# CONCENTRATION OF POVERTY JN THE NEW MILLENNIUM 

Changes in Prevalence, Composition, and Location of High Poverty Neighborhoods

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# Concentration of Poverty in the New Millennium: Changes in the Prevalence, Composition, and Location of High-Poverty Neighborhoods 

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Poverty ebbs and flows due to changes in the economy, changes in demographics, and changes in human capital. In addition, the spatial organization of poverty can contribute to poverty and help to maintain it over generations. For any given number or percentage of poor families in a society, a more concentrated residential pattern of the poor will result in more poor adults living in dangerous neighborhoods with less access to information about jobs. More poor children will grow up with fewer employed role models and attend schools that, on average, function at far lower levels than those of the middle class. Physical and mental health of the poor will also suffer. While the exact extent of these effects is debated, few would dispute that there are costs to the poor of living in economically devastated ghetto or barrio neighborhoods, rather than middle-class or better neighborhoods with good schools, good connections to the labor market, and other public amenities.

For this reason, the spatial distribution of poverty has been an ongoing concern of economists, sociologists, political scientists, and urban planners. After a dramatic increase in the concentration of poverty between 1970 and 1990, there were substantial declines in the 1990s related to a booming economy and changes in housing policy that favored decentralized forms of housing subsidies. Unfortunately, the concentration of poverty has surged once again since 2000.

This issue brief uses data from three waves of the American Community Survey (ACS) five-year census tract files to examine the resurgence of concentrated poverty in detail. (See the Appendix on data and methodology

The data reveal that although concentrated poverty has returned to-and in some ways exceeded-the previous peak level of 1990, there are substantial differences in how concentrated poverty is manifested in the new millennium. In particular, it is worth noting that the residents of highpoverty neighborhoods are more demographically diverse than in the past; that smaller metropolitan areas and cities experienced the fastest growth, rather than the largest metro areas as was common in the past; and that, within cities, high-poverty neighborhoods are more decentralized and disconnected, with unknown implications for the residents of these areas. The brief also discusses why an understanding of the spatial dimension is critical to addressing the problems caused by poverty, and makes recommendations for future directions for policy.

## What the Findings Show about the Surging Concentration of Poverty

Looking at the ACS data revealed some significant findings. The most interesting discoveries concern the number and location of high-poverty neighborhoods, their changing demographics, and the shifting concentration of poverty nationwide

## Neighborhoods by Poverty Rate

As shown in Table 1, (see page 2) the number of highpoverty census tracts-those with poverty rates of 40 percent or more-fell 26.5 percent, from 3,417 in 1990 to 2,510 in 2000 . The sharp reduction in high-poverty neighborhoods observed in the 2000 census-after the economy had run at nearly full employment during the
last half of the 1990s-has since been completely reversed. The count of such tracts increased by 800 ( 32 percent) between 2000 and the 2005-2009 ACS data to nearly the level of 1990, even though these data span more than three years before the financial crisis hit in late 2008. In the latest available data, spanning 2007 to 2011, the count of high poverty tracts rose by an additional 454 ( 14 percent) to 3,764 , eclipsing the 1990 high.' Overall, the number of high-poverty tracts has increased by 50 percent since 2000. Thus, there are more zones of concentrated poverty in the most recent data than have ever been recorded before. Clearly, the recent severe recession produced more highpoverty neighborhoods, but it is important to note that the bulk of the increase largely preceded the financial crisis and the sharp rise in unemployment that followed.

The distribution of census tracts by poverty rate has changed in several other ways. First, there were fewer extreme high-poverty tracts-those with poverty rates of 60 percent or more-in the 2007-2011 data than in 1990. In practice, such neighborhoods tended to be dominated by public housing projects, where residence was restricted
to low-income families by program rules. Second, there is a somewhat different trend in "borderline" neighborhoods, those with poverty rates of 20 to 40 percent. Such neighborhoods increased between 1990 and 2000, as many high poverty neighborhoods "moved up." One might have expected the number of borderline neighborhoods to decline again once more neighborhoods moved back into the high-poverty category. But instead, the number of borderline neighborhoods has increased every year that we can observe. Between 1990 and the 2007-2011, borderline neighborhoods increased 43.1 percent, compared to 10.2 percent for high-poverty neighborhoods. As a result of these changes and the increase in the total number of tracts, the distribution of census tracts by poverty rate has changed over time, as shown in the bottom panel of Table 1. Borderline neighborhoods increased from 18.4 percent to 21.7 percent of total census tracts, while there were slight declines in the share of census tracts with higher or lower poverty rates.

## Residents of High-Poverty Neighborhoods <br> The population of high-poverty neighborhoods has also

Table 1. Census Tracts by Poverty Rate, 1990-2011

| CENSUS | TRACT POVERTY RATE |  |  |  |  | ALL HIGH POVERTY | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-19.9\% | 20-39.9\% | 40-59.9\% | 60-79.9\% | 80-100\% | 40-100\% |  |
| CENSUS |  |  |  |  |  |  |  |
| 1990 | 45,286 | 10,973 | 2,794 | 481 | 142 | 3,417 | 59,676 |
| 2000 | 51,253 | 11,241 | 2,155 | 296 | 59 | 2,510 | 65,004 |
| ACS |  |  |  |  |  |  |  |
| 2005-2009 | 48,313 | 13,328 | 2,734 | 452 | 124 | 3,310 | 64,951 |
| 2006-2010 | 53,957 | 14,823 | 2,976 | 395 | 103 | 3,474 | 72,254 |
| 2007-2011 | 52,822 | 15,700 | 3,254 | 415 | 95 | 3,764 | 72,286 |
| CHANGES |  |  |  |  |  |  |  |
| 1990-2000 | 13.2\% | 2.4\% | -22.9\% | -38.5\% | -58.5\% | -26.5\% | 8.9\% |
| 2000-2011 | 3.1\% | 39.7\% | 51.0\% | 40.2\% | 61.0\% | 50.0\% | 11.2\% |
| 1990-2011 | 16.6\% | 43.1\% | 16.5\% | -13.7\% | -33.1\% | 10.2\% | 21.1\% |
| DISTRIBUTION |  |  |  |  |  |  |  |
| 1990 | 75.9\% | 18.4\% | 4.7\% | 0.8\% | 0.2\% | 5.7\% | 100\% |
| 2000 | 78.8\% | 17.3\% | 3.3\% | 0.5\% | 0.1\% | 3.9\% | 100\% |
| 2005-2009 | 74.4\% | 20.5\% | 4.2\% | 0.7\% | 0.2\% | 5.1\% | 100\% |
| 2006-2010 | 74.7\% | 20.5\% | 4.1\% | 0.5\% | 0.1\% | 4.8\% | 100\% |
| 2007-2011 | 73.1\% | 21.7\% | 4.5\% | 0.6\% | 0.1\% | 5.2\% | 100\% |

