Rural Children Disproportionally Live in Persistently Poor Counties

Marybeth J. Mattingly, Kenneth Johnson, and Andrew Schaefer

Short Abstract

In this poster, we will use decennial census data from 1980, 1990, 2000, and the 2009 American Community Survey (ACS) five-year estimates to show the spatial distribution of persistently high child poverty. Additionally, we will overlay racial composition data to show where persistent child poverty is concentrated, and discuss other demographic correlates of persistent child poverty.

Introduction

Despite a War on Poverty that commenced nearly 50 years ago, poverty remains pervasive. Child poverty is particularly pernicious. Nearly 19 percent of America's children live in poverty. This compares with 14 percent of the total population (see Map 1) (U.S. Census Bureau 2010a). Poverty is scattered and geographically concentrated, and it ebbs and flows with economic cycles. However, in some parts of the country, poverty has persisted for generations.

Persistent high poverty is more prevalent among children. We find persistent child poverty[1] in nearly twice as many U.S. counties[2] as those that report high persistent poverty across all age groups. In all, 342 counties have experienced persistently high levels of poverty across all age groups during the past 29 years. In contrast, more than 700 counties experienced persistent child poverty over the same period. Our purpose is to identify those counties, describe their geographic distribution, and identify the characteristics of counties where child poverty has persisted. We find that persistent child poverty is geographically dispersed but spatially concentrated, and that it is occurring across racial-ethnic groups. If children are America's future, then we need to do something about the widespread and persistent poverty that more than 13.5 million U.S. children face daily (U.S. Census Bureau 2010a).

2009 High Child Poverty

In 2009, 19 percent of American children lived in poverty, with rates significantly higher for those in rural areas and in urban cores (over 28 percent for each) (Mattingly and Stransky 2010). Child poverty was particularly high among children residing in homes headed by a single mother (40 percent) and among racial minorities (36 percent of black and 31 percent of Hispanic

[1] Child poverty is not an isolated occurrence. In fact, a major reason for the widespread concern with child poverty is that it tends to recur in the same places. To examine this phenomenon, we delineate five types of counties based on historical child poverty rates. We consider places with child poverty rates greater than 20 percent in any given year as "high" child poverty for that year. The five types of counties are: *Persistent High Child Poverty*: high child poverty at all four time points studied (706 counties); *Frequent High Child Poverty*: high child poverty in three of four time points(362 counties); *Intermittent High Child Poverty*: high child poverty in two of four years studied (362 counties); *Infrequent High Child Poverty*: high child poverty in one of four years studied (516 counties); and *No High Child Poverty*: no instances of high child poverty in any of the years studies (1,184 counties).

[2] We included the 3,130 counties with data at all four time points in our sample. This represents 99.6 percent of the 3,141 U.S. counties in 2010.

children are poor) (Mattingly and Bean 2010). Many of these children are growing up in places where high child poverty has persisted for decades.

Clustering of High Child Poverty over Time

We find clear evidence of spatial clustering of child poverty in several "hot spots" (indicated by the red and orange shades on Map 2) High child poverty is evident in the Southeast, particularly in the Mississippi Delta and in the Atlantic coastal plain. Poverty levels are also high in the central Appalachian coalfields and in the Ozarks. Additional child poverty hot spots exist in the Southwest along the Rio Grande and in Texas–New Mexico. Although child poverty is generally limited on the Great Plains, a pocket of high child poverty is apparent in the Native American regions of the Dakotas. In contrast, there are far fewer occurrences of high child poverty in the Northeast and Midwest.

Spatial Distribution of Persistent Child Poverty

We identify areas of high poverty above, here we focus on the distribution of persistent child poverty. Persistent child poverty is far more common in nonmetropolitan, or rural, counties: 571 of the 706 persistent child poverty counties are rural (Map 3). In all, some 81 percent of counties with persistent child poverty are classified as nonmetropolitan, although rural counties represent only 65 percent of all U.S. counties. A similar pattern is evident among counties whose high child poverty rates approach being categorized as persistent (what we term "nearly persistently high"). In all, 267 (74 percent) of the 362 counties classified as having frequent child poverty are located in nonmetropolitan areas. The distribution of both these types of counties (frequent and persistent child poverty) is familiar to anyone who has studied U.S. poverty trends. There are large and enduring concentrations of child poverty in Appalachia and the Ozarks, the Mississippi Delta, and along the Texas–Mexico border as well as in the Native American regions of Oklahoma and the northern Great Plains. Persistent child poverty is extremely rare in the Northeast and North Central regions of the United States.

