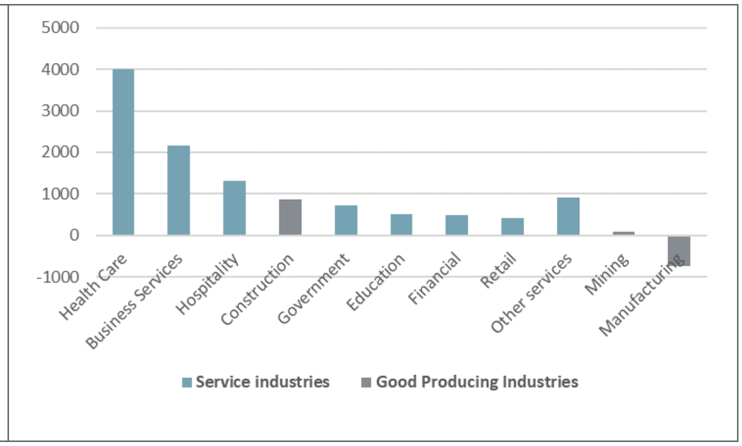
Most new jobs aren't being created in rural America (Figure 6). Those that are, tend to be in the lower paying service sector. As the traditional energy and mining-related economy continues to shrink and large industrial employers exit small U.S. towns, coal miners, factory workers and loggers are now stocking shelves at the local big box retailer. The U.S Bureau of Labor Statistics projects this trend to continue over the next decade,[46] as shown in Figure 7.

Figure 6: Job growth in America - metropolitan vs. rural areas



Source: Integrated Public Use (https://usa.ipums.org/usa/)

Figure 7: Absolute changes in jobs, service vs. goods-producing sectors (non-farm), projected for 2016-26



Source: U.S. Bureau of Labor Statistics

Further, researchers from the Economic Innovation Group looked at three of the last recoveries in the U.S. economy: 1992-96, 2002-06, and 2010-14,[47] and found a worrisome geographic trend: In the 1990s recovery, U.S. business formation and job creation were broad-based, with less-populous counties of 500,000 people or less generating 71% of all new business establishments. In the 2010s, that figure plummeted to 19%. Larger counties with over 500,000 people generated 81% of new businesses, and most of the growth occurred in counties with over a million people.[48]

Automation in agriculture

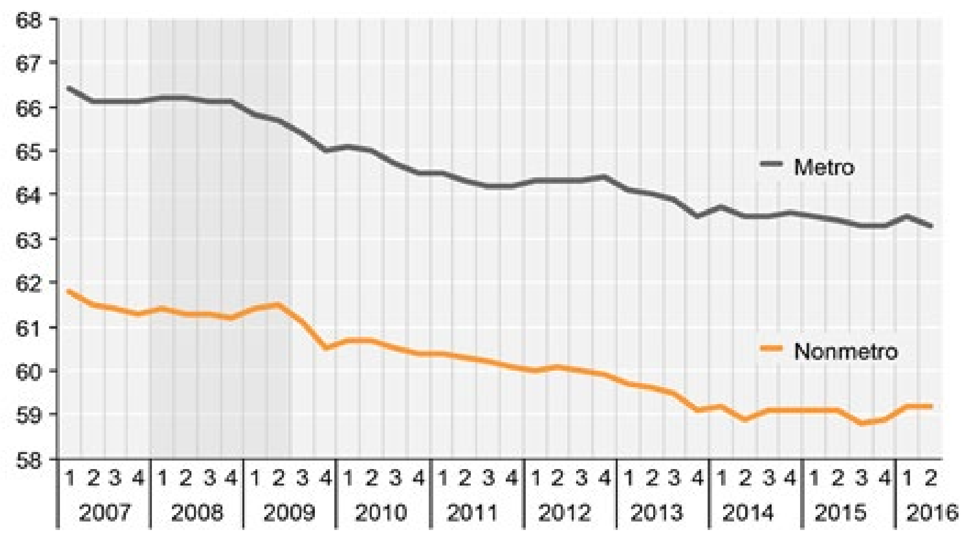
Much has been recent in recent years about the looming impact of automation on a range of industries.[49] In agriculture, this is old news.