[^0]Table 2. Population and Poor Population by Poverty Threshold Level, 1990-2011

|  | POPULATION |  |  |  | CHANGE SINCE 2000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons | \% | Poor | \% | Persons | Poor |
| 20\% POVERTY THRESHOLD |  |  |  |  |  |  |
| 1990 | 49,235,624 | 20.3 | 15,703,328 | 49.5 |  |  |
| 2000 | 49,488,516 | 18.1 | 15,046,608 | 44.4 |  |  |
| 2005-2009 | 62,612,180 | 21.3 | 19,129,454 | 48.4 | 27\% | 18\% |
| 2006-2010 | 66,954,054 | 22.6 | 20,528,429 | 50.2 | 35\% | 25\% |
| 2007-2011 | 71,755,114 | 24.0 | 22,084,705 | 51.7 | 45\% | 33\% |
| 30\% POVERTY THRESHOLD |  |  |  |  |  |  |
| 1990 | 22,060,599 | 9.1 | 9,093,430 | 28.6 |  |  |
| 2000 | 19,863,809 | 7.3 | 7,834,252 | 23.1 |  |  |
| 2005-2009 | 24,982,018 | 8.5 | 10,004,654 | 25.3 | 26\% | 17\% |
| 2006-2010 | 27,255,305 | 9.2 | 10,861,521 | 26.5 | 37\% | 27\% |
| 2007-2011 | 29,888,363 | 10.0 | 11,880,122 | 27.8 | 50\% | 38\% |
| 40\% POVERTY THRESHOLD |  |  |  |  |  |  |
| 1990 | 9,592,333 | 4.0 | 4,802,686 | 15.1 |  |  |
| 2000 | 7,198,892 | 2.6 | 3,487,015 | 10.3 |  |  |
| 2005-2009 | 9,506,534 | 3.2 | 4,687,383 | 11.9 | 32\% | 23\% |
| 2006-2010 | 10,309,844 | 3.5 | 5,049,956 | 12.3 | 43\% | 32\% |
| 2007-2011 | 11,224,438 | 3.8 | 5,484,665 | 12.8 | 56\% | 43\% |

Source: U.S. Census Bureau, 1990 Census and 2000 Census, Summary File 3; 2009, 2010, and 2011 American Community Survey, 5-Year Estimates.
risen substantially since the 2000 census, as shown in Table 2. The results for alternative poverty thresholds of 20 percent and 30 percent are shown for comparison. About one-fourth of the U.S. population, over 71 million persons, and more than half of all poor persons live in neighborhoods with poverty rates of 20 percent or more. Ten percent of the U.S. population, nearly 30 million persons, and 27.8 percent of the poor live in census tracts where the poverty rate is 30 percent or more. More than 11 million persons, slightly less than 4 percent of the U.S. population, and 12.8 percent of all poor persons lives in severely distressed neighborhoods where the poverty rate is 40 percent or more.

Clearly, the magnitude of the concentrated poverty problem depends on the threshold level selected to identify high-poverty neighborhoods. The basic trend, however, does not. Since 2000, the population of highpoverty neighborhoods, based on the 40 percent poverty threshold, increased by a troubling 56 percent. The increase is nearly as rapid iflower, more inclusive thresholds are used: the population of neighborhoods with poverty above 20
percent and above 30 percent increased by 45 percent and 50 percent, respectively. In the same time period, the U.S. population as a whole increased by only 9 percent; in other words, these increases vastly outstrip population growth. Poverty also rose during this period, both before and after the onset of the financial crisis. Still, the total number of poor persons increased by 26 percent between the 2000 Census and the 2011 ACS data release. The growth of the poor population of high-poverty neighborhoods was more than double the growth in poor persons nationally, indicating a change in the spatial organization of poverty.

While the resurgence of concentrated poverty since 2000 was a national phenomenon, there were striking regional variations in the magnitude of the increases. Table 3 (see page 4) provides sub-national details on the increases in high-poverty census tracts and population. The North Central region (the Midwest) had by far the most rapid growth of high-poverty census tracts (513 new higher poverty tracts, a 90 percent increase) and population (1.5 million, 132 percent). The Northeast, in contrast, added only 83 new tracts ( 15 percent increase) and 200,000 new

Table 3. High-Poverty Census Tracts and Populations, 2000, 2007-2011, and Change, by Region, Area Type, and Metropolitan Area Size

|  | NUMBER <br> OF <br> AREAS | HIGH-POVERTY CENSUS TRACTS |  |  | RESIDENTS OF HIGH-POVERTY <br> NEIGHBORHOODS |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2000 | 2011 | Chg. | $\%$ | 2000 | 2011 | Chg. |  |
| UNITED STATES | 1006 | 2,510 | 3,764 | 1,254 | $50.0 \%$ | $7,198,892$ | $11,224,438$ | $4,025,546$ | $55.9 \%$ |
| REGION |  |  |  |  |  |  |  |  |  |
| Northeast | 107 | 555 | 638 | 83 | $15.0 \%$ | $1,696,800$ | $1,899,244$ | 202,444 | $11.9 \%$ |
| N. Central | 297 | 570 | 1,083 | 513 | $90.0 \%$ | $\mathbf{1 , 1 5 3 , 8 2 9}$ | $\mathbf{2 , 6 7 3 , 9 7 3}$ | $\mathbf{1 , 5 2 0 , 1 4 4}$ | $\mathbf{1 3 1 . 7 \%}$ |
| South | 414 | 964 | 1,497 | 533 | $55.3 \%$ | $2,791,826$ | $4,633,442$ | $1,841,616$ | $66.0 \%$ |
| West | 188 | 421 | 546 | 125 | $29.7 \%$ | $1,556,437$ | $2,017,779$ | 461,342 | $29.6 \%$ |
| AREA TYPE AND SIZE |  |  |  |  |  |  |  |  |  |
| Metropolitan Areas | 384 | 2,274 | 3,367 | 1,093 | $48.1 \%$ | $6,452,238$ | $9,941,574$ | $3,489,336$ | $54.1 \%$ |
| More than 3 million | 11 | 728 | 767 | 39 | $5.4 \%$ | $2,358,928$ | $2,579,019$ | 220,091 | $9.3 \%$ |
| 1 to 3 million | 52 | 716 | 1,093 | 377 | $52.7 \%$ | $1,639,910$ | $2,790,790$ | $1,150,880$ | $70.2 \%$ |
| 500,000 to 1 million | 55 | 312 | 570 | 258 | $82.7 \%$ | $1,071,512$ | $1,892,221$ | 820,709 | $76.6 \%$ |
| 250,000 to 500,000 | 75 | 249 | 465 | 216 | $86.7 \%$ | $\mathbf{6 0 2 , 4 5 2}$ | $\mathbf{1 , 2 8 4 , 2 5 1}$ | $\mathbf{6 8 1 , 7 9 9}$ | $\mathbf{1 1 3 . 2 \%}$ |
| Less than 250,000 | 191 | 269 | 472 | 203 | $75.5 \%$ | 779,436 | $1,395,293$ | 615,857 | $79.0 \%$ |
| Micropolitan Areas | 576 | $\mathbf{1 4 7}$ | $\mathbf{2 9 9}$ | $\mathbf{1 5 2}$ | $\mathbf{1 0 3 . 4 \%}$ | 520,032 | 981,040 | 461,008 | $88.6 \%$ |
| Small/Rural Areas | 46 | 89 | 98 | 9 | $10.1 \%$ | 226,622 | 301,824 | 75,202 | $33.2 \%$ |