Persistent Child Poverty Affects Many Racial Groups, Including Whites

Persistent child poverty touches many minority children. Map 4 overlays child poverty data on the distribution of minority children in 2010. A county is identified as having a concentration of racial-ethnic minority children if more than 10 percent of its children are black, Asian, Native American, or of Hispanic origin. Counties where children from two or more minority groups each exceed 10 percent are identified as multi-ethnic.

There are several distinctions worth noting. For example, child poverty is concentrated in counties in the old plantation South and in the *colonias* along the Texas–Mexico border. Additional clusters exist on Native American reservations, including in southeastern Oklahoma, Arizona, and New Mexico, Montana and the Dakotas. There are also large child poverty hot spots in the Ozarks and Appalachia, where the child populations are almost exclusively non-Hispanic white.

Some of the child poverty hot spots contain more diverse child populations. In East Texas, a large cluster of counties with persistent child poverty contains a large percentage of Hispanic, black, and white children. Further west, we see high child poverty in places with a large presence of both Hispanic and Native American children. A smaller area is emerging in coastal North

Carolina, where traditionally poor black areas are beginning to see significant growth in the Hispanic child population.

Characteristics of Counties with Persistent child poverty

In general, both metropolitan and nonmetropolitan counties with persistent child poverty are characterized by high rates of unemployment (see Figure 1). In rural counties with persistent child poverty, an average of 8.1 percent of the labor force was unemployed in 2000. In contrast, only 4.6 percent of the labor force was unemployed in counties with no history of high child poverty. Our analysis of historical data for 1990 and 1980 suggests that this same general pattern was evident in the earlier periods (data not shown).

One explanation for the higher unemployment rates in counties with persistent child poverty may be their very low education levels. Counties with persistent child poverty consistently report high percentages of individuals without a high school degree. In 2000, rural counties with persistent child poverty reported that 33 percent of their population, on average, lacked a high school degree compared with 17 percent of rural counties that never experienced high child poverty (Figure 2). For this group, the decline in many rural places of extractive and manufacturing industries, which historically provided "good" jobs for low and unskilled workers, has meant rising unemployment.

A similar pattern of high unemployment and low education levels is evident in urban counties with persistent child poverty, although urban education levels are consistently higher (by 3 to 4 percentage points). This education gap is not new, and dates back to at least 1980. In both 1980 and 1990, the percentage of adults graduating from high school has increased; however, counties with persistent child poverty have the lowest levels of education (data not shown). Many of these persistently poor communities face barriers that have resulted in little investment or infrastructure for a solid public education (Duncan 1999). For example, in some communities the separation of "haves" and "have -nots" results in a two-tiered school system. The wealthier families tend to reside in districts where investments in public schools have been high and prioritized, while poorer families often only have access to underfunded schools. In many places, this bifurcation occurs by race, with whites having access to better schools than blacks (Duncan 1999).

Given our findings above on the ties between minorities and poverty, it comes as little surprise that the proportion of minority children tends to be higher in counties with histories of persistent child poverty. Blacks are disproportionately represented in persistent child poverty counties. In 2000, black children represented 14.9 percent of the under age 18 population. However, they composed, on average, 28 percent of the children in persistently high-poverty counties. The proportion of poor black children is much lower in counties with little or no history of high child poverty. A similar pattern exists in rural counties for blacks, although because the black population tends to be more concentrated in urban areas, the actual percentages are considerably lower in rural than in urban areas. Our historical analysis suggests that similar concentrations of black population in persistent poverty existed in earlier decades (data not shown).

Hispanics are now the largest minority group in the United States (Johnson and Lichter 2010). The Hispanic population has grown rapidly in the past several decades fueled both by immigration and by high levels of natural increase, resulting in a rapid increase in the number of Hispanic children (Johnson and Lichter 2010). By 2010, Hispanic children represented 23 percent of all U.S. children. Thus, poverty patterns among Hispanic children are of considerable interest.

In 2000, Hispanics represented an average of 10 percent of the total population persistent child poverty counties and a slightly lower proportion of those in nearly persistently poor counties. They represent a smaller proportion of the children in counties with less child poverty. The contrast between their concentrations in persistently high and lower-poverty counties is not as striking as it is for blacks, but there is still a clear gradient. In addition, there is also a consistent urban-rural difference in the mean percentage of Hispanic children across the poverty categories. Hispanic children represent a larger proportion of the urban than the rural child population, a finding consistent with the overall higher concentration of Hispanics in urban areas. Because the Hispanic population has grown rapidly in recent decades, longitudinal analysis reflects greater proportional gains in Hispanic children in the poverty counties than for blacks. However, the pattern for the two groups is consistent. Hispanics, like blacks, are disproportionately represented in persistently and nearly persistent child poverty counties (data not shown).

