Growing Up in Rural America

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This article examines the context of growing up in rural America and how rural roots shape life chances. The distinctive physical, social, and cultural attributes of rural areas can exacerbate many of the challenges of childhood poverty. Yet rural children have better access to public childcare services and perform as well as urban children on standardized tests. Life trajectories diverge most sharply when rural youths decide whether to leave their home communities. Those who stay typically face limited opportunities for higher education and well-paid, stable employment, whereas those who leave fare remarkably well with respect to their educational, economic, and health outcomes. In sum, growing up in rural America offers distinctive advantages and disadvantages, yet the benefits may accrue primarily to those who leave.

Keywords: rural, life course, geographic inequalities, place-based effects

Nearly one in six Americans, some forty-six million people, lives in a rural area (Cromartie et al. 2020). Over the last three decades their lives have attracted relatively little attention, but recent years have seen a burst of media attention and academic research. Much of this newfound interest paints a bleak, even troubling, portrait of life in rural areas in the United States. Several important scholarly works have argued that rural communities feel "left behind," engendering widespread feelings of rage, despair, mourning, and resentment (Cramer 2016; Hochschild 2016; Lichter and Schafft 2016; Wuthnow 2018).

Scholars often attribute these sentiments to widespread economic distress found in many rural communities (Monnat and Brown 2017). Some rural areas have experienced deep poverty persisting across generations (Lichter and Johnson 2007; Thiede, Kim, and Valasik 2018), whereas others have witnessed steady economic decline over the last fifty years as a consequence of economic restructuring (Lobao

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2014; Ryser and Halseth 2010) and globalization (Slack 2014; Thiede and Slack 2017). These economic hardships, in turn, have affected all aspects of rural life. Even after the recovery from the Great Recession, unemployment and underemployment (discouraged workers, involuntary part-time workers, low-income full-time workers) remain widespread in rural areas (Thiede and Slack 2017). For at least the last half century, employment hardship has consistently been greater for rural workers than for urban workers (Slack and Jensen 2020). Prime-age labor-force participation rates remain markedly lower in rural areas than in urban areas (Economic Research Service 2019b). Educational attainment is also lower in rural areas. In 2015, only 19 percent of rural residents, relative to 33 percent of urban residents, have a bachelor's degree (Marré 2017). Of particular importance for children's well-being and long-term health and educational outcomes, about 25 percent of rural children versus approximately 20 percent of urban children live in poverty (Hertz and Farrigan 2016; Pacas and Rothwell 2020; Rothwell and Thiede 2018).

Rural families have also changed (Carson and Mattingly 2014; Lichter and Graefe 2011; MacTavish and Salamon 2004). Once characterized as the traditional ideal of strong, stable "intact" nuclear families with robust extended kinship ties, rural families are now indistinguishable from urban families in terms of rates of family volatility, single motherhood, and cohabitation (Livingston 2018; O'Hare et al. 2009; Snyder and McLaughlin 2004). Similarly, in response to an aging and shrinking population, rural schools, which were historically important hubs in rural communities, are now consolidating or closing (Biddle, Mette, and Schafft 2017; Schafft and Biddle 2014; Sherman and Sage 2011). Rural health has also suffered, and mortality rates are now substantially higher in rural than in urban areas (Cosby et al. 2018; Garcia et al. 2017, 2019; Leider et al. 2020; Moy 2017). Rural areas have been severely affected by the opioid crisis and other so-called deaths of despair (Kiang et al. 2019; Monnat 2018; Peters et al. 2020; Case and Deaton 2015), a growing rural-urban gap in cardiovascular disease and injuries (Abrams, Myrskylä, and Mehta 2021; Harper, Riddell, and King 2021; Monnat 2020), and most recently elevated rates of infection and deaths associated with the COVID epidemic (Cromartie et al. 2020; Karim and Chen 2021; Karmakar, Lantz, and Tipirneni 2021; Mueller et al. 2021).

Taken together, these studies suggest that growing up in rural areas is hard. Children who happen to be born in rural areas are likely to face a series of daunting obstacles that ultimately result in cumulative disadvantage in regard to their education, incomes, and health. Yet studies examining what it is like to grow up in rural areas, and particularly its longer-term implications, are surprisingly scarce. Many of the extant studies on rural children and families focus exclusively on those living in poverty (Albrecht and Albrecht 2000; Beale 2004; Brown and Lichter 2004; Duncan 2015; Lichter and Johnson 2007; Snyder, McLaughlin, and Findeis 2006; Snyder and McLaughlin 2004; Thiede, Kim, and Valasik 2018; Weber and Miller 2017). Although such a focus is certainly justifiable from a child welfare perspective, it can create a false impression that all or at least most rural children live in poverty or in poor rural areas. As noted, about three-quarters of rural children are not living in poverty (Rothwell and Thiede 2018). Further, at the national level, although the official poverty rate is about 3.5 percentage points higher in rural than urban areas (Economic Research Service 2020b), the supplemental poverty rate, which takes into account the cost of living, is actually lower in rural areas (Nolan, Waldfogel, and Wimer 2017; Pacas and Rothwell 2020). Nationally representative studies also find few sizable differences in key indicators of children's well-being. For example, rural school children perform as well or slightly better than their urban counterparts on standardized math and reading tests, although suburban children outperform both groups (Burdick-Will and Logan 2017; Provasnik et al. 2007; Fishman 2015). Similarly, differences in the overall health of rural and urban children are minimal (National Center for Health Statistics 2019; Robinson et al. 2017; Probst et al. 2018), with the notable exception of obesity, which is higher in rural areas (Liu et al. 2012; Ogden et al. 2018; Johnson and Johnson 2015).

In addition, most studies, including those

cited, that show striking rural disadvantage with respect to health, education, and earnings are based on cross-sectional samples of adults currently living in places designated as rural or urban. Such studies provide important insights into the well-being of adults who remained in or moved to rural areas. However, they do not address one of the central questions of this issue, namely, whether individuals who grew up in rural areas fare better or worse than those from more urban areas. This is because cross-sectional studies reflect selective migration both out of and into rural areas. Adults who grew up in rural areas and left differ from those who stayed. Selective out-migration of better-educated rural youths is well documented (Carr and Kefalas 2009), but rural out-migrants may also be healthier and have higher earning potential (Weber et al. 2007). Addressing the issue of selective migration, and hence answering questions about the longer-term implications of growing up in a rural area, requires longitudinal data that traces individuals over their life course. Unfortunately, only a handful of such studies currently exist.

The goal of this double issue of *RSF: The Russell Sage Foundation Journal of the Social Sciences* is to provide a nuanced, balanced, and accurate depiction of what it is like to grow up in rural communities and its implications for both those who leave and those who stay in rural areas. This introductory article has four main objectives. First, we address a deceptively simple question: what is rural? This section briefly describes the challenges of defining rural places and rural people, the considerable changes that have occurred in rural areas over the last fifty years, and the heterogeneity across rural areas. Second, it examines what is distinctive about rural areas and challenges to measuring the effect of growing up in rural areas. Third, it draws on the existing literature and new research in this volume to provide insights into the challenges and opportunities afforded by growing up in rural areas and the longer-term implications of having grown up in rural places for adults. In the fourth section, we identify important gaps that remain in the existing literature on growing up rural.

The studies presented offer several key findings; some reinforce the well-known challenges associated with rural life, whereas others yield surprising, and often more optimistic, insights about rural institutions and the longer-term implications of growing up in rural areas. In particular, the articles in this volume show that

consistent with prior studies, evidence indicates that rural families are under considerable strain. This strain is particularly acute in low-income families and families dealing with drug addiction. Yet strong ties among extended family members continue to play an important role in supporting and caring for children in families facing food insecurity and drug addiction.

Early public education programs and schools are surprisingly strong in rural areas relative to those in urban areas.

Publicly funded early childcare and education programs, such as Head Start, are more common in rural than in urban areas.

Rural third graders perform as well as their urban counterparts on standardized tests and socioeconomic status (SES) is less predictive of academic performance for rural than for urban students, suggesting less educational inequality.

However, the educational benefits of rural gentrification for children of longer-term residents may be limited.

Many rural youths harbor ambitious aspirations for higher education, but they lack practical knowledge about how to achieve their goals and are reluctant to leave their communities.

Young people who choose to stay in rural areas often do so to maintain family ties, even at the cost of limiting their careers and earnings. Rural youths who remain often make expedited transitions into parenthood and marriage, although these early unions are often unstable.

Relative to studies focusing on adults who currently live in rural areas, studies that take a life-course perspective paint a more complex, and somewhat rosier, picture of the consequences of growing up rural on adult health, education, income, and wealth.

Being born on an Iowa farm in the early twentieth century is associated with living a longer and healthier life. However, women who grew up and stayed in nonfarm rural areas had worse mortality outcomes.

Young adults who grew up in rural areas were less likely than their urban-raised counterparts to have negative net worth, although they also had fewer financial assets.

Children who grew up in rural areas achieved similar levels of education and earnings as urban children. More favorable economic place-based conditions facilitated greater upward educational and income mobility, although these benefits primarily accrued to those who moved to urban areas.

UNDERSTANDING RURAL AMERICA

Willa Cather's novel *My Antonia* (1918) opens with two friends on a train to New York, passing through the Iowa countryside where they had both grown up many years ago. The narrator reflects on their shared experience: "We were talking about what it is like to spend one's childhood in little towns like these, buried in wheat and corn, under stimulating extremes of climate: burning summers when the world lies green and billowy beneath a brilliant sky, when one is fairly stifled in vegetation, in the color and smell of strong weeds and heavy harvests; blustery winters with little snow, when the whole country is stripped bare and grey as sheet-iron. We agreed that no one who had not grown up in a little prairie town could know anything about it."

Some will agree with the narrator that unless you have grown up in rural America, you will never understand rural people or places. For those who study rural America, however, it is necessary to identify the boundaries and to define *rural* in a way that maintains a coherent object of study. It is challenging—even for those who grew up rural—to clearly articulate what makes a place or person rural and to mark the boundaries between rural and urban. As we discuss in the following section, it is difficult to draw these boundaries clearly for several reasons.

What Is Rural? Defining Rural Places and Rural People

At its most fundamental level, the term *rural* is about territory. Two of the most commonly used definitions of the word by the U.S. Census Bureau and the Office of Management and Budget (OMB) clearly identify the boundaries that separate rural and urban territory. Complications in characterizing rural places arise chiefly because, in either definition, rural is a residual category. Rural is defined as what is not urban. Rural is whatever territory or area is outside of the urban boundaries. Rural areas are not selected and bounded based on their own characteristics, but is what is left over after bounding *urban* territory.

Furthermore, these standard definitions of rural identify geographic places, not rural people. A person is rural only by association with rural territory, and the premise underlying the notion of rural people is that people are shaped by the places they live. People are rural to the extent that they live in or have lived in rural places. Yet because of migration, rural places and rural people may not always coincide. Further, no set duration of exposure to rural places renders an individual rural because the development of a rural identity or consciousness is subjective and idiosyncratic. Hence the study of rural people is inherently even more fuzzy and messy than the study of rural places. Defining rural is further complicated by the diversity of rural people and places and the reality that rural areas are changing and interdependent with urban places, as we discuss.

Notwithstanding the definitional issues, rural places are commonly understood to share two characteristics. They are relatively sparsely settled with small populations and relatively isolated from large cities.[1] The two standard definitions that are used to describe rural America emphasize one or the other of these characteristics in their definitions.

The Census Bureau defines rural and urban

1. Some would also add the relative dependence of rural economies on natural resources, but this is more difficult to defend as a defining characteristic given the prevalence of farming and food and wood processing in metro areas.

areas by aggregating densely settled census blocks into urban areas and defining rural as any territory that is not urban (Ratcliffe et al. 2016). Using this definition yields a rural America that consists of small towns and open country. The OMB starts with counties as the unit of measurement, and classifies them into metropolitan (metro) and nonmetropolitan (nonmetro) by identifying "metropolitan statistical areas" that group counties into regional labor markets around big cities. Nonmetro counties are those that are not part of a "metropolitan statistical area." By convention, many scholars refer to OMB metro counties as urban and nonmetro countries as rural (Economic Research Service 2019d). Rural under this nonmetro definition consists of territory that is distant from the regional labor markets of cities with populations of fifty thousand or more (for more detail about these definitions, see appendix table A.1).

Both classifications provide useful perspectives on rural America. Both seek to describe sparsely populated and remote places, but they are not equivalent concepts and they capture different realities. More than half of the rural population (as defined by the Census) live in metro counties, and most of the nonmetro population (as defined by OMB) live in counties that have urban clusters, that is, cities or towns with populations of more than ten thousand. The Economic Research Service (2019d) suggests that

> the choice of a rural definition should be based on the purpose of the application. For instance, tracking urbanization and its influence on farmland prices is best approached using the Census urban-rural definition because it is a land-use definition that distinguishes built-up territory from immediately surrounding, less developed land. Studies designed to track and explain economic and social changes often choose to use the metro-nonmetro classification, because it reflects a regional, labor-market concept and allows the use of widely available county-level data. The key is to use a rural-urban definition that best fits the needs of a specific activity, recognizing that any simple dichotomy hides a complex rural-urban continuum, often with very gentle gradations from one level to the next.

In this special issue, definitions of the rural places studied are varied. The seven quantitative studies used six systems. Only two used the metro-nonmetro binary. Two articles use classifications developed by the U.S. Department of Agriculture's Economic Research Service: one uses the Rural-Urban Continuum Codes and the other Rural-Urban Commuting Area codes. Only one used the census definitions. One article examining schooling outcomes identifies rural school districts using a National Center for Educational Statistics urbanicity code and the other devised its own criteria. All seven qualitative studies, with one exception, selected respondents from nonmetro counties. The exception studied a "largely rural" region that included a few respondents from outlying areas of metro counties.[2]

Rural America Is Diverse, Changing, and Interdependent

Rural scholars have described rural America as "diverse, dynamic, and relational to (rather than separate from) urban places" (Slack and Jensen 2020, 775). All three characteristics complicate a common definition or understanding of rural America.

Although rural areas share the characteristics of having relatively small and sparsely settled populations and remoteness from cities, they exhibit enormous *diversity*. Each rural location offers its own combination of landscapes and features. Different rural populations have their own distinctive personalities and histories. The substantial diversity across rural areas makes generalizations about "rural life" difficult (Chan, Hart, and Goodman 2006; Cossman, James, and Wolf 2017). Some nonmetro areas are truly isolated and sparsely populated and others contain medium-sized cities or are found just beyond the suburbs of large cities. Some nonmetro counties are growing, but many are declining in population.

Average poverty rates are higher in non-

2. For more detail about these studies and the ways they defined rural, see the appendix table A.2

metro than in metro counties, but this difference masks considerable economic heterogeneity. Deep pockets of persistent poverty in nonmetro America are numerous. Geographic concentrations of nonmetro poverty are found in Appalachia, in the Mississippi Delta (Thiede, Kim, and Valasik 2018), in *colonias* along the Mexican border, and on Native American reservations (Weber and Miller 2017). However, other amenity-rich rural areas and many parts of the upper Midwest are thriving and offer their residents attractive environmental features (such as lakes, mountains, rivers), better air quality, low traffic congestion, and a strong local economy (Hamilton et al. 2008).

Rural areas are also economically diverse. Many nonmetro counties depend on agricultural and extractive industries for a significant share of their jobs and earnings. Although agricultural and extractive industries such as mining account for less than 5 percent of nonmetro employment on average (Cromartie 2017), 20 percent of nonmetro counties have been classified by the Economic Research Service as dependent on farming (more than 16 percent of their jobs) and 9 percent as dependent on mining. An additional 12 percent were defined as dependent on recreation services (Economic Research Service 2019a). Those based on farming face different economic challenges than those dependent on mining or recreation jobs.

Rural America is less ethnically and racially diverse than urban America, 78 percent of the rural U.S. population is White relative to 58 percent of the urban population (Economic Research Service 2020a). Some nonmetro areas, however, have large concentrations of minorities: of African Americans in the southeastern states, of Hispanics in the southwestern states, and of Native Americans in the Southwest and northern Great Plains (Economic Research Service 2011). Furthermore, more than 90 percent of nonmetro places experienced an increase in racial-ethnic diversity between 1990 and 2010 and racial and ethnic minorities accounted for more than 80 percent of rural population growth (Johnson 2012, 2014; Lee and Sharp 2017).

In short, what it is like to grow up in rural America depends heavily on the specific rural locale. This diversity presents challenges for making broad generalizations regarding the impacts of growing up rural, but also offers opportunities to explore the heterogeneity of rural environments and how their specific features may shape their residents' life chances.

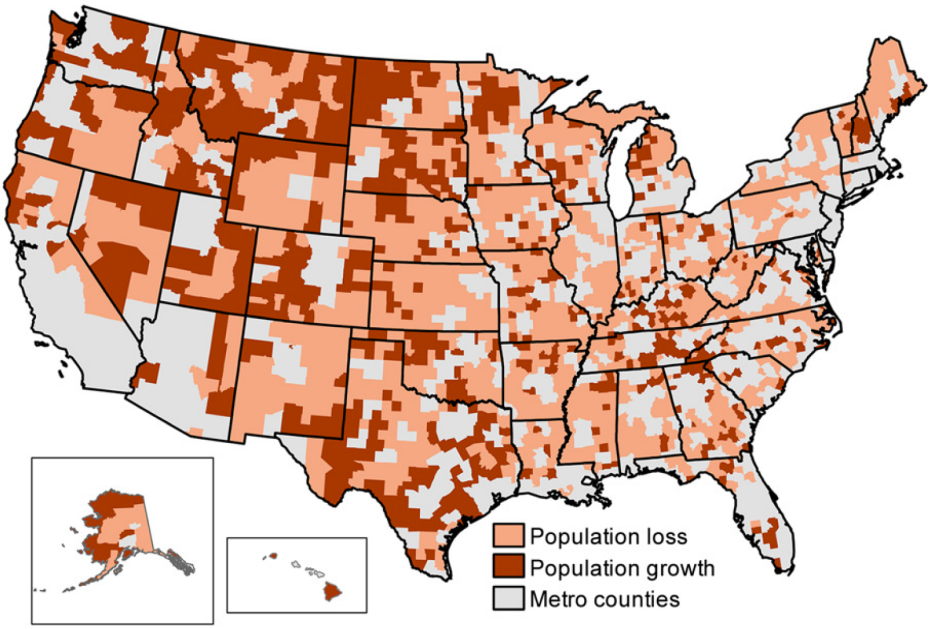
The last half century witnessed considerable changes in both the composition and the general well-being of rural populations. Three important demographic trends observed in the nonmetro United States over the past several decades are: depopulation due to population aging and out-migration of youth; in-migration associated with exurban growth, retirement decisions, and amenities; and increases in ethnic and racial diversity (Brown 2014).

Although the total nonmetro population is roughly the same in 2017 as it was in 2010, more than two-thirds of the nonmetro counties lost population, as shown in figure 1. These counties that lost population are disproportionately found in the Great Plains, the Corn Belt, high poverty areas of the southern Coastal Plains and the Appalachian region from Kentucky up through New England. During the same period, however, other nonmetro areas experienced population growth. Since the Great Recession, evidence indicates that suburbanization and exurban expansion, recreation-related development and energy development in rural areas have slowed (Economic Research Service 2019c). In the wake of the COVID pandemic, some rural areas may be experiencing an influx of new residents, but the extent of this migration and whether it will endure is yet unknown.

Growth in the Hispanic population contributed to both the increase in ethnic diversity in rural America and to overall population growth. The rural Hispanic population grew by almost 45 percent between 2000 and 2010 (Lichter 2012; Lee and Sharp 2017). Hispanics have also become the largest minority population in nonmetro areas, 8.6 percent in 2018 (Economic Research Service 2020a). The increase also boosted the overall nonmetro population, contributing more than 60 percent of nonmetropolitan population growth from 1990 to 2017 (Lichter and Johnson 2020).

Trends across several important markers indicate deterioration in rural well-being and a widening rural-urban gap over the past thirty

Figure 1. Nonmetropolitan Population Change in the United States, 2010–2017



Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

to fifty years. For example, the proportion of rural children living with married two-parent families has declined steadily such that rural children are now less likely than urban children to live in married two-parent families and more likely to live with cohabiting couples (O'Hare et al. 2009; O'Hare and Churilla 2008). Nonmetro Americans, particularly men, have also fallen further behind their metro counterparts in postsecondary education. The college completion gap between metro and nonmetro men has grown from about 5 to about 20 percent over the past fifty years (Ziliak 2018). The rural-urban gap in employment rates for men with less than a high school education has increased dramatically. In the 1960s, nearly all men without a high school degree in both metro and nonmetro areas were employed, "but by 2016 only 1 in 2 less skilled men in rural America worked, which was 15 percentage points lower than in metro areas" (Ziliak 2018, 10).