Note: Areas that have increased 100 percent or more are in bold.
Source: U.S. Census Bureau , 2000 Census, Summary File 3, and 2007-2011 American Community Survey, 5-Year Estimates.
residents (12 percent). The South and West regions were in between these two extremes.

Another striking and somewhat surprising variation is related to metropolitan area size. The problem of highpoverty ghettos and barrios is usually associated with the nation's largest cities. Yet the growth in concentrated poverty since 2000 is more pronounced in smaller metropolitan areas. Metropolitan areas with populations of more than 3 million in the 2007-2011 data, the eleven largest metro areas, had only a 5 percent increase in highpoverty tracts and a 9 percent increase in the population of those tracts. In contrast, metropolitan areas with populations of less than 1 million experienced more than a 75 percent increase in high-poverty tracts. In the seventyfive metropolitan areas that have a population of between 250,000 to 500,000 , the number of residents living in high-poverty areas more than doubled (113 percent). Micropolitan areas-those areas centered on a smaller city of 10,000 to 50,000-which in the past have had very little concentrated poverty, experienced a doubling in the number of high-poverty census tracts and a near doubling of their population in high-poverty neighborhoods. Clearly, concentration of poverty is no longer a problem confined to the nation's largest metropolitan areas.

## Racial/Ethnic Variation

High-poverty neighborhoods are disproportionately composed of members of minority groups, reflecting both the higher average poverty rates of minority groups and the continuation of racial and ethnic segregation. While this continues to be the case, the relative balance of groups is changing, as shown in Table 4 (see page 5). The number of non-Hispanic white people residing in high-poverty neighborhoods more than doubled between 2000 and 2007-2011, rising from 1.4 million to 2.9 million. In comparison, black and Hispanic residents of high-poverty neighborhoods increased 39 percent and 51 percent, respectively, over the same time period. Combined with the long-term growth in the Hispanic population, the result is that the black share of the high-poverty neighborhood population has declined from 42 percent in 1990 to 37 percent in 2007-2011. The white share increased from 20 percent to 26 percent. The Hispanic share remained constant about 30 percent. ${ }^{2}$

Regardless of the share of the population totals nationally, the norm in past decades was that individual high-poverty neighborhoods tended to be dominated by a single group. Even cities with a mixed high-poverty population would have some monolithic black ghetto census tracts and some predominantly Hispanic barrio tracts. However, tracts
dominated by a single group are less common. Figure 1 shows the breakdown of single group tracts, defined as those in which one race or ethnicity comprises 75 percent or more of the tract's population. Whereas two-thirds of highpoverty tracts were dominated by a single race/ethnic group in 1990, only about half met this standard in 2007-2011. The main reason is the declining prevalence of high-poverty tracts dominated by blacks and to a lesser extent whites. Hispanic dominated tracts actually increased slightly.

## Concentration of Poverty

The concentration of poverty is defined as the percentage of poor persons who live in high-poverty neighborhoods. As we have seen, since 2000, the population of highpovertyzones was increasing, but so was the overall national number of poor people due to both population growth and increases in the poverty rate. In other words, both the numerator and the denominator of the concentrated poverty rate increased over the decade. For the most part, the growth in the numerator was larger, thus increasing the concentration of poverty. The overall concentration of poverty has increased from 10.3 percent in 2000 to 12.8 percent in the more recent data, but it still has not returned to the 1990 level of 15.1 percent. Among non-Hispanic whites, the concentration of poverty is much lower generally, but increased faster, from 4.1 percent to 6.8 percent, and now exceeds the level of 1990.

To give a visual sense of the regional variation in the concentration of poverty across the nation, Figure 2 through Figure 5 (see page 6 and 7) show the state-level concentration of poverty, both overall and separately for non-Hispanic whites, blacks, and Hispanics. ${ }^{3}$ While the primary units of this analysis are metropolitan and micropolitan areas, there are nearly one thousand of them; state-level maps convey the regional trends more effectively. The color scheme is consistent across groups, so the maps can be compared directly. The overall concentration of poverty varies widely at the state level, from a low of 3.1 percent in Maine to Michigan, where

Figure 1. Dominant Racial or Ethnic Group in HighPoverty Census Tracts, 1990 to 2007-2011


Source: : U.S. Census Bureau, 1990 Census and 2000 Census, Summary File 3; 2009, 2010, and 2011 American Community Survey, 5-Year Estimates.
more than one in five poor persons lives in a high-poverty neighborhood. Concentration is greatest in the MidAtlantic, Midwest, Mississippi, and the Southwest. The concentration of the non-Hispanic white poor is lower across the board, as shown in Figure 3. In only four states does the concentration of white poverty exceed 10 percent, and the highest level is again in Michigan, at 11.4 percent.