In 2000, the distribution of non-Hispanic whites was decidedly different from that of Hispanics and blacks. Non-Hispanic whites are instead underrepresented in counties with persistent child poverty. In 2000, rural counties with persistent child poverty rates were, on average, 65 percent white compared to an average of 82 percent for all rural counties. Urban counties were 57 percent non-Hispanic whites, on average compared to 79 percent of all urban counties (data not shown). In contrast, rural counties with no instances of high child poverty were, on average, 93 percent non-Hispanic white, and 85 percent white in metro areas. Despite these lower levels of persistent child poverty among white children, there are areas in the United States, particularly in Appalachia, that have a large proportion of non-Hispanic whites suffering the effects of persistent child poverty. Such patterns underscore the fact that racial differences reflect larger structural issues associated with higher poverty, including a legacy of slavery and discrimination that restrict the opportunities afforded minority children.

Structural Factors associated with Persistent Child Poverty

As noted above, female-headed households with children have a far greater risk of poverty than two-parent households (Mattingly and Bean 2010). Not surprisingly, the pattern is also apparent in persistent child poverty counties. In urban counties with persistent child poverty in 2000, 25 percent of the households were female-headed; in rural counties, the number was 22 percent. In contrast, female-headed households constituted an average of only 16 percent of urban and 14 percent of rural households in counties with no history of child poverty. This distinction has held over time and in fact the gap between the two types of counties has been increasing in all poverty and place categories. In 1980, 14 percent of households in persistently poor counties were headed by single mothers. By 2000, the share was 22 percent.

Demographic characteristics such as family structure and educational attainment are correlated with poverty *and* with race. These differences contribute, in large part, to observed racial concentrations of persistent child poverty. Data from the American Community Survey's 2005–

2009 five-year estimates reveal that 14.4 percent of white family households are female-headed compared with 45.9 percent of black family households and 23.7 percent of Hispanic households (which may also identify as white or black) (U.S. Census Bureau 2010b). There are also racial disparities in educational attainment. For example, whites and blacks have similar percentages that graduate high school and have some college. However, fewer blacks than whites complete a four-year degree. More specifically, 29 percent of whites compared to only 17.2 percent of blacks have a college degree or more. Hispanic education levels are lower than both blacks and whites, with only about one-third of Hispanics reporting no high school degree (U.S. Census Bureau 2010c).

Summary and Conclusion

By highlighting the concentration of persistent child poverty counties in rural America, our research demonstrates that child poverty is not just an urban problem. Our analysis identifies 706 U.S. counties (23 percent of the U.S. total) that have experienced persistent child poverty. In each of these counties for three decades, more than 20 percent of the children have been poor. A disproportionate share of these counties with persistent child poverty is in rural America. Nearly 26 percent of all rural children live in these counties. Nor is persistent child poverty limited to a few isolated pockets of the country as is widely believed. Although child poverty is certainly more common in some regions than others, our research clearly demonstrates that persistent child poverty is widespread in both rural and urban America. We find evidence of it in impoverished rural hollows in Appalachian, shacks deep in the Mississippi Delta, isolated Native American reservations on the Great Plains, emerging *colonias* along the Rio Grande, and in urban neighborhoods populated by the latest of a long succession of immigrant streams trying to gain their first foothold in America. Nor is persistent child poverty limited to minority children. Our maps demonstrate that persistent child poverty is widespread in largely white areas of Appalchia and the Ozarks, just as it is in black counties deep in the Mississippi Delta, in Hispanic enclaves in the Rio Grande Valley, and in Native American parts of the Dakotas.

By illustrating that persistent child poverty is widespread in rural America, we contribute to the policy discussion about how to address the challenges poor children face there. The problems that all poor people struggle with are often exacerbated by the isolation and lack of support services in rural areas. The isolation of persistently poor rural areas far from the media and governmental centers of metropolitan America also makes it difficult for policymakers, the media, and the public to develop a clear vision of rural poverty.