According to a study by the Federal Deposit Insurance Corp, technological change within the agriculture industry over the last century is one of the core reasons for the population decrease in rural America.[50]

Advances in farm machinery, pesticides, fertilizers, and other aspects of the industry led to a reduction in the labor necessary to own and operate a farm or ranch.[51]

Farms already account for less than 1% of employment, and agricultural jobs are projected to decline another 6% by 2024.[52] This may partially explain why labor force participation rates appear to be lower in non-metropolitan areas than in cities.[53]

Figure 8: U.S labor force participation rates, metro and nonmetro areas, 2007-16 (quarterly)
Percent of adults age 16 and over in the labor force



Note. Data are seasonally adjusted. Shaded area indicates recession period.
Source: USDA, ERS using data from Bureau of Labor Statistics, Local Area Unemployment Statistics

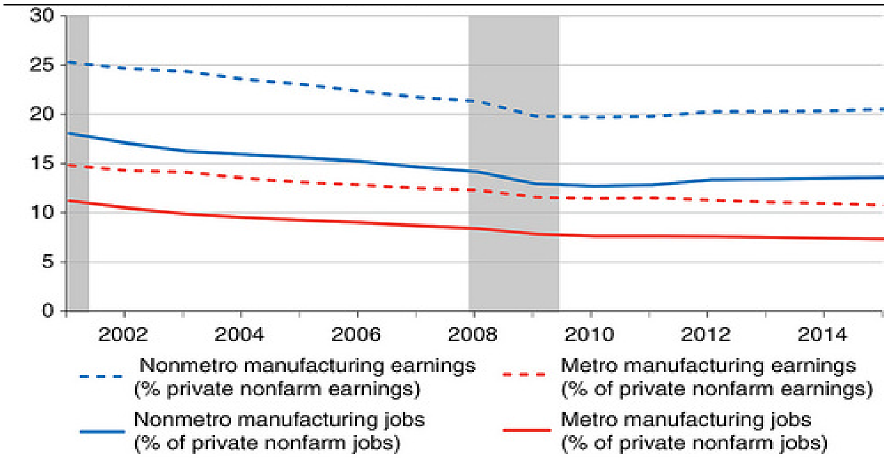
Manufacturing consolidation and relocation

Nationwide, manufacturing employment peaked in 1979 at 19.6 million jobs; by 2015 it had dropped to 12.3 million.[54] This has affected rural areas disproportionately. In 2015, manufacturing represented 14% of private nonfarm rural jobs vs. 7% in urban areas and 21% of rural earnings vs. 11% of urban earnings. Rural manufacturing employment was smaller both in relative and absolute terms in 2015 than in 2001.

When a manufacturing plant closes there is an economic multiplier effect on the local community as tax revenue declines

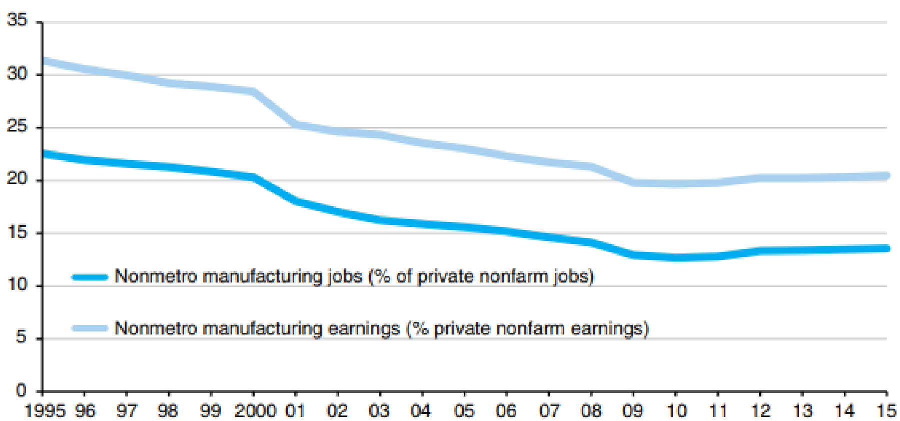
When a manufacturing plant closes there is an economic multiplier effect on the local community as tax revenue declines.[55] This further depresses local demand and income.[56] Local stores may close as foot traffic drops, and key services such as local healthcare facilities and schools may close or consolidate. Thus, the survival of existing manufacturers is key to the rural communities in which those plants are located.[57]

Figure 9: Contribution of manufacturing to jobs/earnings, metro and nonmetro areas
Percent of nonmetro/metro jobs/earnings



Note: Shaded areas denote recessionary period.
Source: USDA, ERS using data from Bureau of Labor Statistics, Regional Economic Information System data.