The situation is dramatically different for AfricanAmericans, as shown in Figure 4. In nine states, more than one in four of the black poor live in a high-poverty neighborhood; the highest is again Michigan, at 41.8 percent. These states comprise a large and populous swath of the country starting in the rust belt and following the course of the Mississippi River. In another seven states, concentration of poverty is between 20 percent and 25 percent, and ten more have rates between 15 percent and 20 percent. Recall that in no state does concentration of poverty for whites exceed 11.4 percent. Clearly, black

Table 4. High-Poverty Neighborhood Residents, by Race/Ethnicity

|  | TOTAL | WHITE | \% | BLACK | \% | HISPANIC | \% |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 0}$ | $7,198,892$ | $1,439,889$ | $20.0 \%$ | $3,010,537$ | $41.8 \%$ | $2,236,604$ | $31.1 \%$ |
| $\mathbf{2 0 1 1}$ | $11,224,438$ | $2,932,517$ | $26.1 \%$ | $4,195,031$ | $37.4 \%$ | $3,386,471$ | $30.2 \%$ |
| Change | $4,025,546$ | $1,492,628$ |  | $1,184,494$ |  | $1,149,867$ |  |
| \%Change | $56 \%$ | $104 \%$ |  | $39 \%$ |  | $51 \%$ |  |

Source: U.S. Census Bureau , 2000 Census, Summary File 3, and 2007-2011 American Community Survey, 5-Year Estimates.

Figure 2. Concentration of Poverty, All Races and Ethnicities, 2007-2011


Figure 3. Non-Hispanic White Concentration of Poverty, 2007-2011


Figure 4. Black Concentration of Poverty, 2007-2011


Figure 5. Hispanic Concentration of Poverty, 2007-2011

and white poverty is fundamentally different when neighborhood context is taken into account.

The situation for the Hispanic poor is somewhat different, as shown in Figure 5. Ohio and Pennsylvania are the only states where poverty concentration exceeds 25 percent. Michigan, a handful of Northeastern states, Texas, and New Mexico are in the next category of 20 percent to 25 percent concentration. In most of the rest of the country, however, concentration of poverty among Hispanics is at more moderate levels.

The next set of figures maps the changes in concentration of poverty since 2000 at the state level. Figure 6 (see page 9 ) shows that the vast majority of states experienced an increase in concentrated poverty. A handful of states had decreases in concentration of poverty of less than 5 percentage points. Most had small ( 0 to 5 percentage point) or moderate ( 5 to 10 percentage point) increases in concentration of poverty. Michigan exhibits the largest increase, 11.7 percentage points. Non-Hispanic whites, as shown in Figure 7 (see page 9), exhibit a very consistent national trend of increases in concentrated poverty; only three states exhibited decreases and these were trivial. The vast majority of states saw concentration of poverty increase between 0 and 5 percentage points. Michigan and Ohio increased by a little more than 6 percentage points each.

In contrast to the consistency of the changes for whites, Figure 8 (see page 10) reveals that the statelevel changes in black concentration of poverty vary enormously. In California and New York, concentration of poverty declined about 5 percentage points for blacks, yet a number of states had very substantial increases, led by-not surprisingly-Michigan, with an increase of 23.4 percentage points in the concentration of poverty. Indeed the concentration of poverty more than doubled in Michigan between 2000 and 2007-2011. The same was true in the Carolinas, Indiana, and several other states with small black populations. On the other hand, three of the five states with the largest black populations had large percentage declines-New York (-18 percent), Georgia (12 percent), and California ( -28 percent). Hispanics, as shown in Figure 9 (see page 10), exhibit a similarly befuddling pattern, with a mixed-up pattern of increases and decreases at the state level. This wide variation in the trend of concentration among blacks and Hispanics is puzzling, given that several of the major forces affecting concentration of poverty-the financial crisis and changes in housing policy-were national in scope.

Table 5 (see page 11) presents the concentration of poverty figures for different regions and types of areas. Table 6 (see page 12) goes a step further, giving the concentration of poverty numbers for different types of areas within regions. Both tables show the concentration of poverty in 2000 and 2007-2011 and the change between those dates for all persons, whites, blacks, and Hispanics. A number of interesting facts emerge from the two tables. Concentration of poverty increased 6 percentage points in the Midwest and 3 points in the south, but was mostly unchanged elsewhere. Black concentration of poverty rose rapidly in the Midwest, but actually declined in the northeast and West. Hispanic concentration of poverty more than doubled in the Midwest, but declined by 3 percentage points in the Northeast.

Overall, concentration of poverty in metropolitan areas increased from 11.6 percent to 14.1 percent, but there was a lot of variation by metropolitan area size. Consistent with the numbers for census tracts and population, concentration of poverty rose the fastest in small to midsize metropolitan areas, those with fewer than 1 million persons. The increases were largest in the North Central region, where smaller metropolitan areas increased 7 to 11 percentage points, followed by the Northeast increasing 5 to 11 percentage points. It is important to recognize that these smaller areas had much lower rates of concentration of poverty in 2000 than larger metropolitan areas, so that on a percentage basis, these increases are enormous. For example, concentration of poverty more than doubled for metropolitan areas in the Northeast region with between 250,000 and 500,000 persons and in the North Central region for areas with 500,000 to 1 million residents

In contrast to smaller metropolitan areas, metropolitan areas larger than 1 million persons (the two top categories) had much smaller increases or even decreases in some regions and for some groups. For example, concentration of poverty in the largest metropolitan areas declined 4.7 percentage points for blacks and 7.2 percentage points for Hispanics in the Northeast, driven by declines in New York. The regional exception is metropolitan areas of 1 to 3 million persons in the North Central region, which had an average increase of 9.1 percentage points. ${ }^{4}$

Another way to visualize the trends by metropolitan area size is shown in Figure 10 (see page 13), showing scatterplots of the overall concentration of poverty by metropolitan area size in 2000 and 2007-2011. The largest metropolitan areas are about equally divided between increases (above the diagonal) and (decreases below the

Figure 6. Change in Concentration of Poverty, All, 2000 to 2007-2011


Figure 7. Change in Concentration of Poverty, Non-Hispanic White, 2000 to 2007-2011