The overwhelming urban focus of welfare programs means policymakers often overlook needy families in rural areas. In addition to the high unemployment and low education levels that we document here, the physical and social isolation associated with rural poverty create problems different from those in densely settled urban areas. For instance, limited access to comprehensive food stores with fresh fruit and vegetables creates food desserts in rural areas, especially among the rural poor with limited access to reliable transportation. Even if government policies make health care more affordable, access to that health care is limited in rural areas with few doctors, nurses, dentists and hospitals. The Great Recession exacerbated these problems by further reducing employment opportunities and forcing local and state governments to cut back on support services.

The Great Recession is also worsening the already difficult situation in America's poorest counties according to our analysis of recent Census Bureau small area poverty estimates (SAIPE) for 2005 to 2009. Prior to the recession in 2005-2007, 61 percent of the persistent child poverty counties had more than 30 percent of their children in poverty. By 2008-2009, the percentage of these counties with child poverty above 30 percent increased to 68 percent. So, as the Great Recession drags on, the situation for children in America's poorest counties continues to deteriorate. Many of the biggest social policy changes over the past decade and those looming on the horizon have special implications for rural children. Because of the unique aspects of social and economic life in rural America, welfare reform, expansion of government health insurance, and education reform affect children differently in rural areas than in cities and suburbs. And the reductions in government spending likely to result from the Great Recession coupled with two decades of the devolution of policymaking responsibility from the federal to the state level (and occasionally to municipal governments) may have significant implications for children and fragile families in these persistently poor rural counties.

Data and Methods

We examine child poverty rates using decennial census data from 1980, 1990 and 2000, as well as American Community Survey five-year estimates (ACS) from 2009. "High" child is 20 percent or more of the children living in poverty in a county. "Persistent" poverty is high poverty rates three consecutive decades: 1980, 1990, 2000, as well as 2009. Demographic data for each county are from the U.S. Census Bureau's "U.S.A. Counties Data Files." The demographic variables are created by dividing the total population (or subpopulation for female-headed households, unemployed, and less than high school) of a county by the total number of people defined by the variable. For instance, percentage unemployed is calculated by dividing the total workforce population for each county by the total unemployed in each county. As a result, numbers in the charts are mean percentages for each county. For instance, 7.8 percent (Figure 1) is not the unemployment rate in 2000 for metropolitan counties with persistent child poverty, but rather, the mean percentage unemployed in counties with persistent child poverty in metropolitan areas. Because we examine all U.S. counties, differences represent actual differences in the population. As a result, statistical testing for significance was not necessary.

We use counties[3] as the unit of analysis because they provide a historically consistent set of entities for which child poverty and demographic data have been collected over time. Thus, we are able to identify persistent child poverty in counties and examine variation over both time and location. Counties are also used to delineate metropolitan and nonmetropolitan areas. We used a consistent 2004 definition of metropolitan areas, which avoids problems that would arise from the redefinition of metropolitan and nonmetropolitan areas. Our use of the 2004 definition reduces the number of nonmetropolitan counties and increases the number of metropolitan counties compared with earlier definitions.

[3] In this analysis, Virginia Independent cities are treated as counties. In addition, we have estimated poverty levels for Cibola County NM and for Lake and Peninsula Borough in Alaska because they did not exist at the time of the 1980 Census.

Although the county is the best unit of analysis for our purposes, it does have some limitations. Because large metropolitan counties included substantial populations, some contain large numbers of poor children. However, because most metropolitan counties include both poor and non-poor areas, the percentage of poor children in them might be relatively modest, though the absolute number of poor children may be large. Also, because we use counties, we are unable to identify large spatial pockets of concentrated poverty within large urban counties.

Figures

Figure 1. Mean percent unemployed (2000)