Since the early 1980s, urban and rural areas have seen diverging mortality trajectories (Cosby et al. 2018; James 2014; Singh and Siahpush 2014; Elo et al. 2019). Mortality rates have fallen in small, medium, and large metropolitan areas but have increased among rural adults age twenty-five to sixty-four over the last thirty years (James 2014). The rural mortality penalty, which began to emerge in the 1990s, is now substantial (Cosby et al. 2018). Although much research highlights the poor health of rural men, recent analyses reveal a growing rural mortality penalty for White women as well (Monnat 2020). The opioid crisis and other so-called deaths of despair, such as suicides, drug overdoses, and alcohol-related deaths (Kiang et al. 2019; Monnat 2018; Peters et al. 2020; Case and Deaton 2015), only partially account for the rural-urban mortality gap, given that most of the growing difference in life expectancy is attributable to diverging mortality trajectories for cardiovascular diseases (Abrams, Myrskylä, and Mehta 2021; Harper, Riddell, and King 2021; Monnat 2020). Poorer cardiovascular health in rural areas relative to urban areas is found even among young adults (Lawrence, Hummer, and Harris 2017). Nonfatal health outcomes among adults are also worse in rural areas (National Center for Health Statistics 2019), particularly with respect to physical activity, obesity, and rates of smoking and tobacco consumption (Roth et al. 2017). Rural

areas have also not been spared from the ongoing coronavirus pandemic, which began in early 2020. Although initial caseloads were higher in dense urban places, rural counties saw rising caseloads during the summer and rural counties were observed to have some of the highest incidence and death rates (Cromartie et al. 2020; Karim and Chen 2021; Karmakar, Lantz, and Tipirneni 2021; Mueller et al. 2021). As the pandemic continues in subsequent waves, rural areas maintain their relatively higher risks of infection and death, as well as lower rates of full vaccination (Ullrich and Mueller 2021).

At least some of the measured decline in well-being in rural America is because many growing nonmetro counties have been reclassified from nonmetro to metro status since the OMB created the metropolitan classification in 1950. For many years, researchers have been aware that the conclusions drawn from comparisons of economic and social conditions in metro and nonmetro areas over long periods are influenced by the fact that each decade many counties are reclassified from nonmetro to metro or (less frequently) from metro to nonmetro (Artz and Orazem 2006; Goetz, Partridge, and Stephens 2018; Johnson and Lichter 2020).[3] As a result, counties designated as nonmetro in 1974, for example, are now home to more than eighty million people, but counties classified as nonmetro in 2013 claim fewer than fifty million (Cromartie 2017). To the extent that population growth is correlated with strong local economies, better population health, and a better-educated labor force, this reclassification may contribute to a persistent rural-urban gaps in these economic, health, and education measures. For example, one recent study found that reclassification accounted for about 25 percent of the increase in the rural-urban mortality gap since the 1970s (Brooks, Mueller, and Thiede 2020).

Two other factors that make it difficult to characterize the distinctive impact of rural places are the strength of social and economic ties across rural and urban communities and the ongoing blurring of the boundaries between rural and urban areas. Recent scholarship argues that interdependence of rural and urban places is growing and the uniqueness of rural and urban settings is diminishing as they become more similar across multiple dimensions (Lichter and Brown 2011; Lichter and Ziliak 2017; Wu, Weber, and Partridge 2017; Lichter, Brown, and Parisi 2021).

Rural and urban places are interdependent economically, environmentally, socially, and politically (Lichter, Brown, and Parisi 2021). Rural economies produce the food and energy and have the natural amenities that urban people need to thrive, and urban businesses produce goods and higher order services that rural people need but cannot generate efficiently. Rural land uses also generate environmental externalities from farming and mining that cross over into urban areas, and urban air and water pollution migrates into the rural periphery (Wu, Weber, and Partridge 2017). At the same time, the historical distinctiveness of urban and rural places is diminishing. Daniel Lichter and David Brown (2011) identify past changes in transportation technology and infrastructure that speeded the movement of goods and services and people. New advances in information technology and globalization, they argue, have facilitated the rapid movement of information and capital across rural

3. This reclassification can happen either because their largest cities cross the metro population threshold or because their commuting patterns change to cross the commuting thresholds. This was recognized as early as the 1970s when Fred Hines, David Brown, and John Zimmer developed the Beale Codes for use in an Economic Research Service publication examining changes in social and economic characteristics of metro and nonmetro populations. They recognized that using the 1970 classification for both their 1960 and 1970 data would likely depress nonmetro growth rates "by inclusion of some rapidly changing counties in the metro category that were nonmetro at the beginning of the period (1960)" (1975, 4) In the intervening years, others have noted how the failure to address the changing classification of counties affects the estimate of growth rates. Johnson (1989), for example, pointed out that the estimated nonmetro population growth rate between 1980 and 1987 was reduced by 32 percent if one used the nonmetro classification for 1987 rather than for 1980.

and urban spaces. Furthermore, the geographic expansion of boundaries at the rural-urban fringe and into exurbia can erase and blur the separation of rural and urban areas. They assert that "drawing sharp rural-urban distinctions seems increasingly obsolete" (2011, 566).

WHY GROWING UP RURAL MATTERS

A central concept of this double issue is that growing up in rural areas matters not only for children's development and well-being, but also for their future life chances. In this section, we briefly review evidence that where one grows up has both immediate and longer-term influence on important outcomes such as health, education, and economic security. We then articulate what is distinctive about rural settings, how they differ from more urban environments, and why these place-based rural characteristics may impact the lives of those who grow up there.

Place-Based Effects: Short and Long-Term Implications

Over the past three decades since William Julius Wilson's *The Truly Disadvantaged* (1987) stimulated research on "neighborhood effects," a substantial literature has emerged in a wide range of disciplines demonstrating that one's childhood place of residence matters (Duncan, Brooks-Gunn, and Aber 1997; Sampson 2008; Sampson, Morenoff, and Gannon-Rowley 2002; Diez Roux and Mair 2010; Sampson, Raudenbush, and Earls 1997; Chetty et al. 2014; Chetty and Hendren 2018a; Hayward and Gorman 2004). In their landmark publication, Jeanne Brooks-Gunn, Greg J. Duncan, and Lawrence Aber (1997) compile extensive evidence that neighborhood characteristics, particularly poverty, had a detrimental effect on children's well-being. Importantly, several studies demonstrate that these neighborhood-level characteristics influenced child development above and beyond their individual household or family characteristics. Subsequent work showed that many neighborhood characteristics impact children by operating through key institutions such as families and schools (Leventhal and Brooks-Gunn 2000). For example, poorer neighborhoods tend to have a higher proportion of single-parent families and lower quality, underresourced schools, which in turn are associated with poorer child development outcomes.

An important and growing literature further demonstrates that the impact of childhood residential characteristics are not limited to childhood. Recently scholars have drawn on ideas from both neighborhood or place-based effects and life-course theories to examine how community characteristics and residential environments during childhood may influence health and economic outcomes well into adulthood. Being raised in a poor or disadvantaged neighborhood is often associated with poorer health, lower educational attainment, and lower earnings in adulthood (Gould, Lavy, and Paserman 2011; Leventhal and Brooks-Gunn 2000; Wodtke, Harding, and Elwert 2011). For example, such children are more likely to be obese as adults (Alvarado 2019; Kravitz-Wirtz 2016). In his groundbreaking study, the Equality of Opportunity project, Raj Chetty and colleagues show that where children are raised is strongly related with their upward income mobility as well as educational, fertility, and marital outcomes (Chetty et al. 2014; Chetty, Hendren, and Katz 2016; Chetty et al. 2018; Chetty and Hendren 2018b, 2018a). The Equality of Opportunity project used data from deidentified geographically coded federal income tax records to identify where individuals born in the early 1980s lived when they were in their mid-teens and then linked information about their teen location and family income rank to a host of socioeconomic outcomes when the individuals were roughly age thirty. Importantly, these analyses assessed outcomes of young adults regardless of whether these individuals have remained in their home county or commuting zone or have moved. These studies provide compelling evidence that not only does where you grew up matter, but so do the place-based characteristics of your childhood residence. Specifically, they find that areas with less segregation and more income equality achieved higher rates of upward income mobility (Chetty and Hendren 2018b).

The lion's share of the research cited, however, focuses on urban areas or nationally representative studies consisting of predominately

urban populations. Even the term *neighborhood effects* reflects an urban orientation given that *neighborhoods* more aptly characterize urban than rural communities. Hence we prefer terms like *community* or *place-based* effects. This urban bias may matter for several reasons and may not provide a full understanding of how rural places can shape the development and life chances of children. First, many of the measures used to capture urban neighborhood quality may not be applicable to rural communities. For examples, community-level indicators of food deserts typically measure the number and proximity of supermarkets but do not usually take into account whether families have access to gardens (Walker, Keane, and Burke 2010). Even studies that explicitly seek to examine neighborhood effects across the rural-urban continuum encounter urban-biased definitional problems. For example, one study defined neighborhood problems in urban, suburban, exurban, and rural areas using the presence of abandoned or vandalized buildings or buildings with bars on windows within three hundred feet of the housing unit (Cornwell and Hall 2017). Given that rural housing units are less likely to have any buildings within three hundred feet, it is not clear that these standard measures of neighborhood quality are conceptually or empirically comparable across the rural-urban continuum.

A second issue is that many place-based characteristics that have been identified as important in urban settings may be less salient in rural communities, and vice versa. An obvious example is the presence of sidewalks, which may have very important implications for access to goods and services in urban areas but are less relevant in rural areas. Less obviously, levels of neighborhood socioeconomic inequality may be less germane in rural than urban areas given that urban residents are able to more easily self-segregate themselves and their children into different schools and medical care, whereas rural residents are more likely to share these services. Our lack of understanding how growing up rural may influence childhood well-being and life outcomes represents an important blind spot in both academic research and in the urban public more broadly.

What Is Distinctive About Rural Areas?

The dearth of research on the place-effects of growing up rural leaves open the question of what, if anything, is distinctive about rural places and why growing up in such places should matter. Given the rapid changes and considerable heterogeneity in rural areas just discussed, no one feature, such as poverty or agricultural production, is universally present in all rural areas. Nonetheless, we contend that two defining characteristics of rurality, smaller population size and remoteness from urban centers, fundamentally shape the characteristics of rural areas, which in turn influence the well-being and life chances of those raised in these places. Rebecca Blank (2005) identifies five attributes of communities that affect opportunity and outcomes: its natural and physical built environment, its economic structure, its public and community institutions, its social norms and cultural environment, and the demographic characteristics of its population. Places, in this view, are not just spaces where physical infrastructure and natural resources are located. Places are human creations with unique institutions, cultural and social norms, and sets of relationships within which people live and interact and change.

Despite the great diversity across rural America just described, rural areas are distinctly different from urban areas, at least on average, with respect to each of the five attributes. Perhaps the most visually striking differences between rural and urban places is in their physical environments. Put simply, rural places have a higher ratio of the natural to the built environment. Indeed, the natural environment is often central to the identity of rural areas. Densely timbered forests, vast fertile fields, coal-laden mountains, and abundant lakes and streams not only are the backbone of many rural economies, but also provide entertainment and physical exercise such as hunting and fishing, hiking, skiing, biking, and canoeing. Consequently, rural life is generally more closely tied to the natural environment. The physical built environment of rural areas is also distinctive. Rural infrastructures generally consist of longer roads and fewer sidewalks. As a result, traffic congestion may be less, but dis-

tances to services is typically greater and public forms of transportation, including bus routes and subway systems, are much more limited. Consequently, rural residents depend more on cars to perform essential daily tasks, such as getting to work or buying groceries. This reliance not only is relatively expensive, but also affords fewer opportunities for active transportation by walking or biking, thus affecting rural residence economic and physical well-being. Prior studies, for example, have labeled rural environments as "obesogenic" due to their limited access to recreational facilities, dependence on nonactive modes of transportation, and overall food environments (Boehmer et al. 2006; Wen et al. 2018).

Rural economic structures also differ strikingly from urban ones both because of their greater dependence on natural features and resources, and because smaller population sizes generate less demand and fewer economies of scale. As a result, access to economic opportunities and services is generally more limited. Job markets tend to be less diverse and many rural communities depend on only a few major industries (Cromartie 2017). Limited job opportunities correlate with higher unemployment and underemployment (Slack, Thiede, and Jensen 2020) and lower labor-force participation rates (Pender et al. 2019), which in turn affect rural families through higher levels of poverty and its impact on gender norms (as discussed). Commercial establishments including grocery stores, restaurants, and other retail businesses often are not profitable in sparsely populated areas or offer less variety where they do exist (Mushinski, Weiler, and Widner 2014). Many services and public infrastructures with high fixed costs that are provided in cities are not available in rural communities or are provided by volunteers rather than paid professionals.

Importantly, rural areas in the United States suffer from fewer health-care resources and potentially greater difficulties accessing both primary and secondary care (National Center for Health Statistics 2019). Access to physicians is generally lower in rural areas given that only about 10 percent of physicians practice there (Rosenblatt et al. 2010). The problem of rural out-migration is likely to exacerbate this issue because growing up in a rural area is a key determinant of developing a rural medical practice (MacQueen et al. 2018).

In contrast, fewer private and public services may encourage more community institutions, including civic and faith-based organizations (Weber 2008). Schools and churches in rural areas often function as hubs of community life, engendering strong feelings of community attachment. At the same time, educational services are restricted in rural areas because fewer students lead to less diversity in choice of schools and fewer specialized subjects being taught. In sparsely populated rural communities and areas facing pronounced depopulation, some schools have been closed or consolidated. The public and community institutions that emerge (schools, churches, local governments, civic institutions, financial intermediaries) affect the quality and types of services available and thus the emotional, social, cognitive, and physical development of children and youth.

These community institutions also contribute to rural social norms and cultural values. Rural areas tend to hold more religious (Dillon and Henly 2008; Chalfant and Heller 1991) and conservative political (Gimpel et al. 2020) values. These social norms, undergirded by informal social sanctions, shape the behavior and expectations of children, youth, and adults. They are part of the "sense of place" that gives residents an identity but may also limit perceived opportunities. At the same time, the importance of local social relationships and working collectively on common issues and the limited number of neighbors makes developing these relationships easier.

The demographic characteristics of the community reflect its past history and are, in many cases, closely tied to social norms. Rural populations tend to be older, nearly 18 percent of their population age sixty-five or older relative to 14 percent of urban populations (Smith and Trevelyan 2019). In addition, despite large minority populations in geographically concentrated areas and sizable increases in ethnic minority populations, rural areas are also less ethnically and racially diverse than urban areas (Johnson 2012, 2014; Lee and Sharp 2017). These

demographic profiles shape the priorities and opportunities of youth living there. In the long run, of course, many of these attributes pertaining to the physical environment, local economy, civic institutions, cultural values, and demographics, are changeable, and many are endogenous. Social norms, for example, not only shape but also reflect the economic structure and institutions of the community that may have adapted to support these norms.

Challenges in Identifying a Rural Effect

The aim of this double issue is to better understand how growing up in a rural place influences the life outcomes of a person—what has been called the "rural effect" (Weber et al. 2005). Measuring this rural effect, however, presents several daunting methodological challenges. As discussed in detail in the appendix, *rural places* and hence *rural people* can be defined many ways. Beyond these definitional issues, scholars studying the rural effect need to address at least three other challenges: definitions change, places change, and people move. These challenges are particularly important in retrospective and longitudinal studies that follow people over their life course.

The first challenge is that the standard definitions of urban and rural—and metropolitan and nonmetropolitan—have changed over time. Since the earliest days, *rural* has always been *not urban* and *nonmetro* has always been *not metropolitan*. Some changes were made in the definitions in 1950 and 2000, however, and these changed the classification of particular places.[4] But the basic concepts were maintained: *rural* continues to refer to small settlements with open country and populations of less than 2,500; and *nonmetropolitan* continues to refer to counties distant from regional labor markets centered on cities of fifty thousand or more, and so continuity is significant across the decades in definitions that allows some consistency in the analysis of rural places.

A more serious challenge is that, even when the definitions of urban and rural stay consistent over time, places change. As noted, many nonmetropolitan counties have grown over the past half century and been reclassified as metro counties. Between 1960 and 2017, nearly 25 percent (753) of all nonmetro counties were redefined by the OMB as metro (Johnson and Lichter 2020). "All the growth since 1970 in the metropolitan share of the U.S. population came from reclassification rather than endogenous growth in existing metropolitan areas" (Johnson and Lichter 2020, 1929). For the study of "rural effects," it is important that the county of origin is correctly identified as metro or nonmetro. If one happens to have grown up in one of the 753 counties that was reclassified, using the most recent OMB classification to identify county of origin will lead to a misestimation of the rural effect. Specifically, because the formerly nonmetro counties now classified as metro generally have more positive demographic and economic characteristics, failure to properly identify nonmetro status at the time of childhood will likely bias the rural effect downward by excluding healthier, better-educated, and higher-earning adults. Both Lisa Keister, James Moody, and Tom Wolff (2022, this volume, issue 4) and Evan Roberts, Wendy Rahn, and DeAnn Lazovich (2022, this volume,

4. Before 1950, the Census Bureau considered only the populations with incorporated areas in their definition of urban. For the 1950 Census, it changed the definition to allow densely populated unincorporated areas to be identified as urban (Census Bureau 2020b). In 2000, it created two classes of urban areas, aggregating census blocks into urbanized areas of fifty thousand or more and urban clusters of between 2,500 and 49,999. In 1949, the Bureau of the Budget (the predecessor of OMB) standardized the definitions of metro areas by defining as them as single counties or groups of counties with a core city of at least fifty thousand people plus adjoining counties that were socially and economically integrated with the central county (Census Bureau 2020a). Changes of terminology were regular over the next fifty years but the standards used to identify metro areas did not change significantly (U.S. Census Bureau 1994). In 2000, however, OMB instituted a significant change in the metro classification system by adopting *core-based-statistical-areas* to define metro areas. This change retained the metro-nonmetro distinction with Census Bureau–defined urbanized areas of fifty thousand or more forming the cores of metro statistical areas. Nonmetro counties—those that were not in metro statistical areas—were classified as either micropolitan (counties or groups of counties with urban clusters of 10,000 to 49,999 as their cores) or noncore areas (those not metro or micropolitan).

issue 4) take care to link both childhood place of origin and adult place of residence to the geographic identifiers in effect at the time of childhood and adulthood.

Even if definitions can be held constant and particular places do not change categories, the characteristics of a given place may be quite different in different eras. This can change the size and character of the rural effect. This suggests that conclusions about a rural effect from the 1930s, for example, should be carefully interpreted in understanding the effect of growing up in a rural area today. Roberts, Rahn, and Lazovich (2022) provide a good example of how to address this issue in their paper on the effect of growing up in a rural area in the early years of the twentieth century on mortality rates five decades later.

The third, and possibly most intractable, challenge is that people move. This has two implications for the study of rural effects. The first is that, depending on when they move during or after childhood, people growing up in a rural area will have had varying exposure to rural life. In other words, they will have varying "doses" of the rural effect. The effects of this exposure can vary depending both on the life stage and the era in which they are experienced. Emily Parker, Laura Tach, and Cassandra Robertson (2022, this volume, issue 4) consider this in their analysis by creating variables that captured time spent in nonmetro counties, but do not report the results because they find them to be substantially the same as using the metro-nonmetro county of origin variables. They do, however, separate exposure to place-based federal funding in childhood from exposure to place-based federal funding during adulthood and found different effects on adult educational and earnings outcomes.

The second issue involved in migration is that the migration is selective. Because of more limited local institutions of higher education (colleges and universities) and less diverse and robust local labor markets, many rural youths leave their home communities to pursue their educational and occupational goals. Consequently, migration from rural areas to urban ones is known to be highly selective with respect to higher education and earning potential (Carr and Kefalas 2009; Faggian, Corcoran, and Rowe 2017; Sherman and Sage 2011; Weber et al. 2007). Out-migration from rural areas may also be linked to better health, though this form of selective migration is less frequently studied (Jokela et al. 2009; Lee 2019). In-migration to rural areas is also selective. Between 2000 and 2010, Hispanic populations accounted for about two-thirds of rural population growth (Lichter and Johnson 2020). Other rural areas have seen an increase in migrants with high levels of education and income through a process of rural gentrification. Cross-sectional studies typically ignore these selection effects in migration; yet excluding these rural migrants can generate biased estimates of the longer-term effects of growing up in rural areas. Roberts, Rahn, and Lazovich (2022) and Parker, Tach, and Robertson (2022), for example, both find important differences in adult mortality and economic outcomes between rural stayers and movers in their studies.