Figure 8. Change in Concentration of Poverty, Black, 2000 to 2007-2011


Figure 9. Change in Concentration of Poverty, Hispanic, 2000 to 2007-2011


Table 5. Concentration of Poverty, by Region, Area Type, and Metropolitan Area Size, 2000 and 2007-2011

|  | TOTAL |  |  | WHITE |  |  | BLACK |  |  | HISPANIC |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2011 | Chg. | 2000 | 2011 | Chg. | 2000 | 2011 | Chg. | 2000 | 2011 | Chg. |
| UNITED STATES | 10.3 | 12.8 | 2.5 | 4.1 | 6.8 | 2.7 | 18.6 | 22.6 | 4.1 | 13.8 | 15.0 | 1.3 |
| REGION |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 13.8 | 14.3 | 0.5 | 4.8 | 7.1 | 2.3 | 24.7 | 23.6 | -1.1 | 24.9 | 21.8 | -3.1 |
| N. Central | 9.1 | 15.1 | 6.1 | 4.4 | 8.6 | 4.1 | 20.6 | 32.5 | 11.8 | 5.0 | 12.5 | 7.4 |
| South | 10.0 | 12.9 | 2.9 | 3.7 | 6.1 | 2.3 | 16.6 | 20.1 | 3.5 | 13.4 | 15.9 | 2.4 |
| West | 9.1 | 9.7 | 0.6 | 4.0 | 5.7 | 1.7 | 14.4 | 11.7 | -2.7 | 11.0 | 12.2 | 1.2 |
| AREA TYPE AND SIZE |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan Areas | 11.6 | 14.1 | 2.5 | 5.1 | 8.0 | 2.9 | 19.9 | 23.4 | 3.4 | 14.4 | 15.8 | 1.4 |
| More than 3 million | 14.8 | 13.7 | -1.1 | 5.0 | 6.5 | 1.5 | 23.7 | 20.3 | -3.4 | 16.3 | 15.0 | -1.2 |
| 1 to 3 million | 8.9 | 11.7 | 2.8 | 3.0 | 5.5 | 2.5 | 19.6 | 23.8 | 4.2 | 6.5 | 9.6 | 3.1 |
| 500,000 to 1 million | 12.9 | 17.2 | 4.4 | 5.1 | 8.9 | 3.7 | 15.2 | 25.1 | 9.9 | 23.6 | 24.6 | 1.0 |
| 250,000 to 500,000 | 10.2 | 16.0 | 5.8 | 4.9 | 9.1 | 4.2 | 19.5 | 28.1 | 8.6 | 14.2 | 21.1 | 6.9 |
| Less than 250,000 | 11.2 | 15.9 | 4.6 | 9.3 | 12.6 | 3.2 | 15.3 | 23.5 | 8.2 | 12.2 | 17.8 | 5.7 |
| Micropolitan Areas | 6.3 | 9.6 | 3.2 | 2.3 | 5.5 | 3.2 | 14.2 | 22.5 | 8.3 | 8.8 | 8.8 | 0.0 |
| Small/Rural Areas | 3.6 | 4.2 | 0.6 | 1.2 | 1.4 | 0.2 | 6.3 | 11.2 | 4.9 | 4.9 | 2.8 | -2.1 |

Note: Areas that have increased 100 percent or more are in bold.
Source: Census Bureau, 2000 Census, Summary File 3, and 2007-2011 American Community Survey, 5-Year Estimates.
diagonal). The smaller size categories, especially 250,000 to 500,000 and 500,000 to 1 million, are dominated by increases in concentration of poverty. As a result of these contrary trends, the size gradient of concentrated poverty has nearly evaporated. With the exception of the South, metropolitan area size was strongly associated with concentrated poverty in 2000, but by 2011 there is no discernible relationship between population level and concentration of poverty. Even micropolitan areas experienced a doubling of the rates of concentrated poverty for both whites and blacks in the Midwest.

The concentration of white poverty increased in virtually every region and size category, consistent with the statelevel maps. While the absolute size of the increase was relatively small, averaging 2.7 percentage points nationally, the increases were large in relation to the low level of concentrated poverty for whites at the beginning of the decade. Indeed, concentration of poverty doubled for whites in several metropolitan-size categories (shown in bold in Table 6). Blacks and Hispanics, on the other hand, had enormous increases in some areas and significant declines in others. In particular, concentration of black and Hispanic poverty more than doubled in smaller metropolitan areas and micropolitan areas in the Midwest.

A number of individual metropolitan areas have very
high levels of concentrated poverty. Table 7 and Table 8 (see page 14) show the metropolitan areas with the highest levels of concentrated poverty for blacks and Hispanics, respectively. For blacks, the list is dominated by metropolitan areas in the Midwest, such as Detroit, where 47 percent of the black poor live in high poverty neighborhoods, followed by Milwaukee (46 percent), Gary (43 percent), and so on. A few southern metropolitan areas score high as well, such as Tallahassee (39 percent), Mobile ( 37 percent), and Memphis ( 36 percent). Not surprisingly, Southwestern and Western metropolitan areas rank the highest in Hispanic concentration of poverty, exemplified by Laredo, Texas, where 55 percent of the Hispanic poor live in census tracts with poverty levels of 40 percent or more. One notable exception is Philadelphia, ranking third, where 50 percent of the Hispanic poor live in high-poverty neighborhoods.

## The Declustering of Concentration

Ironically, the concentration of poverty has itself become deconcentrated, in a sense. In 1990 and the years prior to that, most high-poverty census tracts in a metropolitan area could be found in one or two main clusters. These huge high-poverty neighborhoods-such BedfordStuyvesant, Harlem, the South Side of Chicago, North Philadelphia, and Watts-have become embedded in the public consciousness as iconic representations of urban

Table 6. Concentration of Poverty, by Region, Area Type, and Metropolitan Area Size, 2000 and 2007-2011