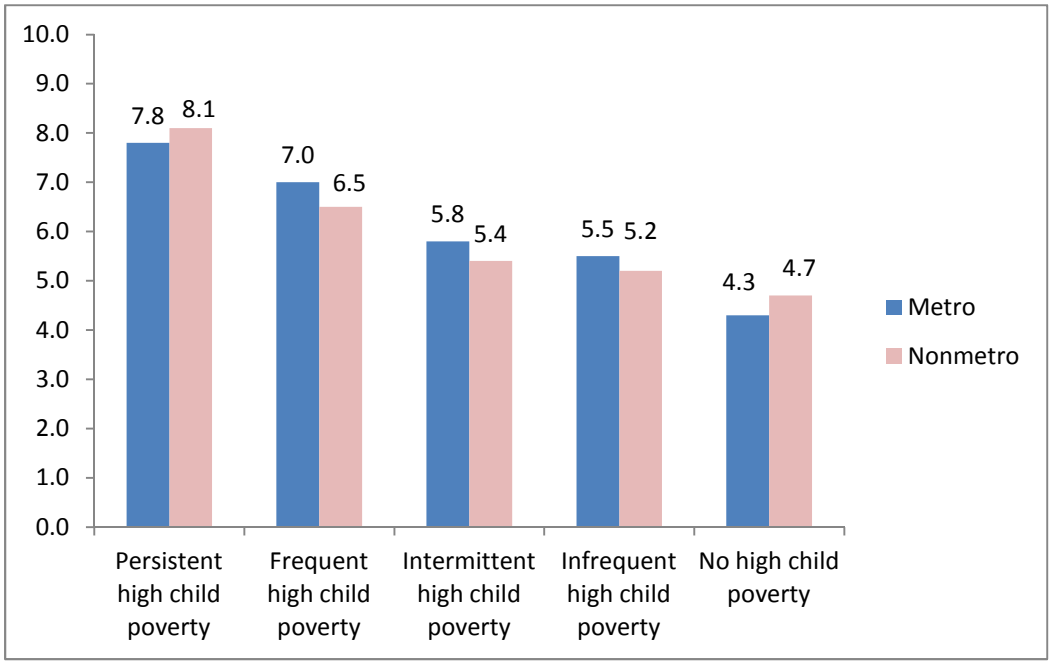
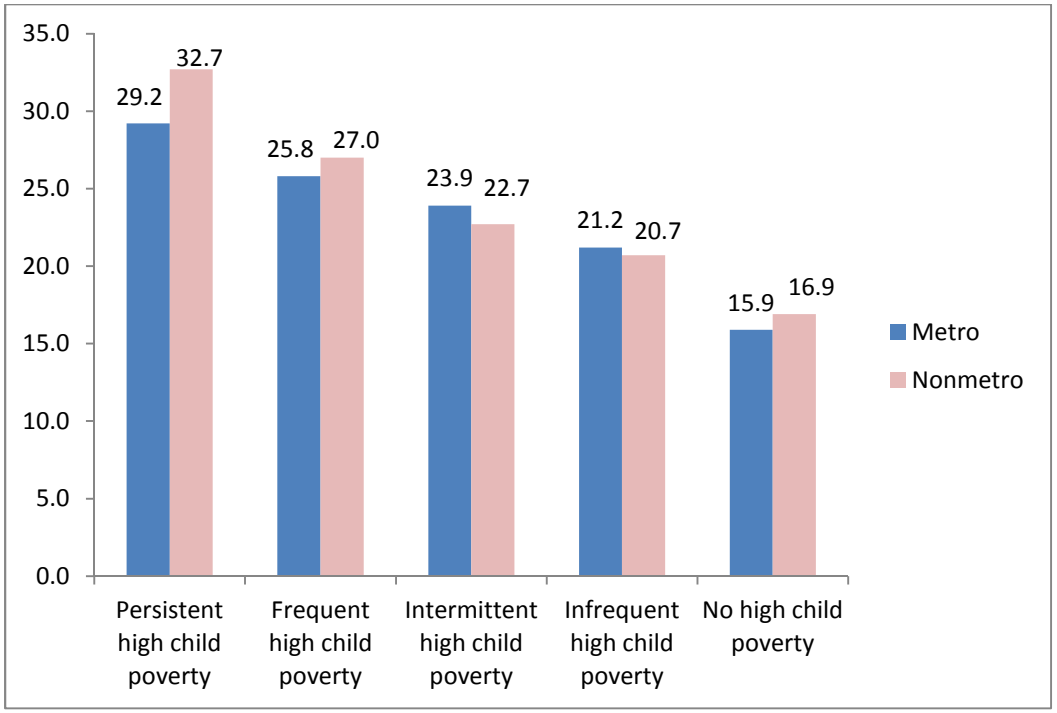