Studying the longer-term effects of having rural roots typically requires longitudinal data at the individual level that spans a substantial portion of the life course and follows individuals who move. Studies of the rural effect over the life course also need to use the most appropriate definition of rural status and measure it at the time the individual was a child. Ideally, such studies would capture not only whether an individual grew up in a rural area, but also how specific attributes of these rural communities (its physical environment, economic structure, community institutions, social norms, and demographic characteristics) shape individuals' life chances. These rural attributes would also need to be measured during childhood as they too change over time. Studies that meet all of these data and analytic challenges are rare, but also essential to provide a deeper understanding of both the advantages and disadvantages of being raised in rural America.

AN OVERVIEW OF GROWING UP IN RURAL AMERICA

In this section we provide an overview of the literature pertaining to growing up in rural America and highlight the contributions of articles in this volume to this literature. We begin with a discussion of two key institutions that are shaped by rural place attributes and play a

pivotal role in fostering children's development: rural families and rural schools. We then turn to one of the most distinctive and difficult aspects of growing up in a rural area: having to decide whether to leave or stay in one's home community. In particular, we examine the conflict and uncertainty rural youths experience as higher educational aspirations typically require them to leave. We then explore why many rural youth prefer to stay in rural areas and the implications of this choice for building families and securing work. Last, we draw on a limited number of studies, including three new studies in this volume, that take a life-course perspective to examine the implications of growing up in rural areas on adult education, income, wealth, and health for both those who leave and those who stay in rural areas.

Rural Families: Coping Under Strain

Like their urban counterparts, rural families play a central role in protecting and promoting rural children's well-being. The strength, stability, and dynamics of family forms and functions critically influence children's emotional well-being and physical health (Amato 2005, 2010; Brown 2004; Panico et al. 2019; Thomson and McLanahan 2012; Bzostek and Berger 2017). Historically, rural children were more likely than urban children to be raised in traditional family structures consisting of heterosexual married couples and their children (Albrecht and Albrecht 2000). These nuclear family units were typically integrated into extended kin networks, including grandparents, aunts, uncles, cousins, nieces, and nephews, who lived nearby. In traditional rural communities, these large and tightly knit kinship networks were actively engaged in the lives of rural children offering both supplemental support and full-time care in times of economic or personal crisis (Beggs, Haines, and Hurlbert 1996).

Today, rural and urban families more closely resemble one another (Carson and Mattingly 2014). By 2018, slightly fewer rural (60 percent) than urban (63 percent) children lived in two-parent married households. Instead, rural children are more likely to live with cohabiting parents (O'Hare et al. 2009) and to be born to unmarried mothers (Livingston 2018). Data on children's residence with same-sex couples are limited, but American Community Survey (ACS) data from 2018 show that a similar proportion of rural and urban children (about 0.5 percent) live in same-sex married or cohabiting couples. Rural children are as likely as urban children to live in multigenerational households, and grandmothers often play an active role in helping raise their grandchildren (Barnett 2008; Brown and Lichter 2004; Burton et al. 2013; Lichter and Graefe 2011). These multigenerational households are especially common among African Americans and Native Americans living in rural areas (Snyder, McLaughlin, and Findeis 2006). Yet the assumption that rural kin are more available to assist with childcare is increasingly questionable, given that high out-migration means fewer family members around to care for the young or the old (Choi et al. 2020).

Furthermore, despite substantial changes in the structures of rural families, social norms, being often rooted in Christian religious ideals, continue to valorize "traditional families" in many rural communities (Miller and Edin 2022, this volume, issue 4). These traditional social norms may help explain why some family structures may be particularly disadvantageous for children living in rural areas (Burton et al. 2013). Relative to urban single mothers, rural single mothers may face greater social stigma as well as greater barriers in accessing welfare benefits and, if employed, are more likely to be working part time (Brown and Lichter 2004). This may help explain the higher poverty levels among single mothers in rural areas than urban areas (Brown and Lichter 2004; Snyder and McLaughlin 2004). In addition, although research shows little if any differential impact of parental gender composition on children's well-being (Reczek et al. 2016; Cheng and Powell 2015; Schumm 2016; Cenegy, Denney, and Kimbro 2018), the scarce literature on lesbian, gay, bisexual, transgender, and queer-questioning (LGBTQ) rural families raises concerns that children with LGBTQ parents may face a higher risk of bullying and social isolation (Bell 2000; Poston and Chang 2016; Preston and D'Augelli 2014).

Some scholars have argued that it is not family structure per se, but instead family instability, including divorce, remarriage, or

household moves, that disrupt children's home lives and have a negative impact on their well-being (for an overview, see Cavanagh and Fomby 2019). Numerous factors have been found to be associated with family instability in rural areas. Studies on the impact of economic restructuring suggest that changing gender roles in rural areas increased family tensions, potentially resulting in greater family instability (Sherman 2009a). Yet other work shows that rural families accustomed to economic hardships, specifically those dependent on coal extraction, exhibited greater resilience (less disruption) than metro areas before and after the recession (Betz and Snyder 2017). Cohabiting unions, which are more common in rural areas, are less stable than marriages, and rural cohabiting unions are less enduring than urban cohabiting partnerships (Brown and Snyder 2006). Similarly, remarriage is more common in rural areas, suggesting higher levels of blended families and a greater number of family transitions. High levels of family instability also fosters greater multipartner fertility, which leads to complex family structures and complicated intergenerational family ties (Burton et al. 2013).

Family instability is also higher among families facing deep poverty and drug addiction. The official poverty rate is higher for rural than for urban children, and poverty increased during the early 2000s reaching a high of 27 percent in 2012 (Hertz and Farrigan 2016). Many low-income rural families, like their urban counterparts, struggle to care for young children through a combination of low-paying jobs, government programs (such as the Supplemental Nutrition Assistance Program [SNAP] and Women, Infants and Children [WIC]), and help from other family members, often grandmothers. Yet in some ways living in a rural area poses additional challenges. Notably, employment opportunities are more scarce and stigma around receiving support from government programs reduces families' use of such programs, even when they are eligible (Brown and Lichter 2004). Moreover, work locations, hospitals, gas stations, and grocery stores are farther away, requiring rural families to incur the costs of car ownership or greater dependence on family and friends to perform essential tasks. Recently, studies have also noted limited access to healthy food in rural areas. In fact, despite being the primary producers of food in America, rural families are more likely to experience food insecurity than urban households, particularly after adjusting for region (Gundersen et al. 2017; Rabbitt, Coleman-Jensen, and Gregory 2017). Furthermore, although food insecurity has generally declined in urban areas after the recovery from the Great Recession, it has continued to rise in rural areas (Coleman-Jensen, Steffen, and Whitley 2017).

Rural families struggle to mitigate the impact of poverty and family instability for children (Sano, Manoogian, and Ontai 2012). Two articles in this volume demonstrate how low-income rural families adapt when coping with food insecurity and drug addiction, respectively. Sarah Bowen, Sinikka Elliott, and Annie Hardison-Moody (2022, issue 3) take a close look at the lived experiences of three unmarried low-income female caregivers of young children in two rural counties in North Carolina. They follow these families for five years. At the beginning of their study, these children reside in a variety of nontraditional living arrangements, including a multigenerational family consisting of a single mother and grandmother, a blended family with cohabiting migrant parents, and a single grandmother caring for three grandchildren. Despite these different initial living arrangements, these families had common experiences. First, all three noted the importance of being able to rely on other family members and, to a lesser extent, neighbors and friends to cope with food insecurity. Second, their reliance on public safety net programs, such as SNAP and WIC, and charitable food pantries was both essential to "getting by" and engendered significant levels of anxiety, frustration, and embarrassment. Third, by the end of the five years of the study, all families experienced significant instability. When an older adolescent grandchild in the multigenerational family became pregnant and had a child, the grandmother (now great-grandmother) left the household as the boyfriend of the adolescent mother moved in. Over this same period, a car accident compelled the migrant family to move to an urban center to

be closer to hospital care. Mounting bills and dilapidated housing forced the grandmother to move several times and ultimately to lose custody of her grandchildren. Her struggles illustrate the close interconnection between food and housing insecurity in rural areas (Coleman-Jensen, Steffen, and Whitley 2017).

In addition to chronic poverty, rising rates of drug addiction have wreaked havoc on rural families, frequently separating children from their parents' care, and fueling family instability. The rapidly spreading opioid and methamphetamine epidemics have rendered fewer adults, including parents, capable of providing childcare. In her analysis of children's living arrangements in rural Appalachia, Kristina Brant (2022, this volume, issue 3) shows how parental opioid and other drug abuse and its ties to the criminal justice systems and child welfare programs generates family instability as children bounce among care by parents, grandparents, and other relatives. Brant's study highlights how in rural communities personal connections (both positive and negative) to local legal systems plays a critical role in determining whether rural families are successful in navigating kinship family formations. Rural family members with negative experiences and connections are less likely to seek legally recognized custody of children, thereby limiting their access to federal and state subsidies for childcare. In contrast, rural families with positive connections are able to effectively intervene, buffering both children and their parents from the negative effects of drug addiction. The articles in this volume by both Bowen, Elliott, and Hardison-Moody and by Brant focus on rural families facing considerable economic and personal strain, but also demonstrate how in the midst of these crises, rural families often work together to prioritize children's well-being.

Childcare and Schools in Rural Areas: Surprising Equality and New Challenges

In addition to families, educational institutions, including early childcare and education programs and schools, play a key role in fostering children's well-being. These institutions are primarily responsible for promoting children's cognitive development and preparing children with the necessary knowledge and skills for subsequent academic success.

The Changing Context of Childcare

Historically, most rural children under the age of five were cared for by family members. Lower female employment rates combined with greater distances to center-based childcare and closer proximity to kin resulted in limited demand for center-based childcare, either private or public (Atkinson 1994). Rapid economic and social change over the last thirty years, however, have transformed rural families, undermined traditional gender roles, and altered childcare arrangements (Betz and Snyder 2017; Lichter and Graefe 2011). Specifically, economic restructuring caused by a shift from largely agricultural and extractive industries to service positions has resulted in lower paid jobs with fewer benefits (Autor 2019; Slack 2014; Thiede and Slack 2017). It has also led to a decline in employment, much more pronounced among rural men than rural women. In fact, many rural women entered the formal labor market in response to their male partners' job loss (Mattingly and Smith 2010). These trends were compounded during the 2008 recession: not only did rural female employment outpace male employment, but rural fathers also modestly increased their time spent on childcare if the child's mother was employed (Smith and Pruitt 2017), transforming traditional gender roles of the male breadwinner and female caregiver (Mattingly and Smith 2010; Smith and Pruitt 2017; Tickamyer and Henderson 2004).

Even after the recession, many of the new jobs available for both men and women in rural areas had rigid hours or irregular shift work, neither of which is compatible with childcare (Thiede and Slack 2017). Rural jobs have been described as being less family friendly because they offer fewer paid sick days, paid vacation days, parental leave, or flextime than urban jobs (Glauber and Young 2015). Historically, many rural families may have depended on kin for assistance with childcare (Atkinson 1994), but this appears to be waning as more rural families look for affordable center-based childcare. Contrary to some expectations, Taryn Morrissey, Scott Allard, and Elizabeth Pelletier (2022, this volume, issue 3) find that publicly

funded early childhood care and education programs, primarily Head Start, are more available and more likely to be used in rural than in urban areas, highlighting the heavy dependence on such public funds in rural communities. In contrast, urban children were more likely than rural children to attend private nonprofit preschools. In addition, on entry into kindergarten, rural children's reading and math scores were slightly lower than their more urban counterparts'. Adjusting for county-level center-based childcare capacity and socioeconomic characteristics, however, largely explained rural-urban differences in young children's readiness to enter kindergarten.

Rural Schools: Challenges and Advantages

School quality, resources, and investments largely drive students' educational outcomes in both rural and urban areas; yet on several key dimensions, differences between rural and urban school environments are distinct. Because of their lower population density, rural schools face numerous challenges. Smaller student bodies support fewer specialized classes (Bouck 2004). Of particular concern in rural areas are the limited number of college preparatory classes as well as of classes suited to the needs of students with learning disabilities. Funding allocation regulations, particularly with respect to federal funding for low-income students, further limits services for disadvantaged rural students (Biddle, Mette, and Schafft 2017). For example, Title 1 of the Elementary and Secondary Education uses an allocation formula based on the percentage of students living in poverty or the total numbers of students living in poverty. As a result, smaller rural schools receive fewer resources per child living in poverty than large urban schools do (Schafft and Biddle 2014; Biddle, Mette, and Schafft 2017; Strange 2011). Less funding also limits teacher salaries, which in turn, undermines the recruitment and retention of rural school teachers (Fishman 2015; Monk 2007; Lamkin 2018). These financial challenges are compounded by stringent certification requirements, which restrict the pool of potential teachers and the number of subjects teachers are eligible to cover. Because rural teachers are more likely to double-up on subjects taught, the burden of these restrictions is heightened in rural school systems.

Given that rural schools receive less per-student funding and offer a less diverse curriculum, one may expect that rural children would exhibit lower academic performance. Yet, rural and urban students often perform similarly on standardized tests such as the National Assessment of Educational Progress (NAEP). From 2000 to 2010, rural students performed slightly better than urban students on the reading and math NAEP, but worse than suburban students (Burdick-Will and Logan 2017; Provasnik et al. 2007). Within rural areas, students in fringe rural areas typically outperform the national average, whereas those in remote rural areas score lower on the NAEP (Fishman 2015).[5] National averages also mask potentially important regional variation. In the Deep South, which includes rural areas with high levels of persistent poverty and lower levels of school funding, rural children's performance on standardized tests falls gradually behind those of urban students as they progress from kindergarten to grade twelve (Lindahl 2011). By using an innovative new common scale of state achievement tests on 430 million standardized test scores, Jessica Drescher, Anne Podolsky, Sean F. Reardon, and Gabrielle Torrance (2022, this volume, issue 3) provide a nationwide comparison of rural and urban third grade achievement and learning rates between the third and eighth grade. Overall, they find only modest differences between rural and urban students' academic performance, although some differences within race-ethnicity groups were larger.

To help explain the similar levels of aca-

5. "NAEP reports results for four mutually exclusive categories of school location: city, suburb, town, and rural. Each of these categories has three subcategories. Rural areas are further distinguished by their distance from an urbanized area: Fringe rural is 5 miles or less from an urbanized area or 2.5 miles or less from an urban cluster; distant rural is more than 5 miles up to 25 miles from an urbanized area or more than 2.5 miles up to 10 miles from an urban cluster; remote rural is more than 25 miles from an urbanized area or more than 10 miles from an urban cluster" (Fishman 2015).

demic performance in rural and urban areas, some studies highlight specific advantageous characteristics of rural schools that may enhance students' learning and performance. For instance, rural schools tend to be closely integrated into their communities, often serving as hubs of local activity and engagement (Elder and Conger 2014; Schafft and Jackson 2010; Schafft and Biddle 2014; Schafft 2016; Bauch 2001). Glen Elder and Rand Conger (2014) provide extensive evidence on how farm children's ties to the land, their families, and their communities enhance both their academic success and social competence. Other studies show that rural schools promote social capital by facilitating children's and adolescents' civic engagement. Rural youth are highly engaged in both community and school civic activities such as student council, Future Farmers of America, and 4-H (Ludden 2011). These close community ties offer important advantages because teachers are more likely to know their students' parents and parents are more engaged in school activities (Schafft and Biddle 2014; Semke and Sheridan 2012). Rural classrooms are also, on average, smaller than urban ones and lower student-to-teacher ratios tend to correspond with greater per-student attention (Schafft and Biddle 2014).

Last, rural schools tend to be less socioeconomically segregated than urban schools. Largely because of limited school choice in rural areas, rural students across the socioeconomic spectrum are more likely to attend the same classes, participate on the same sports teams, and engage in the same extracurricular activities. Emerging research suggests that this greater integration may offer important opportunities for academic achievement and help facilitate social mobility (Chetty and Hendren 2018b; Chetty et al. 2014). These findings are consistent with those of Drescher and her colleagues (2022), which show that socioeconomic status is less predictive of academic achievement in rural areas than in urban areas. Another study also found that racial-ethnic gaps, specifically White-Black and White-Hispanic differences, in test scores were lower in rural than in urban settings (Gagnon and Mattingly 2018). These findings suggest that rural schools offer more equitable opportunities for upward mobility via education than urban schools.

However, new work by Jennifer Sherman and Kai Schafft (2022, this volume, issue 3) raises concerns that this greater rural educational equality may be threatened in rapidly gentrifying, high-amenity rural areas. Although rural gentrification is sometimes viewed as a critical development strategy to reverse economic decline, this provocative study highlights some potentially harmful consequences to the influx of wealthy migrants to a former logging community in the Pacific Northwest. These newcomers have, on average, improved schools resources and performance, but they have also exacerbated inequalities. The most socioeconomically disadvantaged children benefited little from these changes because they lack the resources to pay for any of the schools' new sports and extracurricular activities and are poorly prepared to take advantage of curricular changes. Hence the process of rural gentrification may undermine an important advantage of rural schools, namely, promoting more equitable upward mobility through education.

Aspiring to Leave: The Pursuit of Higher Education

Arguably, the pursuit of postsecondary education marks when the life trajectories of rural and urban Americans most sharply diverge. Because of the limited range of postsecondary institutions in rural areas, rural youth, unlike their urban counterparts, typically face a difficult, and sometimes painful, decision of whether to remain in their home communities or leave to achieve their educational goals. Choosing to leave entails not only separation from their family, friends, and community, but also adjusting to a new, often unfamiliar, urban culture and environment. In addition, because rural areas have fewer local colleges and universities and fewer adults who have college degrees, many rural youths make this potentially life-altering decision with little understanding of how postsecondary institutions work or the role of postsecondary education in defining their subsequent career options.

The rural-urban divergence begins with differential aspirations to attend college. In their study of students in Minnesota, Alejandra Mi-

randa and Michael Rodriguez (2022, this volume, issue 3) find that only 61 percent of rural students, versus 74 percent of urban students, aspired to attend a four-year college. Rural girls had greater odds of college aspiration than rural boys did, and American Indian and Latinx students had lower educational aspirations than non-Latinx White students, but these ethnic differences were smaller among rural than urban students. Other studies, however, have found that among African American men, rural men were slightly less likely than urban men and significantly less likely than suburban men to aspire to attend college even after controlling for SES and student grades (Strayhorn 2009). Nationally, rural and urban adolescents express the greatest divergence in their educational aspirations beyond college, rural children being significantly less likely than urban to aspire to pursue postgraduate training (Howley 2006).

Previous studies highlight three factors that may curtail the educational aspirations and attainment of rural youth: family SES, particularly parental education; greater attachment to their families, communities, and land; and fewer and lower-ranked local universities and colleges nearby (Turley 2009). Perhaps the strongest barrier to pursuing postsecondary education for rural students is limited family resources (Irvin et al. 2012; Koricich, Chen, and Hughes 2017). One study contends that parents' low SES is the primary deterrent for rural youths to seek additional education (Byun, Meece, and Irvin 2012). Matthew Irvin and his colleagues (2012) also find that rural children whose parents have postsecondary education are more likely to attend college. Ethnographic research shows how members of the broader community, including teachers, perceive and sometimes reinforce the link between family SES and youths' educational prospects. In rural Kentucky, children of community leaders, who generally have higher SES, were encouraged to leave their community to attend college, whereas children in poor and working-class families were expected to remain (Miller and Edin 2022, this volume, issue 4). Although a handful of individuals from low-income families do leave and earn college degrees, these children were the exception and referred to as "beating long odds." Jennifer Sherman and Kai Schafft (2022, this volume, issue 3) similarly show notable differences in educational aspirations by length of residency, which is closely correlated with SES. Both old-timers, most of whom lived in the community more than twenty years, and newcomers in rural gentrifying areas strongly encouraged their children to attend college, but old-timers were more likely to view college as essential to securing well-paid and reliable employment, whereas newcomers tended to value education as an important life goal in and of itself.

The strong attachment of rural youths to their families and communities may be a double-edged sword, simultaneously encouraging and discouraging educational ambitions (Byun, Meece, and Agger 2017; Byun, Meece, and Irvin 2012; Howley 2006; Johnson, Elder, and Stern 2005). On the one hand, these ties are an important form of social capital and benefit rural adolescents in their college application process (Nelson 2016). These social resources may be especially important for rural children of lower SES to achieve their educational goals (McGrath et al. 2001). On the other hand, strong local attachments may conflict with educational aspirations (Petrin, Schafft, and Meece 2014; Theodori and Theodori 2015). Unlike urban youths, rural youths with strong parental bonds are less likely to enroll in postsecondary education, suggesting that close family ties, which typically promote higher education, may conflict with educational aspirations in rural contexts (Demi, Coleman-Jensen, and Snyder 2010). One study finds that rural youth with strong academic records tend to apply to lower-ranked community colleges rather than to more distant high-ranking universities (Robbins 2012). Similarly, youths who are more satisfied with their communities are more likely to stay (Mellander, Florida, and Stolarick 2011). These findings are consistent with the study by Nicole Bernsen and her colleagues (2022, this volume, issue 3) that youths in rural Oregon and Maine that have a more favorable perception of their communities were less likely to want to go to college. Interestingly, the perceptions of the high school students about the future local economic trajectory of the commu-

nity did not have any relationship with their educational aspirations.