|  | TOTAL |  |  | WHITE |  |  | BLACK |  |  | HISPANIC |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2011 | Chg. | 2000 | 2011 | Chg. | 2000 | 2011 | Chg. | 2000 | 2011 | Chg. |
| NORTHEAST |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan |  |  |  |  |  |  |  |  |  |  |  |  |
| More than 3 million | 22.4 | 19.1 | -3.4 | 9.2 | 12.5 | 3.4 | 29.4 | 24.7 | -4.7 | 30.8 | 23.6 | -7.2 |
| 1 to 3 million | 9.2 | 11.5 | 2.3 | 3.3 | 4.9 | 1.6 | 19.5 | 21.8 | 2.3 | 14.9 | 16.1 | 1.2 |
| 500,000 to 1 million | 8.9 | 14.9 | 6.0 | 4.5 | 8.2 | 3.7 | 16.0 | 25.1 | 9.1 | 18.3 | 23.8 | 5.6 |
| 250,000 to 500,000 | 8.0 | 18.6 | 10.5 | 3.6 | 8.1 | 4.5 | 17.1 | 28.9 | 11.8 | 17.0 | 37.3 | 20.2 |
| Less than 250,000 | 8.2 | 12.8 | 4.6 | 8.1 | 12.0 | 3.9 | 5.7 | 15.4 | 9.7 | 4.9 | 9.6 | 4.8 |
| Micropolitan | 2.0 | 2.7 | 0.7 | 1.9 | 2.5 | 0.6 | 7.6 | 8.0 | 0.4 | 1.3 | 2.4 | 1.1 |
| Small/Rural Areas | 1.0 | 0.0 | -1.0 | 1.1 | 0.0 | -1.1 | 1.2 | 0.0 | -1.2 | 0.0 | 0.0 | 0.0 |
| N. CENTRAL |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan |  |  |  |  |  |  |  |  |  |  |  |  |
| More than 3 million | 13.2 | 13.3 | 0.1 | 3.4 | 4.5 | 1.1 | 25.6 | 25.8 | 0.2 | 5.0 | 6.7 | 1.7 |
| 1 to 3 million | 12.1 | 21.2 | 9.1 | 4.3 | 10.1 | 5.7 | 21.5 | 35.0 | 13.5 | 7.5 | 24.3 | 16.9 |
| 500,000 to 1 million | 7.5 | 18.2 | 10.6 | 4.8 | 11.8 | 7.0 | 14.5 | 35.2 | 20.7 | 4.0 | 13.6 | 9.6 |
| 250,000 to 500,000 | 9.3 | 17.8 | 8.5 | 6.3 | 11.5 | 5.2 | 17.9 | 39.8 | 21.8 | 6.6 | 16.5 | 10.0 |
| Less than 250,000 | 11.3 | 18.4 | 7.1 | 10.6 | 15.3 | 4.7 | 15.1 | 32.5 | 17.4 | 7.6 | 15.6 | 8.0 |
| Micropolitan | 2.9 | 7.0 | 4.0 | 2.8 | 6.1 | 3.3 | 7.1 | 17.8 | 10.7 | 1.1 | 5.1 | 4.0 |
| Small/Rural Areas | 2.4 | 2.4 | 0.0 | 0.2 | 0.2 | 0.0 | 9.7 | 9.8 | 0.1 | 0.6 | 0.8 | 0.2 |
| SOUTH |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan |  |  |  |  |  |  |  |  |  |  |  |  |
| More than 3 million | 7.6 | 10.5 | 3.0 | 1.2 | 3.2 | 1.9 | 17.2 | 15.5 | -1.7 | 2.8 | 11.5 | 8.7 |
| 1 to 3 million | 10.4 | 11.5 | 1.1 | 2.7 | 4.3 | 1.6 | 20.7 | 20.6 | -0.1 | 5.9 | 9.6 | 3.7 |
| 500,000 to 1 million | 17.2 | 19.3 | 2.2 | 5.1 | 7.1 | 2.0 | 14.4 | 21.5 | 7.2 | 37.2 | 32.6 | -4.6 |
| 250,000 to 500,000 | 12.1 | 16.2 | 4.1 | 3.8 | 7.5 | 3.7 | 20.7 | 25.7 | 5.0 | 21.0 | 23.7 | 2.8 |
| Less than 250,000 | 12.9 | 17.1 | 4.1 | 10.5 | 12.5 | 2.0 | 15.7 | 21.6 | 5.9 | 14.6 | 22.3 | 7.7 |
| Micropolitan | 7.6 | 12.1 | 4.5 | 1.6 | 5.8 | 4.2 | 14.7 | 23.2 | 8.5 | 14.7 | 11.3 | -3.4 |
| Small/Rural Areas | 3.6 | 5.2 | 1.5 | 2.0 | 2.6 | 0.6 | 6.3 | 11.4 | 5.1 | 7.5 | 3.8 | -3.7 |
| WEST |  |  |  |  |  |  |  |  |  |  |  |  |
| Metropolitan |  |  |  |  |  |  |  |  |  |  |  |  |
| More than 3 million | 12.9 | 12.0 | -0.8 | 4.4 | 5.0 | 0.6 | 19.3 | 14.3 | -5.0 | 14.9 | 14.3 | -0.6 |
| 1 to 3 million | 3.5 | 3.9 | 0.4 | 1.7 | 2.3 | 0.6 | 7.0 | 6.8 | -0.2 | 3.9 | 4.3 | 0.4 |
| 500,000 to 1 million | 13.2 | 15.2 | 2.0 | 6.4 | 8.8 | 2.4 | 22.5 | 19.4 | -3.1 | 15.8 | 19.5 | 3.7 |
| 250,000 to 500,000 | 6.7 | 12.2 | 5.5 | 6.8 | 10.6 | 3.8 | 3.1 | 11.6 | 8.6 | 6.1 | 14.3 | 8.2 |
| Less than 250,000 | 8.7 | 11.5 | 2.8 | 5.8 | 8.7 | 2.8 | 15.4 | 12.7 | -2.8 | 11.5 | 15.3 | 3.8 |
| Micropolitan | 9.5 | 9.8 | 0.3 | 3.9 | 6.2 | 2.3 | 7.5 | 16.6 | 9.1 | 3.7 | 7.4 | 3.7 |
| Small/Rural Areas | 7.4 | 5.9 | -1.5 | 0.2 | 0.2 | 0.0 | 1.0 | 1.5 | 0.5 | 0.5 | 1.6 | 1.1 |

Note: Areas that have increased 100 percent or more are in bold.
Source: Census Bureau, 2000 Census, Summary File 3, and 2007-2011 American Community Survey, 5 Year Estimates.

Figure 10. Concentration of Poverty, Metropolitan Level, by Metropolitan Area Size, 2000 and 2007-2011


Source: U.S. Census Bureau, 2000 Census, Summary File 3, and 2007-2011 American Community Survey, 5-Year Estimates.
poverty. But in the more recent data, even though the number of high-poverty census tracts has returned to levels comparable to 1990, the individual high-poverty tracts are more decentralized and less clustered.

Figure 11 (see page 16), for example, shows the Detroit Metropolitan Area's borderline and high-poverty tracts in 1990 and in 2005-2009, comparing two periods of time in which the national number of high-poverty tracts was roughly equal. There is a marked movement of the high-poverty tracts away from the downtown core, and very noticeable spatial fragmentation of the tracts in both categories. Figure 12 and Figure 13 (see pages 17 and 18) reveal the same spatial reorganization in Chicago and Dallas-Ft. Worth respectively.

Given that visual assessment of map patterns can be impressionistic, a more systematic method of evaluating the spatial distribution of tract poverty rates is needed. The Global Moran's I statistic is a measure of spatial autocorrelation; that is, spatial clustering. ${ }^{5}$ Table 9 (see page 19) shows Moran's I for census tract poverty rates for a number of major metropolitan areas using all census
tracts in each metropolitan area. The calculation compares the poverty rate of each tract with the poverty rates in contiguous tracts. In virtually all the metropolitan areas, clustering declined between 1990 and the more recent period. Out of 22 metropolitan areas with decreases in clustering, the change was statistically significant at the $p$ < 0.10 level or better in 17; in the 2 areas with increases, the change was not significant. The impression given by the maps is confirmed in this broader analysis.