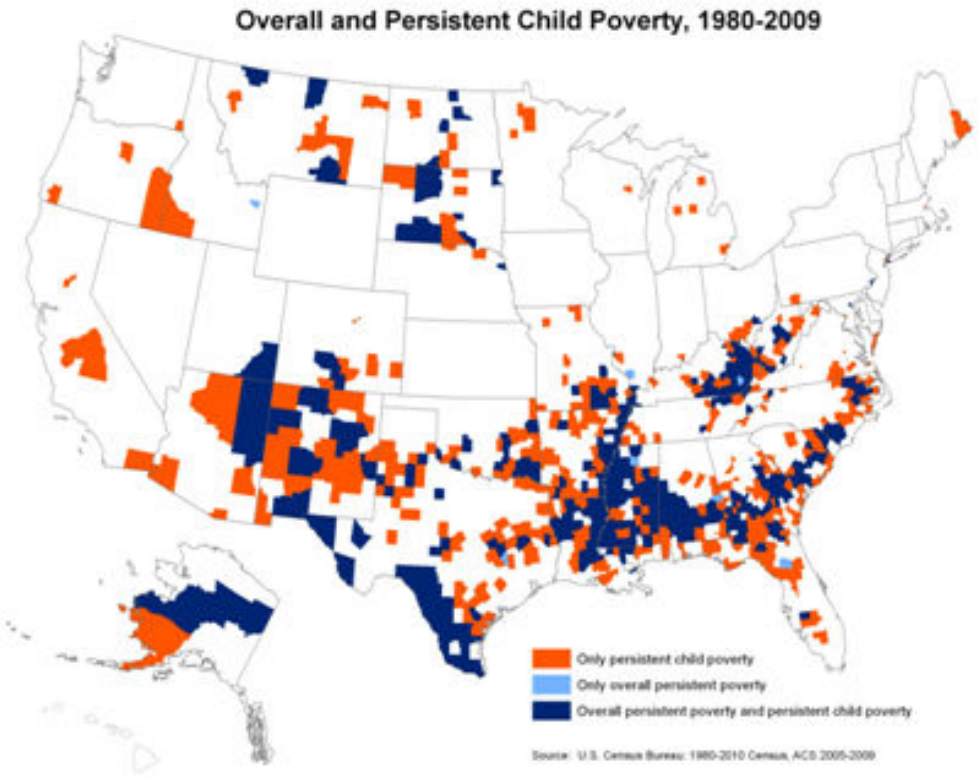