These aspirational rural-urban gaps are reflected in both college and postgraduate enrolment and completion rates. Data from the National Educational Longitudinal Study show that urban youths are more likely than those from rural areas to earn a bachelor's degree (Byun, Meece, and Irvin 2012). The gap in college completion rates may partially reflect higher college drop-out rates for rural youths, who may not feel that they "fit" in university environments, which tend to be more culturally urban and politically liberal. Challenges of acceptance on university campuses may not be limited to rural Whites. One interesting study found that in-state rural African Americans were often being perceived as "more White" and provincial, whereas urban African Americans represented "authentic Blackness" and sophistication (Woldoff, Wiggins, and Washington 2011). Ryan Parsons (2022, this volume, issue 3) provides one of the first in-depth looks at the multiple barriers to college completion facing rural African Americans in the South. He argues that although college is perceived as crucial to upward social mobility, social and cultural capital are mismatched, expectations of cultural and emotional labor are high, and feelings of marginalization are pronounced. In particular, his work highlights how enrolling in college and pursuing careers that require college degrees entails a permanent transition from one opportunity structure to another one, that is unfamiliar to them, their families, and their communities. Thus for rural students of color this transition is especially difficult because it usually entails the substantial emotional and social costs of leaving family behind and facing uncertain futures largely on their own.

Choosing to Stay: Building Families and Finding Work

Out-migration of rural youth is a well-established pattern (Carr and Kefalas 2009; Faggian, Corcoran, and Rowe 2017; Sherman and Sage 2011). Rural youth are typically drawn to urban areas in search of further education, better pay or diversity in employment, and more cosmopolitan lifestyles (Artz 2003; Gibson and McKenzie 2012). Rural out-migration can be substantial. Between 1990 and 2005, the rural Midwest experienced a 50 percent decline in its population aged twenty-five to thirty-four (Hamilton et al. 2008).

Yet many rural youth choose to remain, noting close ties to their families and communities and a dislike for the congestion and anomie of urban life, and many out-migrants later return to rural areas (von Reichert, Cromartie, and Arthun 2011). These youth make a conscious decision to remain in or return to their home communities, despite limited employment opportunities and almost certain economic hardships. Older studies find that rural youth experience markedly different transitions to adulthood, including completing one's education, finding work, leaving home, getting married, and having children (Heaton, Lichter, and Amoateng 1989). Emily E. N. Miller and Kathryn Edin (2022, this volume, issue 4) refer to these transitions as the "big five" and provide an in-depth analysis of the challenges of obtaining these key markers of adulthood in an area of rural Kentucky that has become an icon of rural White poverty. Two of the most notable differences in these transitions to adulthood pertain to building families and securing work.

Early Family Formation

Although rural and urban family structures increasingly resemble one another, differences in the timing of family formation continue to be notable. On average, women in rural counties give birth three years earlier than women in large metro counties in 2017 (Ely and Hamilton 2018). Teen childbirth is strikingly higher in rural than in urban areas, partly a result of more limited access to contraception and abortion services (Hamilton, Rossen, and Branum 2016; Ng and Kaye 2015). Consequently, a higher percentage of rural than urban teen births are unintended (Sutton, Lichter, and Sassler 2019). This early entry into parenthood generally occurs outside marriage, placing many adolescent and young parents at odds with local religious norms and teachings and undermining their access to critical community support and practical assistance. Miller and Edin (2022, this volume, issue 4) provide astute insights into how young unmarried parents navigate their complex and sometimes conflictual relation-

ships with religion and religious institutions in rural Kentucky.

Rural men and women also marry at younger ages (Snyder, Brown, and Condo 2004). Rural marriages that are formed early are often of lower quality with high levels of intimate partner violence and divorce (Miller and Edin 2022, this volume, issue 4). Hence, despite personal aspirations and community expectations of raising children within nuclear families, many young adults in rural areas find themselves struggling to support their children on their own.

Finding Well-Paid, Stable Employment

Job opportunities for those who stay or return to rural areas are limited. In the wake of decades of restructuring, recessions, and globalization, well-paid, stable employment with predictable hours and benefits is difficult to find in many rural communities. The few "good jobs" available, often in the education or health-care sectors, are highly competitive and usually require advanced degrees, and the "bad jobs" offer inadequate wages leading to a higher proportion of the working poor in rural than in urban areas (Thiede, Lichter, and Slack 2018). Even these bad jobs required owning or having regular access to a car, which was beyond the economic reach of many rural workers. Yet having a job, even a poorly paid one with irregular hours, was important to both men and women and carried not only practical, but also important moral, implications (Miller and Edin 2022, this volume, issue 4; Sherman 2009b). Lack of economic opportunities in rural areas is one of the primary drivers of outmigration (McLaughlin, Shoff, and Demi 2014; Petrin, Schafft, and Meece 2014). Depopulation, in turn, exacerbates income inequality (Butler et al. 2020).

For young men and women who have grown up and stayed in rural areas with declining economic bases, available employment is strongly shaped by gender and class. Although better-educated women often dominate in the education and health sector, poorer and less well-educated women can typically only find work at low-paying jobs with limited benefits at fast food restaurants or big box stores (Miller and Edin 2022, this volume, issue 4). In contrast, men with limited education can secure better-paying jobs as construction workers, electricians, and plumbers.

These disparities with respect to the expected returns to education for rural men and women may help explain some of the findings in the study by Ashley Niccolai, Sarah Damaske, and Jason Park (2022, this volume, issue 4) of unemployed men and women age fifty to seventy who grew up in and still lived in rural Pennsylvania. They find working-class girls there were given more encouragement to seek higher education than working-class boys were, and that rural middle-class parents encouraged both boys and girls to pursue a college education. These early aspirations changed in the transition to adulthood by processes they term upshifting, downshifting, and nonshifting. About half of the respondents reported no change in aspirations during this period. Upshifting (raising aspirations) was observed largely among middle-class men. Downshifting was observed largely among working-class men and women, men emphasizing financial constraints as a reason and women emphasizing family ties. When faced with unemployment in midlife, the processes were also classed and gendered and influenced by the desire to remain in the community. In response to unemployment, middle-class men upshifted and anticipated having to leave the rural community. Middle-class women and both working-class men and women, on the other hand, were likely to downshift and remain in place despite recognizing poor local job prospects.

Robert Francis (2022, this volume, issue 4) explores how being rooted in rural places shapes the labor-market trajectories of working-class men in rural Pennsylvania and particularly rural men's decisions about whether to upskill, move, or change jobs to improve their economic prospects. He finds more geographic mobility for work than generally reported, particularly when one considers geographic mobility required for military service. Furthermore, many rural men have left their home communities in search of better-paid jobs but returned when they failed to find them. He also finds that most of these men have pursued some postsecondary education or training, but that rather than seeking further

education to escape rural areas or the working class, they use it "to strengthen—not escape from—their identities as rural, working-class men."

Rural Roots: The Consequences of Growing Up Rural for Adults

As discussed, a sizable literature demonstrates that adults currently living in rural areas have poorer health and higher mortality, have lower educational attainment, and are more likely to be underemployed or unemployed than urban residents. These studies, however, do not necessarily mean that individuals raised in rural areas are similarly disadvantaged in terms of health, education, or economic outcomes because they do not take into account selective migration. We now review the admittedly few studies that have examined rural-urban differences from a life-course perspective and, hence, yield insights into the longer-term implications of having rural roots.

Consequences on Health

The handful of longitudinal health studies that have been published suggest that the effects of growing up rural may be more beneficial than is typically found in cross-sectional comparisons. Samuel Preston, Mark Hill, and Greg Drevenstedt (1998), using data from the 1900 and 1910 Censuses, find that childhood exposure to rural environments among turn-of-the century cohorts was associated with greater likelihood of living to age eighty-five. In particular, they find that childhood residence on farms, in rural places, and in less dense counties was associated with greater survival chances and speculated that at least some of this pattern may have resulted from the intergenerational transmission of farming as an occupation, which is less likely to be relevant today, when fewer than 5 percent of Americans work on farms. Nonetheless, a similar analysis of the more recent National Longitudinal Survey of Older Men (Hayward and Gorman 2004) also finds that rural farm residence in childhood was associated with reduced mortality in adulthood. Although these studies take into account childhood residence, they do not assess whether the individual moved to a more urban setting.

Evan Roberts, Wendy Rahn, and DeAnn Lazovich (2022, this volume, issue 4) link a recent health survey of older women (aged fifty-five and older) in Iowa to early-life census records, and demonstrate the value of such linkage studies for addressing some of the core questions around the impact of "growing up rural." They find that women who grew up on farms or in nonfarm rural areas and migrated to urban areas had an increased probability of attending college relative to those who stayed, but also relative to women who moved to other rural areas. However, these rural-to-urban migrants were also much more likely to be smokers in adulthood, reflecting that out-migration does not necessarily always lead to better health, depending on the social and cultural context of the destination. They also present intriguing results for mortality. Among women originating in rural areas, those who stayed on farms had the highest survival rates and that those who moved to towns, cities, or even rural nonfarm areas had lower survival rates. Interestingly, women who grew up in urban areas but moved to farms also had better survival rates than those who grew up urban but stayed or moved to towns.

The rural effect on health is likely to operate through different pathways for different health outcomes, some salutary and some detrimental. Studies cite evidence that urban adult migrants to rural areas were more likely to become obese in later life, consistent with theories that rural physical environments are obesogenic (Jokela et al. 2009; Lee 2019). A few studies have directly investigated differential exposure to rural environments across the life course, that is, whether rural residence at a particular stage of the life course affects health later in life. Kira Patterson and her colleagues (2017) compare life-course models for assessing the contribution of different place trajectories (stable rural, rural-to-urban, urban-to-rural, stable urban) to rates of obesity in Australia. They find evidence for an impact on obesity in middle-age of both cumulative exposure to rurality, as well as exposure to rural areas during the "sensitive period" of young adulthood. In contrast, a recent study by Shelley Clark (2021) uses longitudinal data from the United States and finds that living in a rural area during the critical period of birth

to age two was associated with higher body mass index (BMI) during young adulthood, but that neither cumulative exposure nor exposure during adolescence to rural environments led to elevated BMI later in life.

Consequences on Economic Outcomes

Although findings from the Equality of Opportunity project brought considerable attention to the importance of childhood residence for a variety of measures of adult economic attainment, the study was primarily interested comparisons across urban cities or regions. The initial reports pay scant attention to differences in economic mobility across the rural-urban continuum, though they note that low-income children growing up in rural commuting zones are, on average, more likely to be upwardly mobile than their urban counterparts (Chetty et al. 2014). This finding surprised and puzzled many rural scholars who thought that the rural economic disadvantages found in many cross-sectional studies would be evident in longitudinal studies as well. Indeed, this finding has yet to be fully explained, though several hypotheses have been put forward. First, much of this average effect is driven by the exceptional upward mobility of youth raised in the upper and lower Midwest. In fact, subsequent analyses show a strong negative correlation between population density and upward mobility of White children (suggesting greater upward mobility of rural children) in the Midwest, and a positive correlation in the Southeast suggesting greater upward mobility for White urban children (Chetty et al. 2018). Similar academic and social advantages have also been noted among rural adolescents in Iowa (Elder and Conger 2014). Second, some of this upward mobility may reflect the high levels of geographic mobility from rural to urban areas, and the corresponding higher urban incomes. Again, outmigration is especially high in the Midwest. Finally, rural community characteristics, including the percentage of single mothers, the racial and ethnic composition, social capital, school quality, and income equality may also facilitate greater upward mobility (Chetty et al. 2014). In the most in-depth analysis of this question to date, Bruce Weber and his colleagues (2017, 2018) find that the most remote rural areas, those farthest from large metro centers, experienced the greatest upward mobility of low-income youth. They also show that many characteristics of rural areas, including higher levels of social capital, less economic inequality, and less single motherhood, help explain the greater upward mobility found in rural areas. Importantly, however, they find that some of these characteristics have a larger effect on upward mobility in rural than in urban areas. These findings demonstrate not only the importance of place-based characteristics, but also that which characteristics matter most may differ in rural and urban areas.

Parker, Tach, and Robertson (2022) further extend our understanding of how access to place-based resources during childhood affect young adults' educational attainment and earnings. Using longitudinal data from the National Longitudinal Study of Youth, they show that, as expected, young adults currently living in metro counties have both higher educational attainment and higher earnings. Yet, importantly, no differences in the educational or earnings outcomes of young adults based on whether they lived in a metro or nonmetro county during childhood are economically meaningful. They also provide an in-depth assessment of trends in federal place-based investments in metro and nonmetro counties, showing a substantial rise in federal funding since 1990. They then show a strong positive association between living in counties with more place-based funding during childhood and higher educational attainment in both metro and nonmetro counties. However, they find that children who grew up in rural counties with more federal place-based funding experienced upward educational and income mobility, only if they subsequently moved out of their home county. Federal place-based funding had no effect on the upward mobility of rural children who remained in their home county. These quantitative findings reinforce qualitative studies suggesting that place-based initiatives may facilitate upward educational and economic mobility, but mainly by helping rural residents leave.

Although most longitudinal studies focus on income, less is known about rural-urban differences in wealth accumulation. Cross-

sectional comparisons across the rural-urban continuum show that rural families are more likely to own the house they live in but have fewer liquid assets than urban families (Fisher and Weber 2004). Lisa Keister, James Moody, and Tom Wolff (2022, this volume, issue 4) use longitudinal data from the National Longitudinal Survey of Adolescent Health to examine whether this pattern holds from a life-course perspective or mainly reflects selective migration or current local economic structures. Their analyses find that young adults who were raised in rural areas were more likely to own a home and had lower mortgage debt than adults who were raised in the urban core, consequently they were less likely to have negative net worth. However, those raised in rural areas also had fewer financial assets. They suggest, therefore, that these types of wealth across the rural-urban continuum reflect both differences in local economies (costs of housing) as well as opportunities for acquiring debt (higher education) that can have a lasting impact on individuals' lifetime economic security.

SUMMARY AND FUTURE RESEARCH

The primary objective of this double issue is to provide a more complete and accurate picture of what it is like to grow up in rural areas and how doing so influences one's life chances. Taken together, these studies generate three main messages that offer a somewhat different perspective on growing up rural than previous studies do.

First, that growing up in poor rural areas is hard and presents a distinctive set of challenges is not in question. Rural children (25 percent) are more likely than urban children (20 percent) to live in poverty in 2016 (Rothwell and Thiede 2018). Furthermore, rural areas, such as the Mississippi Delta and Appalachia, are some of the highest concentrations of persistent poverty in the United States. Growing up in these places has detrimental consequences for children's health and development. Although poor rural children face many of the disadvantages that poor urban children do, some of the harmful effects of poverty may be unique to or exacerbated by living in a rural setting. For example, both rural and urban poverty are associated with greater family volatility, housing instability, food insecurity, job loss, and often drug addiction. In rural areas, however, the natural and built environment typically requires access to an automobile in order to work. Several respondents reported that the lack of a car or mechanical breakdowns were responsible for them losing their jobs (Miller and Edin 2022, this volume, issue 4; Bowen, Elliott, and Hardison-Moody 2022, this volume, issue 3). Greater distances to public services also triggered housing instability, such as that of the family forced to move to an urban area to access necessary medical care (Bowen, Elliott, and Hardison-Moody 2022). Rural social norms and civic and religious institutions can also amplify some of the harmful effects associated with family instability. For example, strong religious beliefs valorizing nuclear families can induce feelings of shame among unmarried parents and greater stigmatization of their children (Miller and Edin 2022). Social connections may also matter more in rural areas creating sizable inequalities in how drug charges are handled in the legal system and poor children are perceived in their schools (Brant 2022; Miller and Edin 2022; Sherman and Schafft 2022). Lastly, rural norms valorizing work and independence may make poor rural families, including those experiencing food insecurity, less likely to access government or private assistance (Bowen, Elliott, and Hardison-Moody 2022). These differences compel scholars of child poverty to think about whether policies and programs designed primarily to meet the needs of urban children living in poverty are applicable in rural areas or whether new policies are required.

Second, because of their more acute vulnerability, the lion's share of research has focused on rural children living in poverty. Although such a focus is justifiable, it does not generate a full picture of what it is like to grow up in rural areas. Specifically, it can distort public images of the lives of rural children by failing to take into account the lives of the three in four rural children who are not living in poverty and the considerable geographic, economic, and social heterogeneity within rural areas. Nationally representative studies tend to show few if any significant differences in rural and urban children's health or academic performance

(Probst et al. 2018). With the notable exception of obesity levels (Liu et al. 2012; Ogden et al. 2018; Johnson and Johnson 2015) and perhaps mental and behavioral disorders, rural children on average are as healthy as urban children (National Center for Health Statistics 2019; Robinson et al. 2017; Probst et al. 2018). Educational programs are also not particularly lacking in rural areas. For example, publicly funded early childcare and education programs, such as Head Start, are more common in rural than in urban areas (Morrissey, Allard, and Pelletier 2022). In addition, using a large national survey, Drescher, Podolsky, Reardon, and Torrance (2022) find that rural third graders perform as well as their urban counterparts on standardized tests, and community SES is less predictive of academic performance for rural than for urban students, suggesting less educational inequality. Ironically, because rural areas typically offer fewer choices in schools and health-care services, socioeconomic inequalities between rural families may matter less because both the rich and the poor use public services, one of the distinctive advantages of growing up rural. Hence, despite substantial heterogeneity in children's well-being, especially by region, at a national level, rural children do not appear to be disadvantaged relative to their urban counterparts.

Third, studies that focus on adults who currently live in rural areas consistently reveal substantial adversity, particularly in regard to health, family formation, job security, education, and earnings (see Miller and Edin 2022; Francis 2022; Niccolai, Damaske, and Park 2022). In contrast, articles that focus on adults who were raised in rural areas but do not necessarily currently live there (that is, not reflecting selective migration bias), show less rural disadvantage and, in some instances, an overall long-term advantage of growing up in a rural area. For example, being born on a farm in the early twentieth century is associated with living a longer and healthier life. However, women who grew up and stayed in a nonfarm rural area had the worst mortality outcomes (Roberts, Rahn, and Lazovich 2022). In addition, young adults who grew up in rural areas are not "less wealthy," although they have different types of wealth (Keister, Moody, and Wolff 2022). Last, despite large metro-nonmetro differences in education and earnings based on where respondents currently live as young adults, Parker, Tach, and Robertson (2022) find no significant differences in either education or earnings between respondents who grew up in metro versus nonmetro places. However, they also find that although placed-based federal funding enhances both the educational attainment and earnings of rural (and urban) children, the benefits of these federal funds primarily accrue to children who grew up in a rural area and subsequently left.

This last caveat is critical. If these placed-based effects are causal, for rural children to realize the same life opportunities as urban children, a sizable fraction must move. This highlights one of the most distinctive and arguably disadvantageous aspects of growing up in a rural area. Rural children face a much sharper trade-off between maintaining close ties to their families and communities and their educational and occupational aspirations than urban children do. Some may dismiss this stipulation as trivial, noting that many urban children also decide to leave their home communities in pursuit of higher education, work, or simply new experiences. Yet this choice is much less constricted for urban than rural children. Many urban children may leave to attend a particular university or take a specific job, but they could find similar or comparable ones nearby. Further, as Parsons highlights (2022), when rural children move to urban areas they often feel marginalized, lack social and cultural urban capital, and must expend considerable emotional labor adjusting to their new environments while maintaining meaningful connections to their old ones. On a practical level, travel times for these rural migrants may take longer than for urban migrants. For example, flying from New York City to Chicago takes less time than driving from New York City to many rural parts of upstate New York. Greater distances also limit the instrumental support family members can provide to one another. For example, grandparents who live farther away are less available to assist with childcare, and adult children are less able to offer practical assistance to their aging parents (Clark, Lawrence, and Monnat forthcoming). At the same

time, costs to rural places that are "left behind" are considerable because high selective outmigration often deprives these communities of the energy and skills that maintain vibrant social lives and dynamic economies (Wuthnow 2018).