Figure 10: Manufacturing share of nonmetropolitan jobs and earnings, 1995-2015
Percent of nonmetro private, nonfarm jobs/earnings



Note: Pre-2001 data are based upon the Standard Industrial Classification system while data from 2001 onward are based on the North American Industrial Classification System.
Source: USDA, ERS using data from Bureau of Labor Statistics, Regional Economic Information System data.

Where did the manufacturing jobs go? The answer is similar to farming jobs: largely automation. Only a quarter of the decline from 1990 to 2007 was due to imports from foreign countries.[58] According to one study, 88% of the loss in manufacturing jobs in the U.S. from 2000 to 2010 can be explained by increases in productivity due to advances in labor-saving technology.[59] With this trend set to continue, jobs will likely continue their shift to lower-paying service-sector and knowledge-based jobs for which a rural community will need a reserve of qualified workers.[60]

Shortages of qualified workers

Like real estate, all job markets are local. Many rural towns lack good quality jobs and businesses to create those jobs. Other towns may be home to a business that cannot find qualified workers due to various issues such as skills mismatches, drug addiction, lack of transportation or access to housing, and migration of younger, working age people to larger metropolitan areas.

Small business owners are struggling to find and retain quality employees, a development that's hindering their ability to grow. A 2017 survey of 3,200 small business owners by U.S. Bank found that 61% of owners said they're experiencing difficulty finding quality employees to expand their business. The concern is particularly acute in rural areas; some small businesses are adapting by offering on-the-job training, but others are curtailing growth expectations.[61]

Small rural markets may lack local qualified workers for knowledge-based jobs in healthcare, education and other growing fields. Jobs that require advanced education present two problems for rural communities. People with MBAs, Ph.Ds. or medical degrees often don't want to relocate to smaller communities, for fear there will be no alternatives if they ever want to change jobs. There also might not be jobs for their spouses.

Cherie Taylor, CEO at Northern Rockies Medical Center in Cut Bank, Montana, had to recruit nurses from overseas because she couldn't find local nurses or any U.S. candidates willing to relocate. "We have a national registered nurse shortage and all the U.S. nurses cannot fill the vacancies," Taylor says.[62]

Shelby Schools Superintendent Elliott Crump has experienced first-hand the teacher shortage in Montana. The Montana Office of Public Instruction reported 638 full-time openings in the state's "difficult or hard to fill" teaching positions in 2016-17 and Crump's school district had four of them. Efforts to recruit applicants locally and nationwide failed so he recruited internationally, hiring four teachers from the Philippines. This inability to recruit within the state or anywhere across the country is a growing problem in Montana (and presumably other sparsely populated states) for hard-to-fill, skilled-job vacancies.[63]

Key infrastructure challenges

The ability of rural areas to restore economic health has been hindered by a lack of access to core services needed to support communities and job creation in today's knowledge-based economy: namely, broadband internet, healthcare, and transportation.

Lack of broadband internet

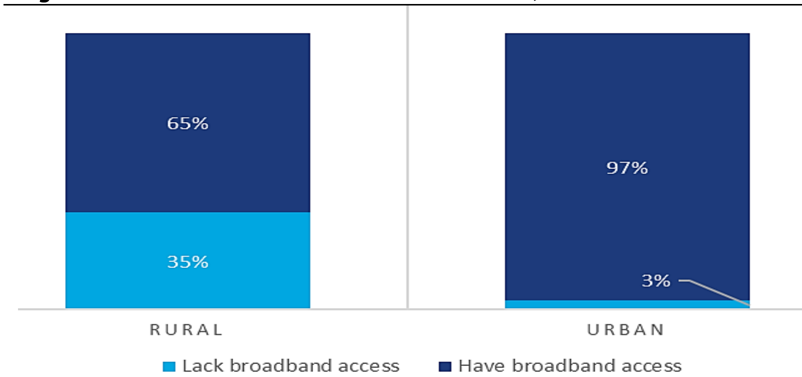
In rural areas across America, high-speed internet is often unavailable or ends at the county line