One caveat that should be mentioned here is that there could be a systematic bias in the Moran's I and the visual appearance of the maps as a consequence of the difference in data collection between the long form of the Census and the American Communities Survey. The collection of data over sixty months rather than a single point in time may smooth out poverty rates in a way that should reduce clustering. Moreover, smaller samples and larger margins of error in the ACS may result in more random noise in the poverty rate data, which could have the same effect. Ultimately, this finding will have to be assessed within one data source when a longer time series of ACS data is available. On the other hand, the finding
of a more dispersed pattern of poor neighborhoods is consistent with the finding that many iconic ghettos have become essentially gentrified. ${ }^{6}$ It is also consistent with the trend towards greater levels of poverty in the suburbs. ${ }^{7}$

## A Disproportionate Burden

Despite some spreading out of high-poverty neighborhoods noted above, and an increase in the
share of the poor living in the suburbs, the overwhelming majority of the burden of concentrated poverty is borne by a small number of cities within sprawling metropolitan areas. Of the 193 high-poverty census tracts in the New York metropolitan area-officially the "New York-White Plains-Wayne Metropolitan Division"-165 are in New York City, containing more than 90 percent of the area's high-poverty neighborhood residents, as shown in Table

Table 7. Metropolitan Areas with Highest Concentration of Poverty among Blacks,* 2007-2011

|  | TOTAL | POOR |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | All census <br> tracts | High-poverty <br> census tracts | $\%$ |
| Detroit-Livonia-Dearborn | 740,857 | 255,604 | 119,241 | 46.7 |
| Milwaukee-Waukesha- <br> West Allis | 249,887 | 90,790 | 41,651 | 45.9 |
| Gary | 128,695 | 40,938 | 17,718 | 43.3 |
| Dayton | 118,593 | 36,692 | 15,310 | 41.7 |
| Louisville/Jefferson <br> County | 167,549 | 52,876 | 21,908 | 41.4 |
| Cleveland-Elyria-Mentor | 404,029 | 130,052 | 52,298 | 40.2 |
| Rochester | 115,744 | 39,323 | 15,601 | 39.7 |
| Tallahassee | 109,516 | 36,020 | 14,072 | 39.1 |
| Mobile | 139,119 | 43,854 | 16,309 | 37.2 |
| Memphis | 575,969 | 169,947 | 60,302 | 35.5 |

*Metropolitan areas with at least 100,000 black residents.
Source: U.S. Census Bureau , 2007-2011American Community Survey, 5-Year Estimates.
Table 8. Metropolitan Areas with the Highest Concentration of Poverty among Hispanics,* 2007-2011

|  | TOTAL | POOR |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | All census <br> tracts | High-poverty <br> census tracts | $\%$ |
| Laredo | 231,791 | 72,530 | 39,647 | 54.7 |
| McAllen-Edinburg- <br> Mission | 679,813 | 256,592 | 133,191 | 51.9 |
| Philadelphia | 279,249 | 88,077 | 43,686 | 49.6 |
| Brownsville-Harlingen | 347,338 | 132,341 | 64,363 | 48.6 |
| Las Cruces | 131,715 | 42,124 | 16,005 | 38.0 |
| Camden | 108,685 | 24,129 | 8,748 | 36.3 |
| Fresno | 450,052 | 137,048 | 46,013 | 33.6 |
| Visalia-Porterville | 257,929 | 79,081 | 26,371 | 33.3 |
| El Paso | 637,099 | 178,773 | 52,555 | 29.4 |
| Milwaukee-Waukesha- <br> West Allis | 140,301 | 34,363 | 10,056 | 29.3 |
| Bakersfield-Delano | 385,415 | 108,451 | 31,434 | 29.0 |
| Hartford-West Hartford- <br> East Hartford | 141,315 | 39,665 | 11,273 | 28.4 |
| Tucson | 325,318 | 82,134 | 19,290 | 23.5 |

[^1]Source: U.S. Census Bureau, 2007-2011American Community Survey, 5-Year Estimates.

10 (see page 20). Another 8 of the 193 high-poverty tracts were in Paterson, New Jersey, home to another 3.6 percent of the residents. A handful of other cities had one or two high-poverty tracts, housing small percentages of the area's high poverty population. Fully 208 cities, towns, villages, boroughs, and other miscellaneous jurisdictions of the sprawling New York metropolitan area had zero high-poverty census tracts and bore none of the burden of concentrated poverty.

The pattern is repeated in many metropolitan areas. Table 6 shows only the three largest metropolitan areas. In the Los Angeles-Long Beach-Glendale Metropolitan area, the first two named cities have 94 of the area's 111 highpoverty census tracts and more than 90 percent of the high poverty population. Eight cities have the rest, and 151 jurisdictions have zero concentrated poverty. In Chicago-Joliet-Naperville, 97 of the 115 tracts and 88 percent of the high-poverty population are in the city of Chicago. DeKalb and Joliet account for most of the rest, and 404 other places had zero high-poverty census tracts. Minneapolis and St. Paul together account for 99.6 percent of the Twin Cities metropolitan area's high-poverty population. Baltimore ( 99 percent), Philadelphia ( 96 percent), and Washington ( 92 percent) are other examples of cities with a vastly disproportionate of their metropolitan areas' concentrated poverty problem.

Figure 14 (see page 21) illustrates the issue dramatically. It shows the full extent of the Philadelphia and Camden metropolitan divisions. The borders of the two principal cities are outlined. Suburbs that have sprawled outward from these two cities for decades are also shown, including Cherry Hill and Mt. Laurel on the New Jersey side and the wealthy suburbs of the "main line" on the Pennsylvania side. The overwhelming majority of the high-poverty neighborhoods are located within the two core cities. Indeed, they dominate the city of Camden. Given the vast expanse of low-poverty areas that surround these two cities, it is not hard to imagine a different outcome if those suburbs had developed a fair share of affordable housing from the beginning.

A large contributing factor to concentrated poverty is suburban development centered on exclusionary zoning and public infrastructure subsidies. ${ }^{8}$ By developing metropolitan regions in this way, we ensure that some cities and suburbs prosper while others suffer and bear a disproportionate burden of the social and economic costs of concentrated poverty. While we cannot ensure that all children will grow up in neighborhoods that are equal, just
as we cannot expect all families to be equal, we should not be actively engaging in development policies that guarantee such vast disparities in children's neighborhood environments.