Gaps in Current Knowledge

The comparative dearth in rural studies likely reflects the research challenges discussed and the lack of sufficient data on rural populations, particularly in nationally representative, longitudinal data, available to meet these challenges. Even in large national studies, rural residents make up a minority of the population, which, unless oversampled, makes studying heterogeneity across types of rural areas difficult. Second, longitudinal studies often face attrition and attrition rates may be especially high among respondents who move. Third, as discussed, measuring exposure to rural places is daunting. Even detailed measures that treat rurality as a continuum rather than a dichotomous indicator face the problem that places themselves may transition from more rural to less rural (or vice versa) and that government classification systems change over time. These issues pose particular difficulty for life-course researchers who need to take these shifting definitions into account. Life-course researchers who wish to access contextual factors within rural areas also require historical data on county or census tract characteristics. In sum, as Jamie Pearce (2018) argues, serious challenges are involved in developing a practical research program on life-course effects of geographic areas, requiring the linking of longitudinal data on people and places over a substantial period of observation, as well as information on geographic mobility over the life course. Notably, the lack of longitudinal data with information on both rural childhood exposure and adult health outcomes has prevented the generation of evidence on whether rural environments in early life may have similar or different effects on later life outcomes (Burton et al. 2013).

Although the new evidence in this issue adds to our understanding of growing up in rural America, as a result of these challenges, two important gaps remain. First, more studies are needed to identify specific place-based attributes of rural areas that either promote or inhibit rural children's development, these include its natural and physical built environment, economic structure, public and community institutions, social norms and cultural environment, and demographic characteristics. Research has developed constructs and measures for many of these place-based characteristics, but the characteristics that may be more important—the community institutions and social and cultural norms—are more difficult to measure. More qualitative research is needed to capture these dimensions. Studies that assess whether the impact of these place-based attributes differs in rural and urban areas would be especially useful in identifying policies and rural development strategies that were most effective in rural areas.

Second, longitudinal studies following rural children over their life course remain scarce. Such studies are essential to determining not only whether children raised in rural areas fare worse (or better) than urban-born children, but also the role of migration in shaping their adult outcomes. Such studies could directly address the question of whether children born in rural areas have equal opportunities as those born in urban centers by taking into account the outcomes of both those who stay in and those who move away from rural areas. In particular, we have surprisingly little knowledge of the fate of those who choose to leave. Last, more studies are needed to understand which specific rural attributes account for rural and urban differences in adult outcomes. For example, one of the few studies to examine this type of question finds that family structure, lower inequality, greater social capital, and better spatial job matching in rural counties facilitate upward income mobility among low-income youths who grow up in nonmetro counties (Weber et al. 2018).

Even well-designed cross-sectional and longitudinal quantitative studies examining the relationship between place characteristics and outcomes, however, would not reveal how places affect outcomes. And knowledge of the mechanisms through which outcomes are generated is critical in designing effective policies. The sparse populations and isolation from

large cities that define rural places lead to distinctive institutions (civic organizations and faith communities) and social and cultural norms. Studies in this volume (Brant 2022, issue 3; Miller and Edin 2022, issue 4; Parsons 2022, issue 3) as well as prior ethnographic research (Cramer 2016; Duncan 2015; Hochschild 2016; Sherman 2009b) provide valuable insights into the social and institutional processes in rural places, but more studies are needed on how they generate the social and cultural norms that affect the human behavior that leads to adult outcomes.

Policy Implications and Conclusions

Those concerned about rural people and places will often encourage policymakers to support place-based or, at least, place-sensitive policies. Most policies focusing on rural rejuvenation aim to strengthen local economies by promoting local businesses and industries, expanding and improving health and educational services, and enhancing civic institutions (see, for example, Austin, Glaeser, and Summers 2018). These place-based policies and programs offer the prospect of not only benefiting residents who remain in rural areas, but also increasing the human and social capital of those who leave. Many, of course, are concerned that policies that invest in rural places might deliberately or inadvertently encourage out-migration, particularly of high achieving youths. This concern appears substantiated in studies like that by Parker, Tach, and Robertson (2022), which shows that levels of federal place-based funding is strongly correlated with out-migration in nonmetro counties. High rates of out-migration, some contend, threaten the economic viability and civic vibrancy, and ultimately the very existence of their communities. Some scholars argue that, by promoting their "best and brightest," rural schools are undermining future social and economic well-being of the communities they serve. To counter these concerns, some place-based policies aim specifically at stemming the tide of rural youth out-migration by promoting training in local trades and vocational programs, offering scholarships at community colleges, or subsidizing professional training (such as medicine, dentistry, law) with the requirement of future service in rural areas.

Others concerned about investments in rural places worry about the opposite outcome—that investments in rural places may trap poor people in poor areas and impede movement of people and businesses to places that would enhance the overall efficiency of the economy and hence the general welfare. The debate over investments in people versus places has a long history, going back at least to Louis Winnick's 1966 paper "Place Prosperity v. People Prosperity" that addressed the role of the federal government in assisting people and places that are economically distressed. Much ink has been spilled in this debate.[6] In the end, many will conclude that investments must be made in both people and places, that these policies are complementary, and that the important decisions are about how much to invest in people relative to places (Weber 2008).

Importantly, these policy debates focus on the welfare of rural places and of the people currently living there, largely, though not exclusively, in economic terms (Nunn and Shambaugh 2018). Such policies are often focused on interventions to address underlying sources of underemployment or poor infrastructure that contribute to reduced economic prospects among working age adults. Notwithstanding the value of such priorities, these policies address a fundamentally different set of underlying issues than those focused on addressing geographic inequalities based on childhood residence, as is the focus of studies such as the Equality of Opportunity Project. Understanding the ways in which children raised in rural versus urban areas are advantaged or disadvantaged and identifying the distinctive challenges rural children face enables a clearer understanding of the types of policies needed to promote the welfare of rural children regardless of whether they stay or leave. Not only would a focus on place-based policies targeting early-life or childhood environments have the potential for "knock-on" effects that materialize in later life, they could also provide crucial new possibilities for measuring and monitoring im-

6. For discussion of the economic arguments for and against place-based policy, see Weber 2008, 117–20.

pacts over the life course—an area that remains underresearched.

Overall, the current literature on the impacts of growing up rural on adult well-being, including the new material presented in this double issue, yield complex and heterogenous findings, reflecting the marked diversity of rural places in the United States. We find continuing examples of how chronic pockets of deep rural poverty create strains on rural families and limit the opportunities of young adults, but this volume also showcases evidence that this narrative needs tempering. Novel and nationally representative data show limited differences between rural and urban places in key child development indicators such as health and educational performance. Moreover, the longitudinal studies in this double issue suggest that exposure to rural places in early life can offer some health and economic benefits, though further studies are needed to ascertain whether these patterns are replicable. Overall, by focusing on the implications of growing up in rural America, rather than currently living in rural America, the new research presented in this issue offers a new perspective on rural life and its social and economic impact on rural people.

APPENDIX: WHAT IS RURAL?

The U.S. Census Bureau defines *urban* using a complex algorithm to aggregate census block groups based on population size and density into contiguous areas, creating two categories of urban territory: urbanized areas of fifty thousand or more people, and urban clusters of 2,500 to 49,999 people. *Rural* is the residual category, including all territory outside of urbanized areas and urban clusters. "Rural areas consist of open countryside with population densities less than 500 people per square mile and places with fewer than 2,500 people" (Economic Research Service 2019d).

The Office of Management and Budget considers both the size of core cities and the commuting patterns of outlying counties to urban centers in its classification of counties into metropolitan (metro) and nonmetropolitan (nonmetro) areas. Starting in 2000, OMB created the Core-Based Statistical Area classification that identified two classes of core areas: metropolitan statistical areas that have at least one county with an urbanized area of fifty thousand or more inhabitants plus any adjoining counties strongly linked through commuting and micropolitan statistical areas that have at least one county with an urban cluster of ten thousand to 49,999 plus adjoining counties linked to the core county by commuting. Nonmetropolitan counties include all those not in metropolitan statistical areas and thus include both the micropolitan counties and the noncore counties that are in neither a metropolitan nor a micropolitan core-based statistical area (for the defining features of each classification, see table A.1). The introduction of core-based statistical areas brought with it some inconsistency in using the OMB classification in describing rural places. Most analysts, including the Economic Research Service, define rural areas to include both micropolitan and noncore areas. Some researchers, however, define rural areas as consisting only of noncore areas. For example, Keith J. Mueller and colleagues (2020) apply the label *rural* to noncore statistical areas.

Recognizing that neither the Census Bureau urban-rural nor the Office of Management and Budget metro-nonmetro definitions captured the multidimensionality of the rural and urban concepts, there have been several attempts to create new classification schemes that better capture the rich diversity of both population size/density and remoteness across rural and urban communities. Perhaps the most widely used of these is the Rural Urban Continuum Code (RUCC) classification (sometimes called Beale Codes) developed in 1975 and updated regularly by the Economic Research Service. The RUCC divides the OMB metro counties into three categories based on population size of the metro area and it divides the OMB nonmetro counties into six categories based on the size of the urban population and adjacency to metropolitan areas. Other classification systems have been developed by the federal government that capture distinct features of rural areas that are important for policy development. An extended discussion of two classification systems discussed plus five other classification systems can be found in the RUPRI Health Panel publication on which table A.1 was based.

Table A.1. Commonly Used Rural-Urban Classifications

Name	Geographic Building Block	Measure	Rural-Nonmetro Percentage of Land Area and Population of Total United States, 2010
Census Bureau	Census block	*Urban = Urbanized Areas and Urban Clusters* *Urbanized Areas*: contiguously built-up area with population of greater than 50,000 and at least 1,000 people per square mile and adjoining blocks with at least 500 people per square mile *Urban Clusters*: contiguously built-up area with population of between 2,500 and 50,000 and at least 1,000 people per square mile and adjoining blocks with at least 500 people per square mile *Rural* = all other census blocks	Land Area: 97 Population: 19
OMB	County	*Metropolitan* = counties with at least one urbanized area (population > 50,000) and adjacent, economically integrated counties. *Nonmetropolitan = Micropolitan and Noncore Counties* *Micropolitan*: counties with at least one urban cluster having a population of between 10,000 and 49,999 and adjacent, economically integrated counties *Noncore*: all other counties	Land Area: 72 Population: 14

Source: Authors' tabulation (Mueller et al. 2020, 10; Ratcliffe et al. 2016; Cromartie 2017).
Note: The *noncore* category was identified as *rural* in the original RUPRI table, but the label has been changed to be consistent with the official OMB guidelines. The description of the category has also been revised.

APPENDIX

Rural Definitions and Methodological Approaches to Studying the "Rural Effect"

This special issue focuses on the experience of growing up in a rural area and how this experience shapes people. This appendix reviews the various definitions of "rural" used by the researchers in this special issue and discusses the strengths and weaknesses of the various methodological approaches used in this special issue to identify a "rural effect."

As noted in the introduction, rural places are the relatively sparsely settled territory that remains after defining urban places, and the more remote territory surrounding the regional labor markets of large cities. The standard classifications divide territory into two categories: urban or rural and metro or nonmetro. Most rural research (and most of the papers in this special issue) use these classification systems to define "rural." Of the fourteen articles, eight identify "rurality" at the county level using the OMB metro and nonmetro dichotomous categories. Three use classifications developed by the USDA Economic Research Service: one uses the Rural-Urban Continuum Codes and one article uses Rural-Urban Commuting Area codes. Only one of the studies uses the Census definitions of rural and urban places. One of the papers, which exam-

ines schooling outcomes, identifies rural school districts using a National Center for Educational Statistics urbanicity code. The remaining two articles rely on their own unique method of defining rural as described below.

Authors in this issue chose the definitions of rural that best suited their substantive topic (that is, education, health, earnings), methods (cross-sectional, longitudinal, or qualitative), and data (which may have limited geographic identifiers). The diversity and complexity of definitions used, however, highlights the challenges to generalizing about "rural areas" or comparisons across studies. In table A.2, we have summarized important features of each of the fourteen studies in this special issue. The last column in the table reports how each of the studies identifies "rural."

The seven quantitative studies used six different classification schemes to capture rurality.

- The OMB ***metro*** or ***nonmetro*** classification was used in two studies. Using a national database, Parker et al. identified respondents as rural if they lived in a county classified as nonmetro in 1990 and explore how federal funding in their counties of origin affected their education and earnings in later life. Bernsen et al. selected two nonmetro counties in Oregon and Maine to examine educational aspirations of youth in a survey of students.
- Roberts et al. used the Census definition of ***rural*** to capture the effect that growing up on a farm or towns of different sizes had on the mortality of an early twentieth century cohort of women in Iowa.
- Economic Research Service ***Rural-Urban Continuum Code (RUCC).*** Morrissey et al. collapsed the nine-category RUCC into four categories in their effort to understand how early childhood education program provision and participation in the U.S. vary across rural and urban places.
- Economic Research Service ***Rural-Urban Commuting Area (RUCA).*** Keister et al. collapsed the ten-category RUCA codes into seven categories to explore how rural residence during adolescence affects wealth in adulthood across the United States.
- National Center for Education Statistics ***Urbanicity Locale Codes for school districts.*** Drescher et al. explore differences in third grade achievement and subsequent five-year learning rates between rural and nonrural (town, suburban, city) school districts and between three subcategories of rural districts (rural fringe, rural distant, and rural remote).
- ***Unique classification***: Miranda and Rodriguez created a unique classification system for Minnesota school districts to explore educational aspirations of public-school students. In their classification system, a district was considered an urban district if it was in Twin Cities metropolitan area or if it was in one of five cities with a population greater than 50,000. All other districts were considered to be Rural. This classification system thus has features of both the Census "urbanized area" of 50,000 or more population and the OMB metropolitan area classifications.
- Of the seven qualitative studies, six selected counties, parts of counties or groups of counties that were nonmetropolitan.
- Two of the studies selected a ***single nonmetropolitan county*** in which to do their ethnographic research. Parsons studied educational aspirations in "Central Delta County," Mississippi. Miller and Edin studied poverty, health and economic mobility in nonmetropolitan Clay County, Kentucky.
- Bowen et al. selected ***two nonmetropolitan counties*** in North Carolina in which to do her semi-structured interviews, surveys and dietary recalls to study food insecurity.
- Two studies examined ***regions comprised of nonmetropolitan counties.*** Brant did interviews and observations related to opioid use and recovery in "an entirely rural region in nonmetropolitan Appalachian Kentucky"; and Niccolai and Damaske did

their interviews of unemployed prime-working-age adults in a five-nonmetropolitan-county region in Pennsylvania

- One study examined ***part of a nonmetro county.*** Sherman did her ethnographic study in "Paradise Valley," a sixty-mile-long valley in a remote nonmetropolitan county in Washington state.
- One study created its own ***uniquely defined region.*** Francis did his qualitative study in a "largely rural" five-county region in northwestern Pennsylvania that included four nonmetro counties and one metro county in 1980 when his respondents were growing up.

Table A.2 also incorporates information about the methodological approaches used by the researchers in studying the relationship between rural residence and various outcomes over the life course (school readiness and test scores in childhood; educational aspirations in teen years; work choices, migration, earnings, employment, upward economic mobility and wealth in adulthood). The studies in this special issue employed three different types of analysis. Following Brooks-Gunn, Duncan, and Aber (1997), we distinguish two types of quantitative analyses: community studies and contextual studies. Community studies of a "rural effect" explain different community outcomes (education rates or employment rates, for example) as a function of community demographic and economic structure variables, including whether a community is urban or rural. Contextual studies of a rural effect explain differences in individual outcomes (individual educational attainment or individual earnings) as a function of individual demographic characteristics and community social and economic characteristics, including whether the community is urban or rural. In this issue there are six contextual studies and one community study. The last approach is the qualitative and ethnographic studies, of which there are seven in this special issue. Through intensive interviews and observation, these qualitative studies provide rich detail about the lives and experiences of people growing up and living in rural places.

These approaches are complementary. Information from community studies about the effects of community characteristic on rates or levels of community outcomes can assist interpretation of contextual study results about how community characteristics affect individual outcomes. Qualitative studies can provide information about the community and individual processes that produce the outcomes observed in the quantitative studies. Qualitative studies provide rich detail that allows understanding of the underlying processes of individual and community change, but they are often less generalizable beyond the region under study. Community studies reveal how community characteristics and perhaps community policies can affect the community outcomes, but they suffer from several problems. Communities are not randomly distributed but tend to cluster geographically in ways that complicate statistical inferences, and the interpretation of results is subject to ecological fallacy problems if used to draw conclusions about individual outcomes. Contextual studies provide better inferences about how context affects individual outcomes and avoids the ecological fallacy problem but can be hampered by endogeneity and omitted variable bias. Estimates of a "rural effect" can be biased because people can choose where they live, and so rural residence is not exogenous and because other important factors that are correlated with rural residence are not included in the analysis.

Table A.2. How Rural Is Defined in This Issue

Author	Type or Geographic Scope	Source of Data	Definition of Rural
		Rural Families	
Bowen, Elliott, Hardison-Moody *Rural Food Insecurity: A Longitudinal Analysis*	Qualitative study in 2 rural counties in North Carolina	Semi-structured interviews, a survey, and 24-hour dietary recalls with 124 poor and working-class households with female caregivers of young children [90 completed all three waves]	Nonmetro (OMB) 2 nonmetro counties
Brant *When Mamaw Becomes Mom: Social Capital and Kinship Family Formation amid the Rural Opioid Crisis*	Qualitative study in "entirely rural region within Central Appalachia"	In-depth interviews with 50 relative caregivers, 50 support/surveil institutions, and observations of 30 support group meetings for relative caregivers	Nonmetro (OMB)
		Childcare and Schools in Rural Areas	
Morrissey-Allard-Pelletier *Access to Early Care and Education in Rural Communities: Implications for Children's School Readiness*	Contextual study using a national database	Unique county-level ECE program data from the 2007–2011 American Community Survey (ACS) linked with child-level data from the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K:2011)	Rural Urban Continuum Codes (2013) collapsed into four categories: Large metro counties (with population 250,000 or greater), (2) Small metro counties (with population less than 250,000), (3) Large nonmetro counties (with urban population of 20,000 or more), (4) Small nonmetro counties (with urban population of less than 20,000)
Drescher-Podolsky-Reardon-Torrance *Geography of Rural Educational Opportunity*	Community study using a national database	Stanford Education Data Archive 3.0, 12,000 school districts (incl. 6,000 rural districts) average test scores in 3rd grade and average learning rates between 3rd and 8th grade	National Center for Education Statistics Common Core of Data (CCD) urbanicity locale codes, categorizing districts and schools by one of four locale types (rural, town, suburban, city), and additional rural subcategories (rural fringe, rural distant, and rural remote, in order of increasing rurality)
Sherman-Schafft *"Turning Their Back on Kids" . . . Gentrifying Rural Communities*	Qualitative study in a mountainous region in Washington state	Intensive qualitative field research that included 84 open-ended in-depth interviews and ten months of ethnographic observation and participation	Nonmetro (OMB) Paradise Valley, a remote rural area covering 60 miles with a population of roughly 5,000 year-round residents and four distinct communities

Table A.2. (*continued*)

Author	Type or Geographic Scope	Source of Data	Definition of Rural
		Aspiring to Leave	
Miranda-Rodriguez *Educational Aspirations and School Grades of Rural Students*	Contextual study using a Minnesota database	Minnesota Student Survey from students in regular public schools in grades 5, 8, 9, 11. ACS data	Unique definition-School Districts 48 districts identified as "urban" included all districts in Twin Cities metropolitan area plus another five districts with community populations > 50,000. The remaining 253 districts identified as "rural."
Bernsen-Crandall-Leahy-Biddle *Community Influences on Youth Educational Aspirations in Rural, Resource-Dependent Places*	Contextual study using a survey of students in northern Maine and coastal Oregon	Survey administered electronically to 2,027 middle (31%) and high school (69%) students at most public secondary schools in counties in two counties	Nonmetro (OMB) 2 counties: Piscataquis County, Maine, [N = 17,535] and Coos County, Oregon [N = 60,043]
Parsons *Moving Out to Move Up: Higher Education as a Mobility Pathway in the Rural South*	Qualitative study in central Mississippi	2 years of ethnographic fieldwork	Nonmetro (OMB) "Central Delta County," Mississippi with a population of 25,000 with 10,000 in county seat
		Choosing to Stay	
Miller-Edin *Coming of Age in Appalachia, Emerging or Expedited Adulthood?*	Qualitative study in Appalachian Kentucky	Intensive interviews with low-income parents as well as a broad range of community leaders to study "poverty to other dimensions of disadvantage, namely health and economic mobility"	Nonmetro (OMB) Clay County, KY [America's poorest White-majority county, nested in its Appalachian region]. It is classified as "noncore" nonmetro.
Francis *Movin' On Up? The Role of Growing Up Rural in Shaping Why Working-Class Men Do—and Don't—Seek to Improve Their Labor-Market Prospects*	Retrospective qualitative study in "mostly rural" northwestern Pennsylvania	Semi-structured, in-depth qualitative interviews (narrative interviewing) with 61 mostly White, mostly working (¾ working) middle-aged (generally under 40) working-class men (defined as having less than a four-year college degree, working in a blue-collar occupation, or both). 85 percent born and raised in NW PA. Only 4 of them moved there as adults.	Unique definition A five-county "largely rural" area. Four of the counties were nonmetro in the 1980s. Three of the five counties were nonmetro in 2010. There were only a few interviews in these metro counties and these interviewees lived in the outlying areas of the metro counties.