The internet is critical infrastructure for business and education in contemporary times. In rural areas across America, high-speed internet is often unavailable or ends at the county line. While only 3% of people in urban areas lack home access to broadband, roughly 35%, or 22 million Americans, in rural areas have no broadband access.[64]

One reason rural broadband is less available is cost. In urban communities, a mile-long cable might pass many homes and businesses. Rural internet requires longer wires—and often special signal-boosting equipment—with fewer potential customers from whom to recoup the costs.[65] In such areas, fiber-optic cable can cost up to $40,000 per mile. Delivering modern broadband service to rural communities would cost hundreds of billions of dollars, experts estimate, an expense government, industry and consumers haven't been willing to pay.

Rural residents have few or no internet service providers in their area. They pay higher prices than urbanites for lower-quality service. To illustrate, downloading songs and movies takes up to 16 times longer in rural areas vs. areas with high speed broadband internet.[66] That means less participation in the culture, politics and economic activity of the 21st century.[67] Counties without broadband internet connections can't attract new firms, and their isolation hinders local businesses. High speed broadband is key to many businesses ranging from banks to factories.

Figure 11: Access to broadband internet service, rural vs urban areas in U.S.



Source: CBS Interactive

Rural counties with more households connected to broadband had higher incomes and lower unemployment

Rural counties with more households connected to broadband had higher incomes and lower unemployment than those with fewer connected households, according to a 2015 study by university researchers in Oklahoma, Mississippi and Texas who compared rural counties before and after getting high-speed internet service. While some rural communities have built their own systems, laws in at least 19 states restrict such efforts, generally on the grounds they pose a threat to private companies.[68]

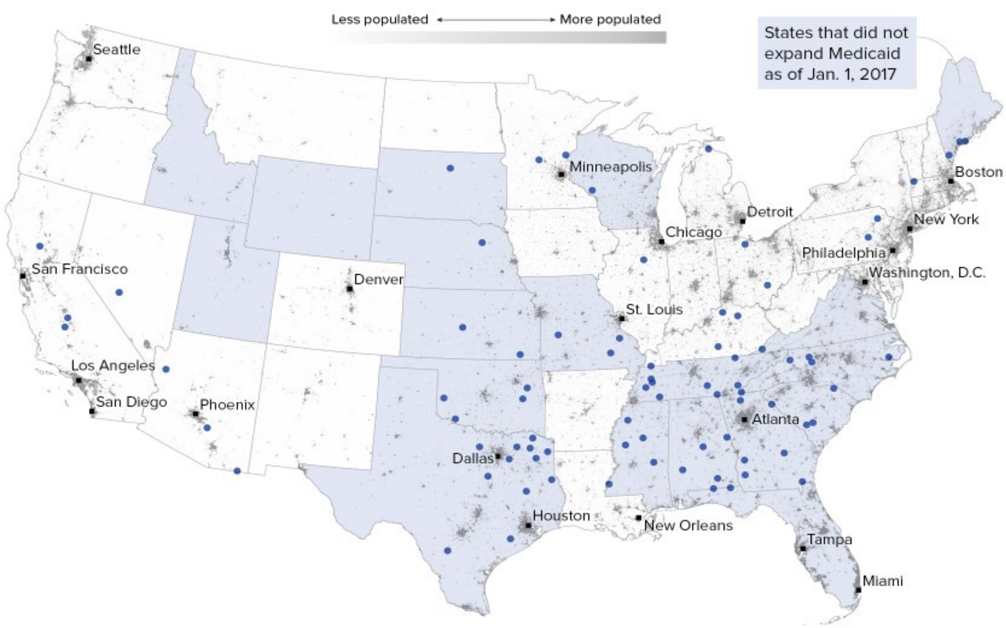
Lack of access to healthcare

Rural communities contain about 20% of the U.S. population but less than 10% of its physicians. There are 13 primary doctors per 10,000 people in rural areas compared to 31 doctors per 10,000 urban inhabitants in urban/metro areas. Specialists are even scarcer, as shown in Figure 13.