Figure 2. Mean percent less than high school (2000)

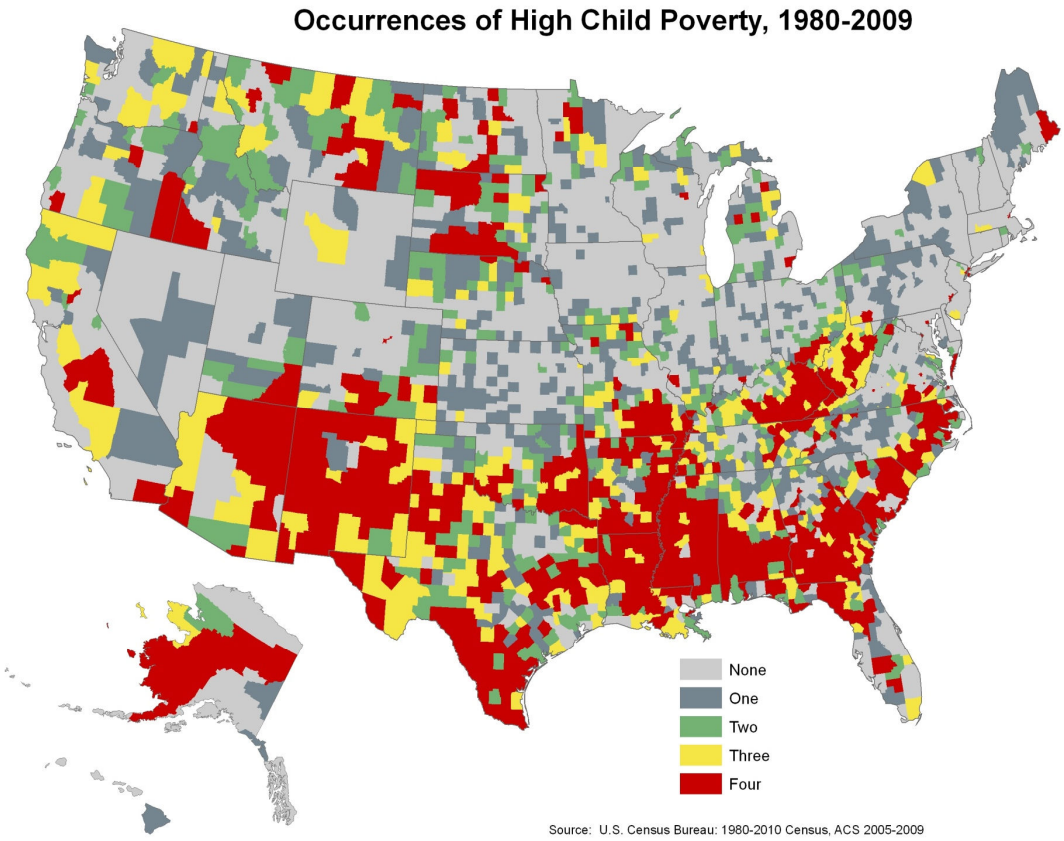


Maps

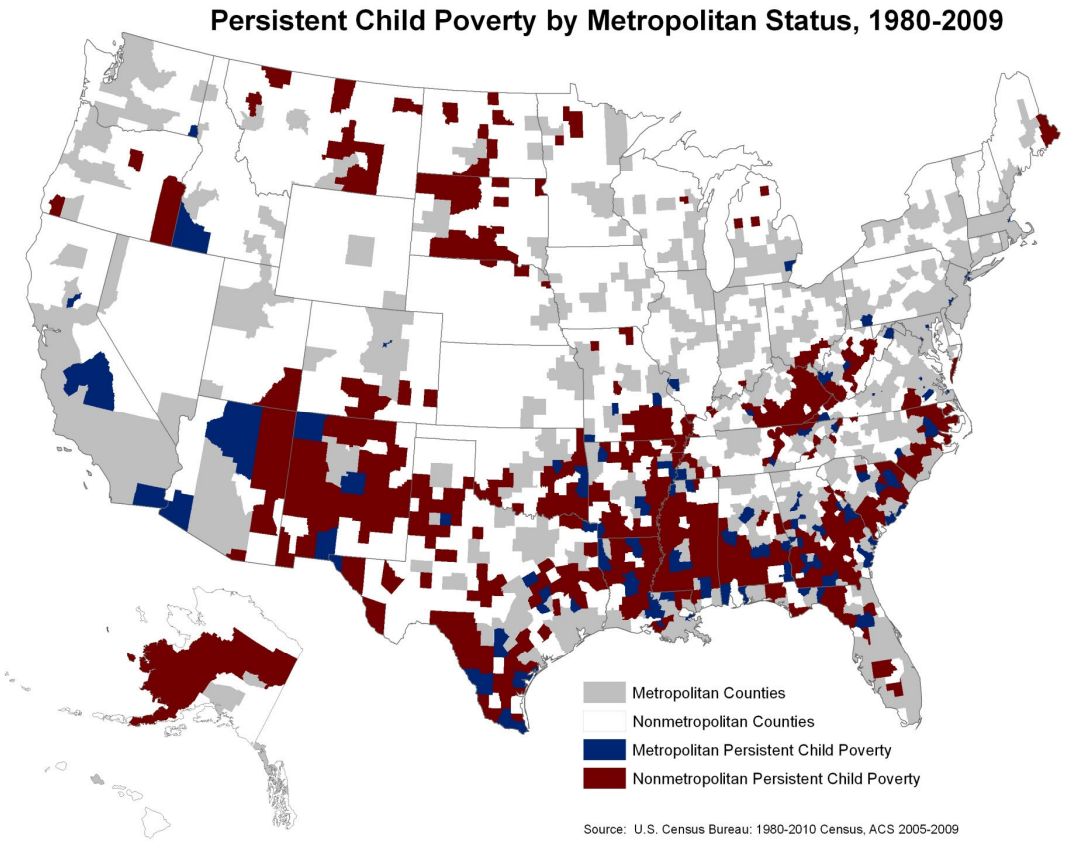
Map 1.


Overall and Persistent Child Poverty, 1980-2009
Only persistent child poverty
Only overall persistent poverty
Overall persistent poverty and persistent child poverty
Source: U.S. Census Bureau: 1980-2010 Census, ACS 2005-2009