(*continued*)

Table A.2. (*continued*)

Author	Type or Geographic Scope	Source of Data	Definition of Rural
		Choosing to Stay (*cont.*)	
Niccolai-Damaske-Park *We Won't Be Able to Find Jobs Here: How Growing Up in Rural America Shapes Decisions About Work*	Retrospective qualitative study in rural Pennsylvania	Analysis draws on 72 interviews of unemployed working- and middle-class men and women (between the ages of 30–50, prime working and child-rearing years) who grew up in nonmetro counties and who worked full-time prior to their job loss, and those who experienced an involuntary job loss during the past year. Follow-up interviews conducted one year later.	Nonmetro (OMB) (2013)
		Rural Roots	
Roberts-Rahn-Lazovich *Life-Course Transitions in Rural Residence and Old-Age Mortality in Iowa, 1930–2014*	Longitudinal contextual study in Iowa	Longitudinal Iowa Women's Health Study (IWHS) linked cohort of 10,375 women born 1916–1930 to early-life census records from 1920 and 1930. IWHS started in the 1980s and followed women through 2014. This cohort (age 55–69 in 1986) represents the mothers of children born during the baby boom.	Rural (U.S. Census) *Early life residence*: farm, rural nonfarm (township < 2,500), urban. (1920 and 1930 Census) *Later life residence*: farm, rural, and four categories of town or city size (Towns under 1,000, Towns 1,000–2,499, Towns 2,500–9,999, Towns or cities of 10,000 or more people) (1980 census)
Parker-Tach-Robertson *Do Federal Place-Based Policies Improve Economic Opportunity in Rural Communities?*	Longitudinal contextual study using linked national databases	Federal agency data on place-based federal expenditures between 1990 and 2015 linked with National Longitudinal Survey of Youth-97 data for 2015 adult outcomes of 8,984 youth born between 1980–1984	Nonmetro (OMB) (1990) Metro status for respondents refers to the county where the NLSY respondent lived in the first survey year (1997). In supplemental analyses they examine counties that were nonmetro throughout separately from transition counties (counties that changed from nonmetro to metro).

Table A.2. (*continued*)

Author	Type or Geographic Scope	Source of Data	Definition of Rural
		Rural Roots (*cont.*)	
Keister-Moody-Wolff *Rural Kids and Wealth*	Longitudinal contextual study with national database	@ National Longitudinal Study of Adolescent to Adult Health [AddHealth] is a study of U.S. adolescents who were in grades 7–12 (ages 12–18) during the study's first wave (1994–1995) and were young adults in Wave 3 (2001–2002 (ages 19–25) and Wave 4 (2008–2009 (ages 26–32).	Rural-urban Commuting Area (RUCA) 10-category RUCA collapsed to 7 categories: metropolitan area core, metropolitan area commuting, micropolitan area core, micropolitan area commuting, small town core, small town commuting, and rural. Adolescent RUCA, Wave 1; Young Adult RUCA, Wave 4

REFERENCES

Abrams, Leah R., Mikko Myrskylä, and Neil K. Mehta. 2021. "The Growing Rural–Urban Divide in US Life Expectancy: Contribution of Cardiovascular Disease and Other Major Causes of Death." *International Journal of Epidemiology.* First published online: August 12, 2021. DOI: 10.1093/ije/dyab158.

Albrecht, Don E., and Stan L. Albrecht. 2000. "Poverty in Nonmetropolitan America: Impacts of Industrial, Employment, and Family Structure Variables." *Rural Sociology* 65(1): 87–103. DOI: 10.1111/j.1549-0831.2000.tb00344.x.

Alvarado, Steven Elías. 2019. "The Indelible Weight of Place: Childhood Neighborhood Disadvantage, Timing of Exposure, and Obesity Across Adulthood." *Health & Place* 58 (July): 102159. DOI: 10.1016/j.healthplace.2019.102159.

Amato, Paul R. 2005. "The Impact of Family Formation Change on the Cognitive, Social, and Emotional Well-Being of the Next Generation." *The Future of Children* 15(2): 75–96. https://www.jstor.org/stable/3556564.

———. 2010. "Research on Divorce: Continuing Trends and New Developments." *Journal of Marriage and Family* 72(3): 650–66. DOI: 10.1111/j.1741-3737.2010.00723.x.

Artz, Georgeanne. 2003. "Rural Area Brain Drain: Is It a Reality?" *Choices* (4th Quarter, 2003). Accessed November 14, 2021. http://www.choicesmagazine.org/2003-4/2003-4-03.htm.

Artz, Georgeanne, and Peter Orazem. 2006. "Reexamining Rural Decline: How Changing Rural Classifications Affect Perceived Growth." *Review of Regional Studies* 36(2): 31.

Atkinson, Alice M. 1994. "Rural and Urban Families' Use of Child Care." *Family Relations* 43(1): 16–22. DOI: 10.2307/585137.

Austin, Benjamin, Edward Glaeser, and Lawrence H. Summers. 2018. "Saving the Heartland: Place-Based Policies in 21st Century America." *Brookings Papers on Economic Activity* (Spring 2018). Washington, D.C.: Brookings Institution. Accessed November 14, 2021. https://www.brookings.edu/bpea-articles/saving-the-heartland-place-based-policies-in-21st-century-america.

Autor, David H. 2019. "Work of the Past, Work of the Future." *AEA Papers and Proceedings* 109 (May): 1–32. DOI: 10.1257/pandp.20191110.

Barnett, Melissa A. 2008. "Mother and Grandmother Parenting in Low-Income Three-Generation Rural Households." *Journal of Marriage and Family* 70(5): 1241–57. DOI: 10.1111/j.1741-3737.2008.00563.x.

Bauch, Patricia A. 2001. "School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place." *Peabody Journal of Education* 76(2): 204–21.

Beale, Calvin L. 2004. "Anatomy of Nonmetro High

Poverty Areas: Common in Plight, Distinctive in Nature." *Amber Waves: The Economics of Food, Farming, Natural Resources, and Rural America*. Washington: U.S. Department of Agriculture. DOI: 10.22004/ag.econ.13183.

Beggs, John J., Valerie A. Haines, and Jeanne S. Hurlbert. 1996. "Revisiting the Rural-Urban Contrast: Personal Networks in Nonmetropolitan and Metropolitan Settings." *Rural Sociology* 61(2): 306–25. DOI: 10.1111/j.1549-0831.1996.tb00622.x.

Bell, David. 2000. "Farm Boys and Wild Men: Rurality, Masculinity, and Homosexuality." *Rural Sociology* 65(4): 547–61. https://doi.org/10.1111/j.1549-0831.2000.tb00043.x.

Bernsen, Nicole R., Mindy S. Crandall, Jessica E. Leahy, and Catharine Biddle. 2022. "How Far to Go? Community Influences on Youth Educational Aspirations in Rural, Resource-Dependent Places." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 189–207. DOI: https://doi.org/10.7758/RSF.2022.8.3.09.

Betz, Michael R., and Anastasia Snyder. 2017. "Coal and Family Through the Boom and Bust: A Look at the Coal Industry's Impact on Marriage and Divorce." *Journal of Rural Studies* 56:207–18. DOI: 10.1016/j.jrurstud.2017.09.011.

Biddle, Catharine, Ian Mette, and Kai A. Schafft. 2017. "Education and Information." In *Rural Poverty in the United States*, edited by Ann R. Tickamyer, Jennifer Sherman, and Jennifer Warlick. New York: Columbia University Press.

Blank, Rebecca M. 2005. "Poverty, Policy, and Place: How Poverty and Policies to Alleviate Poverty Are Shaped by Local Characteristics." *International Regional Science Review* 28(4): 441–64. DOI: 10.1177/0160017605278999.

Boehmer, Tegan K., Sarah L. Lovegreen, Debra Haire-Joshu, and Ross C. Brownson. 2006. "What Constitutes an Obesogenic Environment in Rural Communities?" *American Journal of Health Promotion* 20(6): 411–21.

Bouck, Emily C. 2004. "How Size and Setting Impact Education in Rural Schools." *Rural Educator* 25(3): 38–42.

Bowen, Sarah, Sinikka Elliott, and Annie Hardison-Moody. 2022. "Rural Food Insecurity: A Longitudinal Analysis of Low-Income Rural Households with Children in the South." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 50–77. DOI: https://doi.org/10.7758/RSF.2022.8.3.02.

Brant, Kristina. 2022. "When Mamaw Becomes Mom: Social Capital and Kinship Family Formation amid the Rural Opioid Crisis." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 78–98. DOI: https://doi.org/10.7758/RSF.2022.8.3.03.

Brooks, Matthew M., J. Tom Mueller, and Brian C. Thiede. 2020. "County Reclassifications and Rural–Urban Mortality Disparities in the United States (1970–2018)." *American Journal of Public Health* 110(12): 1814–16. DOI: 10.2105/AJPH.2020.305895.

Brooks-Gunn, Jeanne, Greg J. Duncan, and J. Lawrence Aber. 1997. *Neighborhood Poverty.* Vol. 1, *Context and Consequences for Children*. New York: Russell Sage Foundation.

Brown, J. Brian, and Daniel T. Lichter. 2004. "Poverty, Welfare, and the Livelihood Strategies of Nonmetropolitan Single Mothers." *Rural Sociology* 69(2): 282–301. DOI: 10.1526/003601104323087615.

Brown, David L. 2014. "Rural Population Change in Social Context." In *Rural America in a Globalizing World: Problems and Prospects for the 2010's*, edited by Conner Bailey, Leif Jensen, and Elizabeth Ransom. Morgantown: West Virginia University Press.

Brown, Susan L. 2004. "Family Structure and Child Well-Being: The Significance of Parental Cohabitation." *Journal of Marriage and Family* 66(2): 351–67. DOI: 10.1111/j.1741-3737.2004.00025.x.

Brown, Susan L., and Anastasia R. Snyder. 2006. "Residential Differences in Cohabitors' Union Transitions." *Rural Sociology* 71(2): 311–34. DOI: 10.1526/003601106777789729.

Burdick-Will, Julia, and John R. Logan. 2017. "Schools at the Rural-Urban Boundary: Blurring the Divide?" *Annals of the American Academy of Political and Social Science* 672(1): 185–201. DOI: 10.1177/0002716217707176.

Burton, Linda M., Daniel T. Lichter, Regina S. Baker, and John M. Eason. 2013. "Inequality, Family Processes, and Health in the 'New' Rural America." *American Behavioral Scientist* 57(8): 1128–51. DOI: 10.1177/0002764213487348.

Butler, Jaclyn, Grace A. Wildermuth, Brian C. Thiede, and David L. Brown. 2020. "Population Change and Income Inequality in Rural America." *Population Research and Policy Review* 39(5): 889–911. DOI: 10.1007/s11113-020-09606-7.

Byun, Soo-yong, Judith L. Meece, and Charlotte A.

Agger. 2017. "Predictors of College Attendance Patterns of Rural Youth." *Research in Higher Education* 58(8): 817–42. DOI: 10.1007/s11162-017-9449-z.

Byun, Soo-yong, Judith L. Meece, and Matthew J. Irvin. 2012. "Rural-Nonrural Disparities in Postsecondary Educational Attainment Revisited." *American Educational Research Journal* 49(3): 412–37. DOI: 10.3102/0002831211416344.

Bzostek, Sharon H., and Lawrence M. Berger. 2017. "Family Structure Experiences and Child Socioemotional Development During the First Nine Years of Life: Examining Heterogeneity by Family Structure at Birth." *Demography* 54(2): 513–40. DOI: 10.1007/s13524-017-0563-5.

Carr, Patrick J., and Maria J. Kefalas. 2009. *Hollowing Out the Middle: The Rural Brain Drain and What It Means for America*. Boston, Mass: Beacon Press.

Carson, Jessica A, and Marybeth J. Mattingly. 2014. "Rural Families and Households and the Decline of Traditional Structure." In *Rural America in a Globalizing World*, edited by Conner Bailey, Elizabeth Ransom, and Leif Jensen. Morgantown: West Virginia University Press.

Case, Anne, and Angus Deaton. 2015. "Rising Morbidity and Mortality in Midlife Among White Non-Hispanic Americans in the 21st Century." *Proceedings of the National Academy of Sciences* 112(49): 15078–83. DOI: 10.1073/pnas.1518393112.

Cather, Willa. 1918. *My Ántonia*. Boston, Mass.: Houghton-Mifflin Company.

Cavanagh, Shannon E., and Paula Fomby. 2019. "Family Instability in the Lives of American Children." *Annual Review of Sociology* 45(1): 493–513. DOI: 10.1146/annurev-soc-073018-022633.

Cenegy, Laura Freeman, Justin T. Denney, and Rachel Tolbert Kimbro. 2018. "Family Diversity and Child Health: Where Do Same-Sex Couple Families Fit?" *Journal of Marriage and Family* 80(1): 198–218. DOI: 10.1111/jomf.12437.

Chalfant, H. Paul, and Peter L. Heller. 1991. "Rural/Urban Versus Regional Differences in Religiosity." *Review of Religious Research* 33(1): 76–86. DOI: 10.2307/3511262.

Chan, Leighton, L. Gary Hart, and David C. Goodman. 2006. "Geographic Access to Health Care for Rural Medicare Beneficiaries." *Journal of Rural Health* 22(2): 140–46. DOI: 10.1111/j.1748-0361.2006.00022.x.

Cheng, Simon, and Brian Powell. 2015. "Measurement, Methods, and Divergent Patterns: Reassessing the Effects of Same-Sex Parents." *Social Science Research* 52: 615–26. DOI: 10.1016/j.ssresearch.2015.04.005.

Chetty, Raj, John N. Friedman, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2018. "The Opportunity Atlas: Mapping the Childhood Roots of Social Mobility." *NBER* working paper no. w25147. Cambridge, Mass.: National Bureau of Economic Research. Accessed November 14, 2021. https://www.nber.org/papers/w25147.

Chetty, Raj, and Nathaniel Hendren. 2018a. "The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects." *Quarterly Journal of Economics* 133(3): 1107–62. DOI: 10.1093/qje/qjy007.

———. 2018b. "The Impacts of Neighborhoods on Intergenerational Mobility II: County-Level Estimates." *Quarterly Journal of Economics* 133(3): 1163–228. DOI: 10.1093/qje/qjy006.

Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment." *American Economic Review* 106(4): 855–902. DOI: 10.1257/aer.20150572.

Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. 2014. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *Quarterly Journal of Economics* 129(4): 1553–623. DOI: 10.1093/qje/qju022.

Choi, HwaJung, Robert F. Schoeni, Emily E. Wiemers, V. Joseph Hotz, and Judith A. Seltzer. 2020. "Spatial Distance Between Parents and Adult Children in the United States." *Journal of Marriage and Family* 82(2): 822–40. DOI: 10.1111/jomf.12606.

Clark, Shelley. 2021. "A Life Course Perspective on BMI in Rural America." *Health & Place* 69 (May): 102562. DOI: 10.1016/j.healthplace.2021.102562.

Clark, Shelley, Elizabeth Lawrence, and Shannon Monnat. forthcoming. "Support from Adult Children and Parental Health in Rural America." *Journal of Rural Social Sciences*.

Coleman-Jensen, Alisha, Barry Steffen, and Sarah Whitley. 2017. "Food Insecurity and Housing Insecurity." In *Rural Poverty in the United States*, edited by Ann R. Tickamyer, Jennifer Sherman,

and Jennifer Warlick. New York: Columbia University Press.

Cornwell, Erin York, and Matthew Hall. 2017. "Neighborhood Problems across the Rural-Urban Continuum: Geographic Trends and Racial and Ethnic Disparities." *Annals of the American Academy of Political and Social Science* 672(1): 238–56. DOI: 10.1177/0002716217713171.

Cosby, Arthur G., M. Maya McDoom-Echebiri, Wesley James, Hasna Khandekar, Willie Brown, and Heather L. Hanna. 2018. "Growth and Persistence of Place-Based Mortality in the United States: The Rural Mortality Penalty." *American Journal of Public Health* 109(1): 155–62. DOI: 10.2105/AJPH.2018.304787.

Cossman, Jeralynn, Wesley James, and Julia Kay Wolf. 2017. "The Differential Effects of Rural Health Care Access on Race-Specific Mortality." *SSM—Population Health* 3: 618–23. DOI: 10.1016/j.ssmph.2017.07.013.

Cramer, Katherine. 2016. *The Politics of Resentment: Rural Consciousness in Wisconsin and the Rise of Scott Walker*. Chicago: University of Chicago Press.

Cromartie, John. 2017. "Rural America at a Glance, 2017 Edition." *Economic Information Bulletin* no. EIB-182. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/webdocs/publications/85740/eib-182.pdf.

Cromartie, John, Elizabeth A. Dobis, Thomas Krumel, David A. McGranahan, and John Pender. 2020. "Rural America at a Glance: 2020 Edition." *Economic Information Bulletin* no. EIB-212. Washington: U.S. Department of Agriculture.

Demi, Mary Ann, Alisha Coleman-Jensen, and Anastasia R. Snyder. 2010. "The Rural Context and Post-secondary School Enrollment: An Ecological Systems Approach." *Journal of Research in Rural Education* 25(7). https://jrre.psu.edu/sites/default/files/2019-08/25-7.pdf.

Diez Roux, Ana V., and Christina Mair. "Neighborhoods and Health." 2010. *Annals of the New York Academy of Sciences* 1186(1): 125–45. DOI: https://doi.org/10.1111/j.1749-6632.2009.05333.x.

Dillon, Michele, and Megan Henly. 2008. "Religion, Politics and the Environment in Rural America." Issue Brief No. 3, Fall. Durham: University of New Hampshire, Carsey School of Public Policy. DOI: 10.34051/p/2020.47.

Drescher, Jessica, Anne Podolsky, Sean F. Reardon, and Gabrielle Torrance. 2022. "The Geography of Rural Educational Opportunity." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 123–49. DOI: https://doi.org/10.7758/RSF.2022.8.3.05.

Duncan, Cynthia M. 2015. *Worlds Apart: Poverty and Politics in Rural America*. New Haven, Conn.: Yale University Press.

Economic Research Service. 2011. "Nonmetro High-Minority Counties." Last updated October 19, 2011. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. http://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=75271.

———. 2019a. "Descriptions and Maps." Last updated October 23, 2019. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/data-products/county-typology-codes/descriptions-and-maps.

———. 2019b. "Rural Employment and Unemployment." Last updated September 23, 2019. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/topics/rural-economy-population/employment-education/rural-employment-and-unemployment.

———. 2019c. "Shifting Geography of Population Change." Last updated August 20, 2019. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/topics/rural-economy-population/population-migration/shifting-geography-of-population-change.

———. 2019d. "What Is Rural?" Last updated October 23, 2019. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural.

———. 2020a. "Racial and Ethnic Minorities Made Up About 22 Percent of the Rural Population in 2018, Compared to 43 Percent in Urban Areas." Last updated October 13, 2020. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. http://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=99538.

———. 2020b. "Rural Poverty & Well-Being." Last updated September 17, 2020. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being.

Elder, Glen H., Jr., and Rand D. Conger. 2014. *Children of the Land: Adversity and Success in Rural America*. Chicago: University of Chicago Press.

Elo, Irma T., Arun S. Hendi, Jessica Y. Ho, Yana C. Vierboom, and Samuel H. Preston. 2019. "Trends in Non-Hispanic White Mortality in the United States by Metropolitan-Nonmetropolitan Status and Region, 1990–2016." *Population and Development Review* 45(3): 549–83. DOI: 10.1111/padr.12249.

Ely, Danielle M., and Brady E. Hamilton. 2018. "Trends in Fertility and Mother's Age at First Birth Among Rural and Metropolitan Counties: United States, 2007–2017." *NCHS Data Brief* no. 323 (October): 1–8.

Faggian, Alessandra, Jonathan Corcoran, and Francisco Rowe. 2017. "Special Issue on Youth and Graduate Migration." *Annals of Regional Science* 59(3): 571–75. Accessed November 14, 2021. https://link.springer.com/article/10.1007/s00168-017-0845-2.

Fisher, Monica G., and Bruce A. Weber. 2004. "Does Economic Vulnerability Depend on Place of Residence? Asset Poverty Across The Rural-Urban Continuum." *RPPC* working paper no. 18911. Corvallis: Oregon State University, Rural Poverty Research Center. DOI: 10.22004/ag.econ.1891.