Since 2010, more than 100 rural hospitals have closed nationwide.[69] As many as 700 more are at risk of closing within the next 10 years, according to Alan Morgan, the CEO of the National Rural Health Association, a nonprofit professional organization that lobbies on rural health issues.[70]

The map and table below show that the supply of health care facilities is shrinking and much less accessible in rural communities compared to urban locations. The table highlights how few doctors per capita there are in rural America compared to urban areas.

Figure 12: Rural hospital closures, 2010-17 (as of September 2017)



Note: No new hospitals closed in Alaska or Hawaii during this time period.
Source: HuffPost, Cecil G. Sheps Center for Health Services Research at UNC, Center for International Earth Science Information Network.

Figure 13: Health "snapshot," rural vs urban areas

	Rural	Urban
Percent of population	19.3%	80.7%
Number of doctors per 10,000 people	13.1	31.2
Number of specialists per 100,000 people	30	263
Population aged 65 and older	17.5%	13.8%
Adults who describe health status as fair/poor	19.5%	15.6%
Percentage of dual-eligible Medicare beneficiaries	43%	27%
Percentage covered by Medicaid	16%	13%

Source: https://www.ruralhealthweb.org/about-nrha/about-rural-health-care

A hospital closing in rural America is a bigger problem than in an urban area

A hospital closing in rural America is a bigger problem than in an urban area. When hospitals close, most jobs at the hospital disappear, from doctors to the cleaning crew. Attracting other businesses to small towns where hospitals close becomes difficult as businesses servicing the hospital tend to close.

The closing of a rural hospital also means that life-saving local care is no longer available. Rural residents need to travel greater distances to access different points of the health care system. Rural health care facilities tend to be small and often provide limited services. As a consequence, rural residents may visit the doctor less often and may not be able to reach a critical care unit in a timely manner. The drive to the nearest hospital becomes much longer and can be fatal for someone suffering from a heart attack or trauma.

Health care experts point to a variety of reasons for the rapid decline of rural hospitals since 2010:

- Most rural hospitals were built decades ago and can't afford technical upgrades.

- Patients with private insurance — which usually reimburse hospitals and doctors better — frequent regional hospitals with newer facilities.

- Health care professional shortages are problematic in rural areas, as small communities have a hard time recruiting given their remote locations and tighter budgets, which often result in lower salaries. 71

- Federal government financial help has decreased over the past several years due to sequestration and reduced Medicare payments. The Affordable Care Act cut back a program to reimburse rural hospitals for bad debt in order to cover more uninsured individuals.

Given the lack of government support, a minimum patient population of 40,000 is needed to sustain a rural hospital, according to Jimmy Lewis, head of HomeTown Health, an association of rural hospitals in Georgia. Without a large population, hospitals need substantial county assistance, a high level of diversification in health services, or the backing of a regional hospital system.[72]

Lack of banking services

Consolidation of the banking industry, mostly due to mergers and acquisitions, is detrimental to rural America

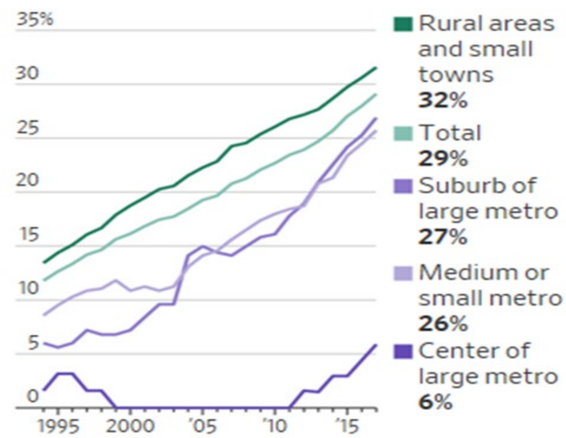
Consolidation of the banking industry, mostly due to mergers and acquisitions, is detrimental to rural America. The number of banks in the U.S. has declined by more than 75% between 1987 and 2017. Just 0.2% of banks (primarily large superregional banks) hold two-thirds of industry assets, and the number of community banks that service smaller local markets has dropped by 50% between 2009 and 2017. The result is that only one in five U.S. counties has a physical banking presence.[73] Of America's 1,980 rural counties, 625 don't have a locally owned community bank – double the number in 1994. At least 35 counties have no bank, while about 115 were served by just one branch as of 2017.[74]