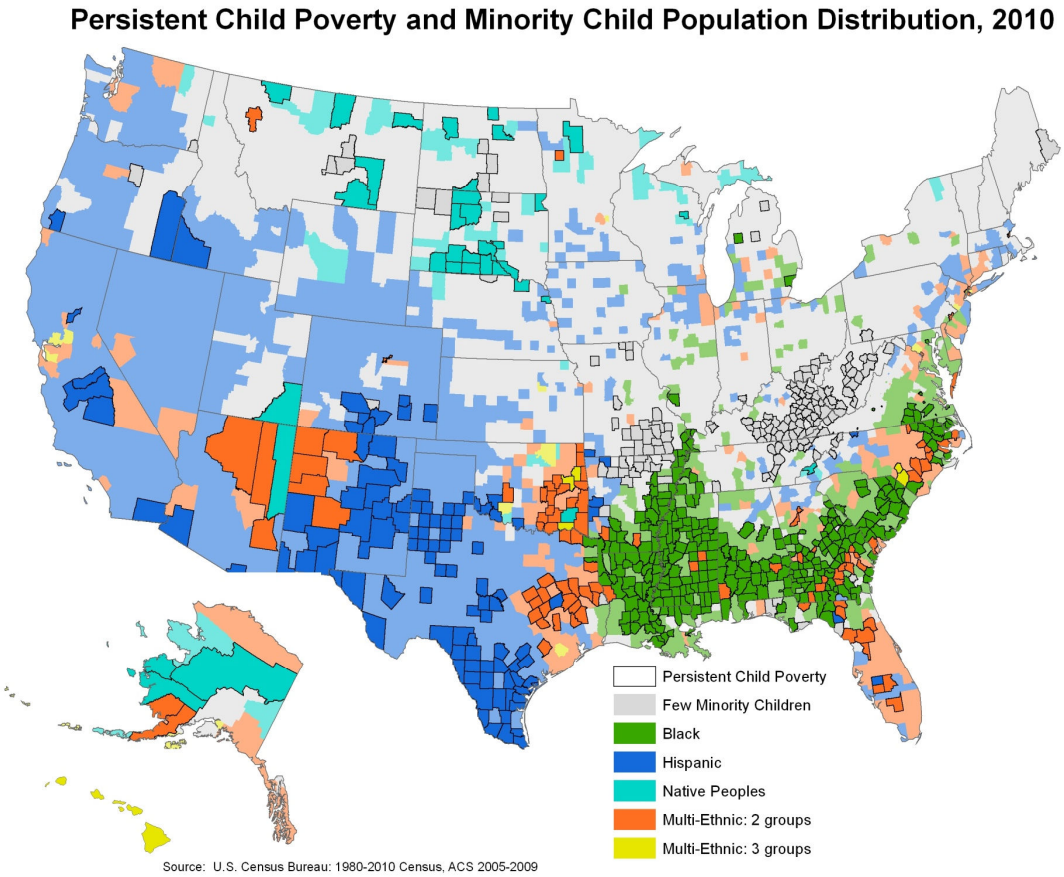
Map 2.


Occurrences of High Child Poverty, 1980-2009
None
One
Two
Three
Four
Source: U.S. Census Bureau: 1980-2010 Census, ACS 2005-2009

Map 3.


Persistent Child Poverty by Metropolitan Status, 1980-2009
Metropolitan Counties
Nonmetropolitan Counties
Metropolitan Persistent Child Poverty
Nonmetropolitan Persistent Child Poverty
Source: U.S. Census Bureau: 1980-2010 Census, ACS 2005-2009

Map 4.


Persistent Child Poverty and Minority Child Population Distribution, 2010
Persistent Child Poverty
Few Minority Children
Black
Hispanic
Native Peoples
Multi-Ethnic: 2 groups
Multi-Ethnic: 3 groups
Source: U.S. Census Bureau: 1980-2010 Census, ACS 2005-2009

References

Duncan, Cynthia M. 1999. *Worlds Apart: Why Poverty Persists in Rural America*. New Haven, Yale University Press

Johnson, Kenneth M. and Daniel T. Lichter. 2010. "Growing Diversity among America's Children and Youth: Spatial and Temporal Dimensions." *Population and Development Review* 36: 151-176

Mattingly, Marybeth J. and Jessica A. Bean. 2010. "The Unequal Distribution of Child Poverty: Highest Rates among Young Blacks and Children of Single Mothers in Rural America." *The Carsey Institute*, Issue Brief no. 18

Mattingly, Marybeth J. and Michelle L. Stransky. 2010. "Young Child Poverty in 2009: Rural Poverty Rate Jumps to Nearly 29 Percent in Second Year of Recession." *The Carsey Institute*, Issue Brief no. 17

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

U.S. Census Bureau. 2010a. *2005-2009 American Community Survey*. Table no. S1701

U.S. Census Bureau. 2010b. *2005-2009 American Community Survey*. Table nos. B11001A, B11001B, and B11001I

U.S. Census Bureau. 2010c. *2005-2009 American Community Survey*. Table nos. C15002A, C15002B, and C15002I