Fishman, Dan. 2015. "School Reform for Rural America." *Education Next* 15(3). Accessed November 14, 2021. http://search.proquest.com/docview/1683512565/abstract/D1BCD102C7E14DE2PQ/1.

Francis, Robert D. 2022. "Movin' On Up? The Role of Growing Up Rural in Shaping Why Working-Class Men Do—and Don't—Seek to Improve Their Labor-Market Prospects." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(4): 68–86. DOI: https://doi.org/10.7758/RSF.2022.8.4.03.

Gagnon, Douglas J., and Marybeth J. Mattingly. 2018. "Racial/Ethnic Test Score Gaps and the Urban Continuum." *Journal of Research in Rural Education* 33(2): 1–16. DOI: 10.18113/P8JRRE3302.

Garcia, Macarena C., Mark Faul, Greta Massetti, Cheryll C. Thomas, Yuling Hong, Ursula E. Bauer, and Michael F. Iademarco. 2017. "Reducing Potentially Excess Deaths from the Five Leading Causes of Death in the Rural United States." *MMWR Surveillance Summaries* 66(2): 1–7. DOI: 10.15585/mmwr.ss6602a1.

Garcia, Macarena C., Lauren M. Rossen, Brigham Bastian, Mark Faul, Nicole F. Dowling, Cheryll C. Thomas, Linda Schieb, Yuling Hong, Paula W. Yoon, and Michael F. Iademarco. 2019. "Potentially Excess Deaths from the Five Leading Causes of Death in Metropolitan and Nonmetropolitan Counties — United States, 2010–2017." *MMWR Surveillance Summaries* 68(10): 1–11. DOI: 10.15585/mmwr.ss6810a1.

Gibson, John, and David McKenzie. 2012. "The Economic Consequences of 'Brain Drain' of the Best and Brightest: Microeconomic Evidence from Five Countries." *Economic Journal* 122(560): 339–75. DOI: 10.1111/j.1468-0297.2012.02498.x.

Gimpel, James G., Nathan Lovin, Bryant Moy, and Andrew Reeves. 2020. "The Urban–Rural Gulf in American Political Behavior." *Political Behavior* 42(4): 1343–68. DOI: 10.1007/s11109-20-09601-w.

Glauber, Rebecca, and Justin Robert Young. 2015. "On the Fringe: Family-Friendly Benefits and the Rural–Urban Gap Among Working Women." *Journal of Family and Economic Issues* 36(1): 97–113. DOI: 10.1007/s10834-014-9418-z.

Goetz, Stephan J., Mark D. Partridge, and Heather M. Stephens. 2018. "The Economic Status of Rural America in the President Trump Era and Beyond." *Applied Economic Perspectives and Policy* 40(1): 97–118. DOI: 10.1093/aepp/ppx061.

Gould, Eric D., Victor Lavy, and M. Daniele Paserman. 2011. "Sixty Years After the Magic Carpet Ride: The Long-Run Effect of the Early Childhood Environment on Social and Economic Outcomes." *Review of Economic Studies* 78(3): 938–73. DOI: 10.1093/restud/rdq038.

Gundersen, Craig, Adam Dewey, Monica Hake, Emily Engelhard, and Amy S. Crumbaugh. 2017. "Food Insecurity Across the Rural-Urban Divide: Are Counties in Need Being Reached by Charitable Food Assistance?" *Annals of the American Academy of Political and Social Science* 672(1): 217–37. DOI: 10.1177/0002716217710172.

Hamilton, Brady E., Lauren M. Rossen, and Amy M. Branum. 2016. "Teen Birth Rates for Urban and Rural Areas in the United States, 2007–2015." Hyattsville, Md.: National Center for Health Statistics.

Hamilton, Lawrence, Leslie Hamilton, Cynthia M. Duncan, and Chris Colocousis. 2008. "Place Matters: Challenges and Opportunities in Four Rural Americas." Durham: University of New Hamp-

shire, Carsey School of Public Policy. Accessed November 14, 2021. DOI: 10.34051/p/2020.41.

Harper, Sam, Corinne A. Riddell, and Nicholas B. King. 2021. "Declining Life Expectancy in the United States: Missing the Trees for the Forest." *Annual Review of Public Health* 42(1): 381–403. DOI: 10.1146/annurev-publhealth-082619-104231.

Hayward, Mark D., and Bridget K. Gorman. 2004. "The Long Arm of Childhood: The Influence of Early-Life Social Conditions on Men's Mortality." *Demography* 41(1): 87–107. DOI: 10.1353/dem.2004.0005.

Heaton, Tim B., Daniel T. Lichter, and Acheampong Amoateng. 1989. "The Timing of Family Formation: Rural-Urban Differentials in First Intercourse, Childbirth, and Marriage." *Rural Sociology* 54(1): 1–16.

Hertz, Tom, and Tracey Farrigan. 2016. "Understanding the Rise in Rural Child Poverty, 2003–2014." *Economic Research Report* no. ERR-208. Washington: U.S. Department of Agriculture.

Hines, Fred K., David L. Brown, and John M. Zimmer. 1975. *Social and Economic Characteristics of the Population in Metro and Nonmetro Counties, 1970*. Washington: U.S. Department of Agriculture, Economic Research Service.

Hochschild, Arlie. 2016. *Strangers in Their Own Land: Anger and Mourning on the American Right*. New York: New Press.

Howley, Caitlin W. 2006. "Remote Possibilities: Rural Children's Educational Aspirations." *Peabody Journal of Education* 81(2): 62–80. DOI: 10.1207/S15327930pje8102_4.

Irvin, Matthew J., Soo-yong Byun, Judith L. Meece, and Thomas W. Farmer. 2012. "Educational Barriers of Rural Youth: Relation of Individual and Contextual Difference Variables." *Journal of Career Assessment* 20(1): 71–87. DOI: 10.1177/1069072711420105.

James, Wesley L. 2014. "All Rural Places Are Not Created Equal: Revisiting the Rural Mortality Penalty in the United States." *American Journal of Public Health* 104(11): 2122–29. DOI: 10.2105/AJPH.2014.301989.

Johnson, James A., and Asal M. Johnson. 2015. "Urban-Rural Differences in Childhood and Adolescent Obesity in the United States: A Systematic Review and Meta-Analysis." *Childhood Obesity* 11(3): 233–41. DOI: 10.1089/chi.2014.0085.

Johnson, Kenneth M. 1989. "Recent Population Redistribution Trends in Nonmetropolitan America." *Rural Sociology* 54(3): 301–26.

———. 2012. "Rural Demographic Change in the New Century: Slower Growth, Increased Diversity." Issue Brief no. 44. Durham University of New Hampshire, Carsey School of Public Policy. https://scholars.unh.edu/carsey/159.

———. 2014. "Demographic Trends in Nonmetropolitan America: 2000 to 2010." In *Rural America in a Globalizing World: Problems and Prospects for the 2010s*, edited by Conner Bailey, Leif Jensen, and Elizabeth Ransom. Morgantown: West Virginia University Press.

Johnson, Kenneth M., and Daniel T. Lichter. 2020. "Metropolitan Reclassification and the Urbanization of Rural America." *Demography* 57(5): 1929–50. DOI: 10.1007/s13524-020-00912–5.

Johnson, Monica Kirkpatrick, Glen H. Elder Jr., and Michael Stern. 2005. "Attachments to Family and Community and the Young Adult Transition of Rural Youth." *Journal of Research on Adolescence* 15(1): 99–125. DOI: 10.1111/j.1532-7795.2005.00088.x.

Jokela, Markus, Mika Kivimäki, Marko Elovainio, Jorma Viikari, Olli T. Raitakari, and Liisa Keltikangas-Järvinen. 2009. "Urban/Rural Differences in Body Weight: Evidence for Social Selection and Causation Hypotheses in Finland." *Social Science & Medicine* 68(5): 867–75. DOI: 10.1016/j.socscimed.2008.12.022.

Karim, Saleema A., and Hsueh-Fen Chen. 2021. "Deaths From COVID-19 in Rural, Micropolitan, and Metropolitan Areas: A County-Level Comparison." *Journal of Rural Health* 37(1): 124–32. DOI: 10.1111/jrh.12533.

Karmakar, Monita, Paula M. Lantz, and Renuka Tipirneni. 2021. "Association of Social and Demographic Factors with COVID-19 Incidence and Death Rates in the US." *JAMA Network Open* 4(1): e2036462. DOI: 10.1001/jamanetworkopen.2020.36462.

Keister, Lisa A., James W. Moody, and Tom Wolff. 2022. "Rural Kids and Wealth." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(4): 155–82. DOI: https://doi.org/10.7758/RSF.2022.8.4.07.

Kiang, Mathew V., Sanjay Basu, Jarvis Chen, and Monica J. Alexander. 2019. "Assessment of Changes in the Geographical Distribution of Opioid-Related Mortality Across the United States by Opioid Type, 1999–2016." *JAMA Net-*

work Open 2(2): e190040. DOI: 10.1001/jamanetworkopen.2019.0040.

Koricich, Andrew, Xi Chen, and Rodney P. Hughes. 2017. "Understanding the Effects of Rurality and Socioeconomic Status on College Attendance and Institutional Choice in the United States." *Review of Higher Education* 41(2): 281–305. DOI: 10.1353/rhe.2018.0004.

Kravitz-Wirtz, Nicole. 2016. "Temporal Effects of Child and Adolescent Exposure to Neighborhood Disadvantage on Black/White Disparities in Young Adult Obesity." *Journal of Adolescent Health* 58(5): 551–57. DOI: 10.1016/j.jadohealth.2016.01.004.

Lamkin, Marcia L. 2018. "Challenges and Changes Faced by Rural Superintendents." *Rural Educator* 28(1): 17–24. DOI: 10.35608/ruraled.v28i1.486.

Lawrence, Elizabeth, Robert A. Hummer, and Kathleen Mullan Harris. 2017. "The Cardiovascular Health of Young Adults: Disparities along the Urban-Rural Continuum." *Annals of the American Academy of Political and Social Science* 672(1): 257–81. DOI: 10.1177/0002716217711426.

Lee, Barrett A., and Gregory Sharp. 2017. "Ethnoracial Diversity Across the Rural-Urban Continuum." *Annals of the American Academy of Political and Social Science* 672(1): 26–45. DOI: 10.1177/0002716217708560.

Lee, Mark. 2019. "Obesity Among U.S. Rural Adults: Assessing Selection and Causation with Prospective Cohort Data." *Health & Place*, November. DOI: 10.1016/j.healthplace.2019.102260.

Leider, Jonathon P., Michael Meit, J. Mac McCullough, Beth Resnick, Debra Dekker, Y. Natalia Alfonso, and David Bishai. 2020. "The State of Rural Public Health: Enduring Needs in a New Decade." *American Journal of Public Health* 110(9): 1283–90. DOI: 10.2105/AJPH.2020.305728.

Leventhal, Tama, and Jeanne Brooks-Gunn. 2000. "The Neighborhoods They Live In: The Effects of Neighborhood Residence on Child and Adolescent Outcomes." *Psychological Bulletin* 126(2): 309–37. DOI: 10.1037/0033-2909.126.2.309.

Lichter, Daniel T. 2012. "Immigration and the New Racial Diversity in Rural America." *Rural Sociology* 77(1): 3–35. DOI: 10.1111/j.1549-0831.2012.00070.x.

Lichter, Daniel T., and David L. Brown. 2011. "Rural America in an Urban Society: Changing Spatial and Social Boundaries." *Annual Review of Sociology* 37(1): 565–92. DOI: 10.1146/annurev-soc-081309-150208.

Lichter, Daniel T., David L. Brown, and Domenico Parisi. 2021. "The Rural–Urban Interface: Rural and Small Town Growth at the Metropolitan Fringe." *Population, Space and Place* 27(3): e2415. DOI: 10.1002/psp.2415.

Lichter, Daniel T., and Deborah R. Graefe. 2011. "Rural Economic Restructuring: Implications for Children, Youth, and Families." In *Economic Restructuring and Family Well-Being in Rural America*, edited by Kristin E. Smith and Ann R. Tickamyer. University Park: Penn State University Press.

Lichter, Daniel T., and Kenneth M. Johnson. 2007. "The Changing Spatial Concentration of America's Rural Poor Population." *Rural Sociology* 72(3): 331–58. DOI: 10.1526/003601107781799290.

———. 2020. "A Demographic Lifeline? Immigration and Hispanic Population Growth in Rural America." *Population Research and Policy Review* 39(5): 785–803. DOI: 10.1007/s11113-020-09605-8.

Lichter, Daniel T., and Kai A. Schafft. 2016. "People and Places Left Behind: Rural Poverty in the New Century." In *The Oxford Handbook of the Social Science of Poverty*, edited by David Brady and Linda M. Burton. Oxford: Oxford University Press.

Lichter, Daniel T., and James P. Ziliak. 2017. "The Rural-Urban Interface: New Patterns of Spatial Interdependence and Inequality in America." *Annals of the American Academy of Political and Social Science* 672(1): 6–25. DOI: 10.1177/0002716217714180.

Lindahl, Ronald A. 2011. "The State of Education in Alabama's K-12 Rural Public Schools." *Rural Educator* 32(2): 1–12.

Liu, Ji-Hong, Sonya J. Jones, Han Sun, Janice C. Probst, Anwar T. Merchant, and Philip Cavicchia. 2012. "Diet, Physical Activity, and Sedentary Behaviors as Risk Factors for Childhood Obesity: An Urban and Rural Comparison." *Childhood Obesity* 8(5): 440–48. DOI: 10.1089/chi.2012.0090.

Livingston, Gretchen. 2018. "Family Life Is Changing in Urban, Suburban and Rural Communities in the U.S." *Pew Research Center* (blog), June 19, 2018. Accessed November 14, 2021. https://www.pewresearch.org/fact-tank/2018/06/19/family-life-is-changing-in-different-ways

-across-urban-suburban-and-rural-communities-in-the-u-s.

Lobao, Linda. 2014. "Economic Change, Structural Forces, and Rural America: Shifting Fortunes across Communities." In *Rural America in a Globalizing World: Problems and Prospects for the 2010s*, edited by Conner Bailey, Leif Jensen, and Elizabeth Ransom. Morgantown: West Virginia University Press.

Ludden, Alison Bryant. 2011. "Engagement in School and Community Civic Activities Among Rural Adolescents." *Journal of Youth and Adolescence* 40(9): 1254–70. DOI: 10.1007/s10964-010-9536-3.

MacQueen, Ian T., Melinda Maggard-Gibbons, Gina Capra, Laura Raaen, Jesus G. Ulloa, Paul G. Shekelle, Isomi Miake-Lye, Jessica M. Beroes, and Susanne Hempel. 2018. "Recruiting Rural Healthcare Providers Today: A Systematic Review of Training Program Success and Determinants of Geographic Choices." *Journal of General Internal Medicine* 33(2): 191–99. DOI: 10.1007/s11606-017-4210-z.

MacTavish, Katherine, and Sonya Salamon. 2004. "What Do Rural Families Look Like Today?" In *Challenges for Rural America in the Twenty-First Century*, edited by David L. Brown and Louis E. Swanson. University Park: Penn State University Press.

Marré, Alexander. 2017. "Rural Education at a Glance, 2017." *Economic Research Bulletin* no. 171. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/webdocs/publications/83078/eib-171.pdf.

Mattingly, Marybeth J., and Kristin E. Smith. 2010. "Changes in Wives' Employment When Husbands Stop Working: A Recession-Prosperity Comparison." *Family Relations* 59(4): 343–57. DOI: 10.1111/j.1741-3729.2010.00607.x.

McGrath, Daniel J., Raymond R. Swisher, Glen H. Elder Jr., and Rand D. Conger. 2001. "Breaking New Ground: Diverse Routes to College in Rural America." *Rural Sociology* 66(2): 244–67.

McLaughlin, Diane K., Carla M. Shoff, and Mary Ann Demi. 2014. "Influence of Perceptions of Current and Future Community on Residential Aspirations of Rural Youth." *Rural Sociology* 79(4): 453–77. DOI: 10.1111/ruso.12044.

Mellander, Charlotta, Richard Florida, and Kevin Stolarick. 2011. "Here to Stay—The Effects of Community Satisfaction on the Decision to Stay." *Spatial Economic Analysis* 6(1): 5–24. DOI: 10.1080/17421772.2010.540031.

Miller, Emily E. N., and Kathryn Edin. 2022. "Coming of Age in Appalachia, Emerging or Expedited Adulthood?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(4): 50–67. DOI: https://doi.org/10.7758/RSF.2022.8.3.02.

Miranda, Alejandra, and Michael Rodriguez. 2022. "Contexts of Educational Aspirations and School Grades of Rural Students." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 172–88. DOI: https://doi.org/10.7758/RSF.2022.8.3.07.

Monk, David H. 2007. "Recruiting and Retaining High-Quality Teachers in Rural Areas." *The Future of Children* 17(1): 155–74. DOI: 10.1353/foc.2007.0009.

Monnat, Shannon M. 2018. "Factors Associated With County-Level Differences in U.S. Drug-Related Mortality Rates." *American Journal of Preventive Medicine* 54(5): 611–19. DOI: 10.1016/j.amepre.2018.01.040.

———. 2020. "Trends in U.S. Working-Age Non-Hispanic White Mortality: Rural–Urban and Within-Rural Differences." *Population Research and Policy Review* 39(5): 805–34. DOI: 10.1007/s11113-020-09607-6.

Monnat, Shannon M., and David L. Brown. 2017. "More Than a Rural Revolt: Landscapes of Despair and the 2016 Presidential Election." *Journal of Rural Studies* 55: 227–36. DOI: 10.1016/j.jrurstud.2017.08.010.

Morrissey, Taryn W., Scott W. Allard, and Elizabeth Pelletier. 2022. "Access to Early Care and Education in Rural Communities: Implications for Children's School Readiness." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 100–123. DOI: https://doi.org/10.7758/RSF.2022.8.3.04.

Moy, Ernest. 2017. "Leading Causes of Death in Nonmetropolitan and Metropolitan Areas — United States, 1999–2014." *MMWR Surveillance Summaries* 66(1): 1–8. DOI: 10.15585/mmwr.ss6601a1.

Mueller, J. Tom, Kathryn McConnell, Paul Berne Burow, Katie Pofahl, Alexis A. Merdjanoff, and Justin Farrell. 2021. "Impacts of the COVID-19 Pandemic on Rural America." *Proceedings of the National Academy of Sciences* 118(1). DOI: 10.1073/pnas.2019378118.

Mueller, Keith J., Andrew F. Coburn, Alana Knudson, Jennifer P. Lundblad, A. Clinton MacKinney, Timothy D. McBride, Erin Mobley, Fred Ullrich, and Abigail Barker. 2020. "Considerations for Defining Rural Places in Health Policies and Programs." Rural Policy Research Institute. Accessed March 1, 2022. https://rupri.org/wp-content/uploads/Considerations-For-Defining-Rural-Places.pdf.

Mushinski, David, Stephan Weiler, and Benjamin Widner. 2014. "The Impact of Retail Establishments in Hinterlands on the Export Role of Retail Establishments in Rural Places." *Annals of Regional Science* 52(2): 469–87. DOI: 10.1007/s00168-014-0595-3.

National Center for Health Statistics. 2019. "Health, United States, 2018." Hyattsville, Md.: National Center for Health Statistics.

Nelson, Ingrid A. 2016. "Rural Students' Social Capital in the College Search and Application Process." *Rural Sociology* 81(2): 249–81. DOI: 10.1111/ruso.12095.

Ng, Alisson Stewart, and Kelleen Kaye. 2015. "Sex in the (Non) City: Teen Childbearing in Rural America." Washington, D.C.: Power to Decide. Accessed November 14, 2021. https://powertodecide.org/what-we-do/information/resource-library/sex-in-the-non-city.

Niccolai, Ashley R., Sarah Damaske, and Jason Park. 2022. "We Won't Be Able to Find Jobs Here: How Growing Up in Rural America Shapes Decisions About Work." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(4): 87–104. DOI: https://doi.org/10.7758/RSF.2022.8.4.04.

Nolan, Laura B., Jane Waldfogel, and Christopher Wimer. 2017. "Long-Term Trends in Rural and Urban Poverty: New Insights Using a Historical Supplemental Poverty Measure." *Annals of the American Academy of Political and Social Science* 672(1): 123–42. DOI: 10.1177/0002716217713174.

Nunn, Ryan, and Jay Shambaugh. 2018. *Place-Based Policies for Shared Economic Growth*. Washington, D.C.: Brookings Institution. Accessed November 14, 2021. https://www.brookings.edu/multi-chapter-report/place-based-policies-for-shared-economic-growth.