Banks are paring credit in rural America while focusing on growing urban markets

Banks are paring credit in rural America while focusing on growing urban markets. As lending rebounds in metropolitan areas, it is drying up in small towns. According to Ray Grace, North Carolina's commissioner of banks, larger superregional banks are taking deposits gathered in rural areas and deploying them in the cities. "It sucks the capital out of rural communities."

In-person banking, as opposed to centralized credit, is critical to entrepreneurs and small companies, particularly in rural areas. Face-to-face banking is disappearing as large regional banks consolidate, acquiring small local banks. These large distant companies close less-profitable branches in small towns and tend to focus on making larger loans.[75] They have few ties to local communities and often rely on algorithms to gauge creditworthiness. Superregional companies are less likely to have the personal relationships[76] that have helped local bankers judge which local borrowers were a good bet.[77] Simply looking at a credit algorithm may overlook an entrepreneur's willingness to pay despite possible blemishes on his or her credit record, such as a late payment on a credit card bill, etc.

Figure 14: Percentage of counties without a local bank



Source: WSJ analysis of Federal Deposit Insurance Corp., Community Banking Initiative, and National Center for Health Statistics Urban-Rural Classification Scheme for Counties data.

Lack of housing

Today, fewer homes are being built per household than in the past, and in rural communities there are often housing shortages

Today, fewer homes are being built per household than in the past, and in rural communities there are often housing shortages. The rural market share of new single-family homes built in the U.S. declined from 14% in 2010 to 10% in 2016, according to the National Association of Home Builders. Developers in less populated areas can't benefit from the economies of scale available in metropolitan areas such as proximity to building materials, skilled construction labor, and a larger, more concentrated end market of home buyers. As a result, materials and labor are more expensive. In addition, stagnant or declining rural populations mean fewer potential buyers, boosting the risk in speculative building.[78] The result is a lack of affordable housing, which can hinder hiring and business expansion for growing companies in small rural counties.

Prior to the Great Recession, housing starts across the U.S. averaged almost 1.6 million units per year for decades. By 2015 that number had dropped by half. Even after the market improved in 2016, housing starts were still a half-million short of the historical average. According to Trulia, the online real estate site for home buyers and sellers, starter and trade-up home inventory dropped by more than 40% between 2012 and 2016. Given this dearth of inventory nationwide and resulting lack of affordability, the percentage of households that are renting is now at its highest level since the 1960s. As a result, one out of six families spend more than half its income on housing.[79]

In some rural areas, the shortage of affordable housing has become a severe impediment to growth as unemployment hits record lows in certain counties

In some rural areas, the shortage of affordable housing has become a severe impediment to growth as unemployment hits record lows in certain counties. In Platte County, Nebraska, for example, unemployment fell to 2.7% in March 2018, lower than the national rate in April of 3.9%. Jason Luster, chief executive officer of a farm equipment distributor in Platte County, couldn't find a home near the company's Schuyler, Nebraska, headquarters when started his job in 2014. His family stayed behind in Iowa, while Mr. Luster lived at the nearby inn for eight months before buying and moving into a local farmhouse. But his biggest challenge is finding housing for his workers who don't qualify for low-income housing but can't afford an expensive home. "There are not a lot of options for those people," he said, referring to workers who make anywhere from $40,000 to $100,000 a year. This makes it difficult to recruit workers from outside the local community.[80]

Opioid addiction: exacerbating the challenges

Opioid poisonings in rural counties are increasing at over three times the pace in urban counties

According to the Centers for Disease Control and Prevention, opioids — including prescription painkillers, heroin and fentanyl — killed over 70,000 people in 2017,[81] more than any year on record, with higher overdose rates in rural areas.[82] Opioid poisonings in rural counties are increasing at over three times the pace in urban counties. A recent University of Michigan study found rates of babies born with opioid withdrawal symptoms rising much faster in rural areas than urban ones.[83]

Available jobs in rural areas are often physical and sometimes dangerous. This can be especially problematic for an aging workforce which may be prone to more work-related injuries. As a result, chronic pain and injuries are more common than in urban areas. Rural poor often can't afford to take time off from work to heal or access physical therapy, so many rely on pain medications to keep working. The high rate of opioid prescriptions in rural counties has increased the availability of opioids, fueling the epidemic. Diversion, the transfer of a legally prescribed medicine to another individual for illicit use, is common in rural areas. This may be due to the need for money and the close social connections typical in rural communities.[84]

A survey conducted by the American Farm Bureau Foundation (AFBF) and the National Farmers Union (NFU) found that 74% of farmers and agriculture workers have been impacted by opioid abuse, knowing someone who is addicted or experienced addition themselves. More than 75% of farmers and workers said it's easy to obtain painkillers with or without a prescription, and that abuse can begin accidentally. However, only a third of rural adults express confidence that addiction treatment is locally available and few believe treatment is covered by insurance or is affordable.[85]

Limited access to treatment for drug addiction

In the US, over 90% of the substance abuse treatment facilities are located in urban areas

While prescription drugs are relatively easy to obtain in rural areas, treatment for substance abuse is not. In the US, over 90% of the substance abuse treatment facilities are located in urban areas. Other barriers exist for rural individuals seeking opioid treatment, including transportation challenges, healthcare worker shortages, and the stigma associated with mental health and substance abuse conditions. Rural health care providers who are able to prescribe a drug to help addicts battle addiction (such as buprenorphine) report demand outstripping their capacity and a lack of resources to support themselves and patients in treatment. Additionally, wait times for treatment tend to be long in rural areas. As a result, most rural people addicted to opioids do not receive treatment, and those who do have access to severely limited treatment.[86]

The impact of drug abuse and lack of access to treatment is telling. According to the CDC, drug overdoses are the leading cause of injury and death in the U.S., resulting in approximately 52,000 deaths in 2015. In 1999, drug overdose death rates for urban areas were higher than in rural areas. The rates converged in 2004, and in 2006 the rural rate began trending higher than the urban rate. In 2015, the most recent year in this analysis, the rural rate of 17.0 per 100,000 remained slightly higher than the urban rate of 16.2 per 100,000.[87] Facilitating better access to medication-assisted treatment with methadone, buprenorphine, or naltrexone could benefit communities with high opioid use disorder rates and might mitigate this rise in overdose deaths.[88]

Why some people stay

As of 2015, U.S. population mobility was at its lowest level since measurements were first taken at the end of World War II, and down by almost half since its most recent peak in 1985. In rural America, just 4.1% of people moved away from their county in 2015, according to a Wall Street Journal analysis, down from 7.7% in the late 1970s.[89]

Some people choose to stay in their rural community. While they understand its problems, they value knowing their neighbors, the slow pace of life, and the shared cultural values of a small community.

Other rural residents can't afford to leave. A professional leaving a small town in Alabama for a job in metropolitan New York would spend just 21% of his or her income on housing after moving, according to Peter Ganong, an assistant professor of public policy at the University of Chicago who studies migration — but a janitor making a similar move would find 52% of his or her higher salary used to pay housing costs. Moreover, many low-income rural U.S. residents find that government aid programs such as Medicaid, which has benefits that vary by state, can create a disincentive to leave.

Another obstacle to mobility is the growth of state-level job-licensing requirements, which now cover a range of professions from bartenders and florists to scrap-metal recyclers. Licensing requirements may make it difficult to enter a new field if you are required to pay for a license or need to take a licensing exam. A 2015 White House report found that more than 25% of U.S. workers now require a license to do their jobs, with the share licensed at the state level rising fivefold since the 1950s.[90]

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Endnotes

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Disclosures