Ogden, Cynthia L., Cheryl D. Fryar, Craig M. Hales, Margaret D. Carroll, Yutaka Aoki, and David S. Freedman. 2018. "Differences in Obesity Prevalence by Demographics and Urbanization in US Children and Adolescents, 2013–2016." *JAMA* 319(23): 2410–18. DOI: 10.1001/jama.2018.5158.

O'Hare, William, and Alisson Churilla. 2008. "Rural Children Now Less Likely to Live in Married-Couple Families." Fact Sheet no. 13. Durham: University of New Hampshire, Carsey School of Public Policy.

O'Hare, William, Wendy Manning, Meredith Porter, and Heidi Lyons. 2009. "Rural Children Are More Likely to Live in Cohabiting-Couple Households." Durham: University of New Hampshire, Carsey School of Public Policy.

Pacas, José D., and David W. Rothwell. 2020. "Why Is Poverty Higher in Rural America According to the Supplemental Poverty Measure? An Investigation of the Geographic Adjustment." *Population Research and Policy Review* 39(5): 941–75. DOI: 10.1007/s11113-020-09612-9.

Panico, Lidia, Melanie Bartley, Yvonne J Kelly, Anne McMunn, and Amanda Sacker. 2019. "Family Structure Trajectories and Early Child Health in the UK: Pathways to Health." *Social Science & Medicine* 232: 220–29. DOI: 10.1016/j.socscimed.2019.05.006.

Parker, Emily, Laura Tach, and Cassandra Robertson. 2022. "Do Federal Place-Based Policies Improve Economic Opportunity in Rural Communities?" *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(4): 125–54. DOI: https://doi.org/10.7758/RSF.2022.8.4.06.

Parsons, Ryan. 2022. "Moving Out to Move Up: Higher Education as a Mobility Pathway in the Rural South." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 208–29. DOI: https://doi.org/10.7758/RSF.2022.8.3.09.

Patterson, Kira A. E., Seana L. Gall, Alison J. Venn, Petr Otahal, Leigh Blizzard, Terry Dwyer, and Verity J. Cleland. 2017. "Accumulated Exposure to Rural Areas of Residence over the Life Course Is Associated with Overweight and Obesity in Adulthood: A 25-Year Prospective Cohort Study." *Annals of Epidemiology* 27(3): 169–175.e2. DOI: 10.1016/j.annepidem.2017.01.007.

Pearce, Jamie R. 2018. "Complexity and Uncertainty in Geography of Health Research: Incorporating Life-Course Perspectives." *Annals of the American Association of Geographers* 108(6): 1491–98. DOI: 10.1080/24694452.2017.1416280.

Pender, John, Thomas Hertz, John Cromartie, and Tracey Farrigan. 2019. "Rural America at a Glance, 2019 Edition." *Economic Information Bul-*

letin no. EIB-212. Washington: U.S. Department of Agriculture. Accessed November 14, 2021. https://www.ers.usda.gov/webdocs/publications/95341/eib-212.pdf.

Peters, David J., Shannon M. Monnat, Andrew L. Hochstetler, and Mark T. Berg. 2020. "The Opioid Hydra: Understanding Overdose Mortality Epidemics and Syndemics Across the Rural-Urban Continuum." *Rural Sociology* 85(3): 589–622. DOI: 10.1111/ruso.12307.

Petrin, Robert A., Kai A. Schafft, and Judith L. Meece. 2014. "Educational Sorting and Residential Aspirations Among Rural High School Students: What Are the Contributions of Schools and Educators to Rural Brain Drain?" *American Educational Research Journal* 51(2): 294–326. DOI: 10.3102/0002831214527493.

Poston, Dudley L., and Yu-Ting Chang. 2016. "Patterns of Gay Male and Lesbian Partnering in the Metropolitan Areas of the United States in 2010." *Frontiers in Sociology* 1. DOI: 10.3389/fsoc.2016.00012.

Preston, Deborah Bray, and Anthony R. D'Augelli. 2014. *The Challenges of Being a Rural Gay Man: Coping with Stigma*. New York: Routledge.

Preston, Samuel H., Mark E. Hill, and Greg L. Drevenstedt. 1998. "Childhood Conditions that Predict Survival to Advanced Ages Among African-Americans." *Social Science & Medicine* 47(9): 1231–46. DOI: 10.1016/S0277-9536(98)00180-4.

Probst, Janice C., Judith C. Barker, Alexandra Enders, and Paula Gardiner. 2018. "Current State of Child Health in Rural America: How Context Shapes Children's Health." *Journal of Rural Health* 34 (Suppl 1): S3–12. DOI: 10.1111/jrh.12222.

Provasnik, Stephen, Angelina KewalRamani, Mary McLaughlin Coleman, Lauren Gilbertson, Will Herring, and Qingshu Xie. 2007. *Status of Education in Rural America*. NCES no. 2007-040. Washington: U.S. Department of Education.

Rabbitt, Matthew P., Alisha Coleman-Jensen, and Christian A. Gregory. 2017. "Understanding the Prevalence, Severity, and Distribution of Food Insecurity in the United States." Washington: U.S. Department of Agriculture, Economic Research Service. Accessed November 14, 2021. https://www.ers.usda.gov/amber-waves/2017/september/understanding-the-prevalence-severity-and-distribution-of-food-insecurity-in-the-united-states.

Ratcliffe, Michael, Charlynn Burd, Kelly Holder, and Alison Fields. 2016. "Defining Rural at the U.S. Census Bureau." Report no. ACSGEO-1. Washington: U.S. Census Bureau.

Reczek, Corinne, Russell Spiker, Hui Liu, and Robert Crosnoe. 2016. "Family Structure and Child Health: Does the Sex Composition of Parents Matter?" *Demography* 53(5): 1605–30. DOI: 10.1007/s13524-016-0501-y.

Reichert, Christiane von, John B. Cromartie, and Ryan O. Arthun. 2011. "Returning Home and Making a Living: Employment Strategies of Returning Migrants to Rural U.S. Communities." *Journal of Rural and Community Development* 6(2): 35–52.

Robbins, Benjamin M. 2012. "'People Like Us Don't Go There': Local Culture and College Aspirations in Rural Nebraska." *Yale Journal of Sociology* 9 (Fall): 98–129.

Roberts, Evan, Wendy Rahn, and DeAnn Lazovich. 2022. "Life-Course Transitions in Rural Residence and Old-Age Mortality in Iowa, 1930–2014." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(4): 106–24. DOI: https://doi.org/10.7758/RSF.2022.8.4.05.

Robinson, Lara R., Joseph R. Holbrook, Rebecca H. Bitsko, Sophie A. Hartwig, Jennifer W. Kaminski, Reem M. Ghandour, Georgina Peacock, Akilah Heggs, and Coleen A. Boyle. 2017. "Differences in Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders Among Children Aged 2–8 Years in Rural and Urban Areas—United States, 2011–2012." *MMWR Surveillance Summaries* 66(8): 1–11. DOI: 10.15585/mmwr.ss6608a1.

Rosenblatt, Roger A., Frederick M. Chen, Denise M. Lishner, and Mark P. Doescher. 2010. "The Future of Family Medicine and Implications for Rural Primary Care Physician Supply." Final Report no. 125. Seattle: Rural Health Research Center. Accessed November 14, 2021. https://depts.washington.edu/uwrhrc/uploads/RHRC_FR125_Rosenblatt.pdf.

Roth, Gregory A., Laura Dwyer-Lindgren, Amelia Bertozzi-Villa, Rebecca W. Stubbs, Chloe Morozoff, Mohsen Naghavi, Ali H. Mokdad, and Christopher J. L. Murray. 2017. "Trends and Patterns of Geographic Variation in Cardiovascular Mortality Among US Counties, 1980–2014." *Journal of the American Medical Association* 317(19): 1976–92. DOI: https://doi.org/10.1001/jama.2017.4150.

Rothwell, David W, and Brian C. Thiede. 2018. "Child Poverty in Rural America." *IRP Focus* 34(3): 20–29.

Ryser, Laura, and Greg Halseth. 2010. "Rural Economic Development: A Review of the Literature from Industrialized Economies." *Geography Compass* 4(6): 510–31. DOI: 10.1111/j.1749-8198.2010.00321.x.

Sampson, Robert J. 2008. "Moving to Inequality: Neighborhood Effects and Experiments Meet Social Structure." *American Journal of Sociology* 114(1): 189–231. DOI: 10.1086/589843.

Sampson, Robert J., Jeffrey D. Morenoff, and Thomas Gannon-Rowley. 2002. "Assessing 'Neighborhood Effects': Social Processes and New Directions in Research." *Annual Review of Sociology* 28(1): 443–78. DOI: 10.1146/annurev.soc.28.110601.141114.

Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* 277(5328): 918–24. DOI: 10.1126/science.277.5328.918.

Sano, Yoshie, Margaret M. Manoogian, and Lenna L. Ontai. 2012. "'The Kids Still Come First': Creating Family Stability During Partnership Instability in Rural, Low-Income Families." *Journal of Family Issues* 33(7): 942–65. DOI: 10.1177/0192513X11430820.

Schafft, Kai A. 2016. "Rural Education as Rural Development: Understanding the Rural School–Community Well-Being Linkage in a 21st-Century Policy Context." *Peabody Journal of Education* 91(2): 137–54. DOI: 10.1080/0161956X.2016.1151734.

Schafft, Kai A., and Catharine Biddle. 2014. "Education and Schooling in Rural America." In *Rural America in a Globalizing World*, edited by Conner Bailey, Leif Jensen, and Elizabeth Ransom. Morgantown: West Virginia University Press.

Schafft, Kai A., and Alecia Youngblood Jackson. 2010. *Rural Education for the Twenty-First Century: Identity, Place, and Community in a Globalizing World*. University Park: Penn State Press.

Schumm, Walter R. 2016. "A Review and Critique of Research on Same-Sex Parenting and Adoption." *Psychological Reports* 119(3): 641–760. DOI: 10.1177/0033294116665594.

Semke, Carrie A., and Susan M. Sheridan. 2012. "Family-School Connections in Rural Educational Settings: A Systematic Review of the Empirical Literature." *School Community Journal* 22(1): 21–47.

Sherman, Jennifer. 2009a. "Bend to Avoid Breaking: Job Loss, Gender Norms, and Family Stability in Rural America." *Social Problems* 56(4): 599–620. DOI: 10.1525/sp.2009.56.4.599.

———. 2009b. *Those Who Work, Those Who Don't: Poverty, Morality, and Family in Rural America*. Minneapolis: University of Minnesota Press.

Sherman, Jennifer, and Rayna Amber Sage. 2011. "Sending Off All Your Good Treasures: Rural Schools, Brain-Drain, and Community Survival in the Wake of Economic Collapse." *Journal of Research in Rural Education* 26(11). Accessed November 14, 2021. https://jrre.psu.edu/sites/default/files/2019-08/26-11.pdf.

Sherman, Jennifer, and Kai A. Schafft. 2022. "'Turning Their Back on Kids': Inclusions, Exclusions, and the Contradictions of Schooling in Gentrifying Rural Communities." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 8(3): 150–70. DOI: https://doi.org/10.7758/RSF.2022.8.3.06.

Singh, Gopal K., and Mohammad Siahpush. 2014. "Widening Rural-Urban Disparities in All-Cause Mortality and Mortality from Major Causes of Death in the USA, 1969–2009." *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 91(2): 272–92. DOI: 10.1007/s11524-013-9847-2.

Slack, Tim. 2014. "Work in Rural America in the Era of Globalization: Problems and Prospects for the 2010s." In *Rural America in a Globalizing World*, edited by Conner Bailey, Leif Jensen, and Elizabeth Ransom. Morgantown: West Virginia University Press.

Slack, Tim, and Leif Jensen. 2020. "The Changing Demography of Rural and Small-Town America." *Population Research and Policy Review* 39(5): 775–83. DOI: 10.1007/s11113-020-09608-5.

Slack, Tim, Brian C. Thiede, and Leif Jensen. 2020. "Race, Residence, and Underemployment: Fifty Years in Comparative Perspective, 1968–2017." *Rural Sociology* 85(2): 275–315. DOI: 10.1111/ruso.12290.

Smith, Amy S., and Edward Trevelyan. 2019. "The Older Population in Rural America: 2012–2016." *ACS* report no. ACS-41. Washington: U.S. Census Bureau. Accessed November 14, 2021. https://www.census.gov/content/dam/Census/library/publications/2019/acs/acs-41.pdf.

Smith, Kristin E., and Lisa R. Pruitt. 2017. "Changing Gender Roles and Rural Poverty." In *Rural Poverty in the United States*, edited by Ann R. Tickamyer, Jennifer Sherman, and Jennifer Warlick. New York: Columbia University Press.

Snyder, Anastasia R., Susan L. Brown, and Erin P. Condo. 2004. "Residential Differences in Family Formation: The Significance of Cohabitation*." *Rural Sociology* 69(2): 235–60. DOI: 10.1526/003601104323087598.

Snyder, Anastasia R., and Diane K. McLaughlin. 2004. "Female-Headed Families and Poverty in Rural America." *Rural Sociology* 69(1): 127–49. DOI: 10.1526/003601104322919937.

Snyder, Anastasia R., Diane K. McLaughlin, and Jill Findeis. 2006. "Household Composition and Poverty Among Female-Headed Households with Children: Differences by Race and Residence*." *Rural Sociology* 71(4): 597–624. DOI: 10.1526/003601106781262007.

Strange, Marty. 2011. "Finding Fairness for Rural Students." *Phi Delta Kappan* 92(6): 8–15. DOI: 10.1177/003172171109200603.

Strayhorn, Terrell L. 2009. "Different Folks, Different Hopes: The Educational Aspirations of Black Males in Urban, Suburban, and Rural High Schools." *Urban Education* 44(6): 710–31. DOI: 10.1177/0042085908322705.

Sutton, April, Daniel T. Lichter, and Sharon Sassler. 2019. "Rural–Urban Disparities in Pregnancy Intentions, Births, and Abortions Among US Adolescent and Young Women, 1995–2017." *American Journal of Public Health* 109(12): 1762–69. DOI: 10.2105/AJPH.2019.305318.

Theodori, Ann E., and Gene L. Theodori. 2015. "The Influences of Community Attachment, Sense of Community, and Educational Aspirations upon the Migration Intentions of Rural Youth in Texas." *Community Development* 46(4): 380–91. DOI: 10.1080/15575330.2015.1062035.

Thiede, Brian C., Hyojung Kim, and Matthew Valasik. 2018. "The Spatial Concentration of America's Rural Poor Population: A Postrecession Update." *Rural Sociology* 83(1): 109–44. DOI: 10.1111/ruso.12166.

Thiede, Brian C., Daniel T. Lichter, and Tim Slack. 2018. "Working, but Poor: The Good Life in Rural America?" *Journal of Rural Studies* 59(April): 183–93. DOI: 10.1016/j.jrurstud.2016.02.007.

Thiede, Brian C., and Tim Slack. 2017. "9. The Old Versus the New Economies and Their Impacts." In *Rural Poverty in the United States*, edited by Ann Tickamyer, Jennifer Warlick, and Jennifer Sherman. New York: Columbia University Press. DOI: 10.7312/tick17222-015.

Thomson, Elizabeth, and Sara S. McLanahan. 2012. "Reflections on 'Family Structure and Child Well-Being: Economic Resources vs. Parental Socialization.'" *Social Forces* 91(1): 45–53. DOI: 10.1093/sf/sos119.

Tickamyer, Ann R., and Debra A. Henderson. 2004. "Rural Women: New Roles for the New Century?" In *Challenges for Rural America in the Twenty-First Century*, edited by David L. Brown and Louis E. Swanson. University Park: Penn State University Press.

Turley, Ruth N. López. 2009. "College Proximity: Mapping Access to Opportunity." *Sociology of Education* 82(2): 126–46.

Ullrich, Fred, and Keith Mueller. 2021. "Confirmed COVID-19 Cases, Metropolitan and Nonmetropolitan Counties." Grand Forks, N.D.: Rural Health Research Gateway. Accessed November 14, 2021. https://www.ruralhealthresearch.org/publications/1325.

U.S. Census Bureau. 1994. *Geographic Areas Reference Manual.* Accessed March 1, 2021. https://www2.census.gov/geo/pdfs/reference/GARM/GARMcont.pdf.

———. 2020a. "Metropolitan Areas." Last updated December 17, 2020. Accessed November 14, 2021. https://www.census.gov/history/www/programs/geography/metropolitan_areas.html.

———. 2020b. "Urban and Rural Areas." Last updated December 17, 2020. Accessed November 14, 2021. https://www.census.gov/history/www/programs/geography/urban_and_rural_areas.html.

Walker, Renee E., Christopher R. Keane, and Jessica G. Burke. 2010. "Disparities and Access to Healthy Food in the United States: A Review of Food Deserts Literature." *Health & Place* 16(5): 876–84. DOI: 10.1016/j.healthplace.2010.04.013.

Weber, Bruce A. 2008. "People and Places at the Ragged Edge: Place-Based Policy for Reducing Rural Poverty." In *Frontiers in Resource and Rural Economics*, edited by Wu JunJie, Paul W. Barkley, and Bruce A. Weber. New York: Routledge.

Weber, Bruce A., J. Matthew Fannin, Sam M. Cordes, and Thomas G. Johnson. 2017. "Upward Mobility of Low-Income Youth in Metropolitan, Micropolitan, and Rural America." *Annals of the American*

Academy of Political and Social Science 672(1): 103–22. DOI: 10.1177/0002716217713477.

Weber, Bruce A., J. Matthew Fannin, Kathleen Miller, and Stephan Goetz. 2018. "Intergenerational Mobility of Low-income Youth in Metropolitan and Non-metropolitan America: A Spatial Analysis." *Regional Science Policy & Practice* 10(2): 87–101. https://rsaiconnect.onlinelibrary.wiley.com/doi/epdf/10.1111/rsp3.12122.

Weber, Bruce A., Leif Jensen, Kathleen Miller, Jane Mosley, and Monica Fisher. 2005. "A Critical Review of Rural Poverty Literature: Is There Truly a Rural Effect?" *International Regional Science Review* 28(4): 381–141.

Weber, Bruce A., Alexander Marré, Monica Fisher, Robert Gibbs, and John Cromartie. 2007. "Education's Effect on Poverty: The Role of Migration." *Review of Agricultural Economics* 29(3): 437–45. DOI: 10.1111/j.1467-9353.2007.00358.x.

Weber, Bruce A., and Kathleen Miller. 2017. "Poverty in Rural America Then and Now." In *Rural Poverty in the United States*, edited by Ann R. Tickamyer, Jennifer Sherman, and Jennifer Warlick. New York: Columbia University Press.

Wen, Ming, Jessie X. Fan, Lori Kowaleski-Jones, and Neng Wan. 2018. "Rural-Urban Disparities in Obesity Prevalence Among Working Age Adults in the United States: Exploring the Mechanisms." *American Journal of Health Promotion: AJHP* 32(2): 400–408. DOI: 10.1177/0890117116689488.

Wilson, William. 1987. *The Truly Disadvantaged*. Chicago: University of Chicago Press.

Winnick, Louis. 1966. "Winnick, Louis. 1966. Place Prosperity vs. People Prosperity: Welfare Considerations in the Geographic Redistribution of Economic Activity." In *Essays in Urban Land Economics in Honor of the Sixty-Fifth Birthday of Leo Grebler*, edited by G. James and S. Burns. Los Angeles: University of California at Los Angeles.

Wodtke, Geoffrey T., David J. Harding, and Felix Elwert. 2011. "Neighborhood Effects in Temporal Perspective: The Impact of Long-Term Exposure to Concentrated Disadvantage on High School Graduation." *American Sociological Review* 76(5): 713–36. DOI: 10.1177/0003122411420816.

Woldoff, Rachael A., Yolanda M. Wiggins, and Heather M. Washington. 2011. "Black Collegians at a Rural Predominantly White Institution: Toward a Place-Based Understanding of Black Students' Adjustment to College." *Journal of Black Studies* 42(7): 1047–79. DOI: 10.1177/0021934711400741.

Wu, JunJie, Bruce A. Weber, and Mark D. Partridge. 2017. "Rural-Urban Interdependence: A Framework Integrating Regional, Urban, and Environmental Economic Insights." *American Journal of Agricultural Economics* 99(2): 464–80. DOI: 10.1093/ajae/aaw093.

Wuthnow, Robert. 2018. *The Left Behind: Decline and Rage in Rural America*. Princeton, N.J.: Princeton University Press.

Ziliak, James P. 2018. "Economic Change and the Social Safety Net: Are Rural Americans Still Behind?" In *Rural Poverty: Fifty Years After the People Left Behind*. Washington, D.C.: Rural Policy Research Institute.