## Why the Spatial Dimension of Poverty Is Important

When poverty is discussed, the mental image that often comes to mind is the inner-city, and particularly high-poverty ghettos and barrios in the largest cities. Many people implicitly assume, incorrectly, that most of the nation's poor can be found in these often troubled neighborhoods. Yet, most poor families are more focused on their own lack of adequate resources to obtain necessary goods and services than on conditions in the neighborhood. The federal poverty line reflects this prioritization, by highlighting only the comparison of an individual family's income with a fixed dollar amount that is supposed to represent a basic level of consumption. The poverty of a family's neighbors does not factor into the calculation, and it is not included in federal poverty statistics.

For many poor families, however, the problems of poverty include concerns that have a neighborhood basis, such as the quality of housing, the effectiveness of schools, and the prevalence of crime, drugs, and violence. Neighborhood characteristics affect the day-to-day quality of life, and may also hinder poor families as they seek to cope with and work their way out of poverty. Given the susceptibility of children to peer influences, the spatial organization of poverty is particularly detrimental for poor families with school-age children.

For all these reasons, many of the landmark studies of poverty over the years have had a geographic focus, examining the problems of poverty in the context of high-poverty neighborhoods. Kenneth Clark's Dark Ghetto (1965), Elliot Liebow's Talley's Corner (1967), Gerald Suttles' The Social Order of the Slum (1968), and Lee Rainwater's Behind Ghetto Walls (1970) are just a few of the classic works that framed their exploration of the causes and effects of poverty through the lens of particular urban neighborhoods. The Kerner Commission, in discussing the causal factors of the urban riots of the 1960s, clearly indicted structural factors and systemic racial discrimination in creating black poverty, but also pointed to the role of urban ghettos. "The image of success in this world," they wrote, "is not that of the 'solid citizen,'

Figure 11. Declustering of Detroit's High-Poverty Neighborhoods


Source: U.S. Census Bureau, 1990 Census, Summary File 3, and 2005-2009 American Community Survey, 5 Year Estimates.

Figure 12. The Declustering of Chicago's High Poverty Neighborhoods


Source: U.S. Census Bureau, 1990 Census, Summary File 3, and 2007-2011 American Community Survey, 5 Year Estimates.

Figure 13. The Declustering of High-Poverty Neighborhoods in Dallas-Ft. Worth


[^2]Table 9. Spatial Autocorrelation of Poverty (Global Moran's I)

| CBSA / METROPOLITAN DIVISION NAME | 2000 | 2005/9 | CHANGE | t |
| :---: | :---: | :---: | :---: | :---: |
| Atlanta-Sandy Springs-Marietta, GA | 0.62 | 0.43 | -0.16** | 4.63 |
| Boston-Quincy, MA | 0.40 | 0.47 | -0.01 | 0.30 |
| Cambridge-Newton-Framingham, MA | 0.40 | 0.36 | -0.12* | 2.31 |
| Camden, NJ | 0.54 | 0.38 | -0.33** | 6.43 |
| Chicago-Joliet-Naperville, IL | 0.62 | 0.51 | $-0.17^{* *}$ | 7.63 |
| Dallas-Plano-lrving, TX | 0.55 | 0.41 | $-0.19^{\star *}$ | 5.45 |
| Detroit-Livonia-Dearborn, MI | 0.59 | 0.63 | -0.07+ | 1.89 |
| Fort Worth-Arlington, TX | 0.53 | 0.47 | -0.14** | 2.81 |
| Gary, IN | 0.58 | 0.62 | 0.08 | 1.09 |
| Houston-Sugar Land-Baytown, TX | 0.53 | 0.40 | $-0.11^{* *}$ | 3.53 |
| Los Angeles-Long Beach-Glendale, CA | 0.59 | 0.52 | -0.08** | 3.73 |
| Miami-Miami Beach-Kendall, FL | 0.53 | 0.46 | -0.12* | 2.27 |
| Minneapolis-St. Paul-Bloomington, MN-WI | 0.61 | 0.58 | -0.05 | 1.57 |
| Newark-Union, NJ-PA | 0.67 | 0.54 | -0.06 | 1.61 |
| New York-White Plains-Wayne, NY-NJ | 0.58 | 0.47 | -0.15** | 9.08 |
| Oakland-Fremont-Hayward, CA | 0.52 | 0.41 | -0.12** | 3.06 |
| Philadelphia, PA | 0.63 | 0.59 | 0.02 | 0.54 |
| Phoenix-Mesa-Glendale, AZ | 0.52 | 0.45 | -0.08* | 2.01 |
| Riverside-San Bernandino-Ontario, CA | 0.35 | 0.27 | -0.06 | 1.37 |
| San Franscisco-San Mateo-Redwood City, CA | 0.24 | 0.28 | -0.05 | 1.02 |
| Santa Ana-Anaheim-Irvine, CA | 0.31 | 0.27 | -0.07+ | 1.94 |
| Seattle-Bellevue-Everett, WA | 0.37 | 0.32 | -0.15** | 3.64 |
| Tacoma, WA | 0.40 | 0.31 | -0.19* | 2.48 |
| Warren-Troy-Farmington Hills, MI | 0.39 | 0.35 | -0.12 ** | 3.17 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 0.51 | 0.43 | 0.00 | 0.09 |
| Wilmington, DE-MD-NJ | 0.29 | 0.34 | 0.00 | 0.05 |

${ }^{*} p<0.01,{ }^{* *} p<0.05,+p<0.10$
Note: Conceptualization of spatial relationships method: polygon contiguity (first order).
Source: U.S. Census Bureau, 2007-2011American Community Survey, 5-Year Estimates.

Table 10. Distribution of Concentrated Poverty across Jurisdictions within Metropolitan Areas, 2007-2011

|  | HIGH-POVERTY CENSUS TRACTS | RESIDENTS OF HIGHPOVERTY AREAS | \% OF METRO AREA TOTAL |
| :---: | :---: | :---: | :---: |
| NEW YORK-WHITE PLAINS-WAYNE, NY-NJ |  |  |  |
| New York | 165 | 627,937 | 90.5 |
| Paterson | 8 | 25,064 | 3.6 |
| Passaic | 2 | 10,873 | 1.6 |
| Monsey | 2 | 7,909 | 1.1 |
| New Square | 2 | 6,668 | 1.0 |
| Jersey City | 1 | 3,996 | 0.6 |
| Yonkers | 1 | 3,883 | 0.6 |
| Ossining | 2 | 2,983 | 0.4 |
| Kaser | 2 | 2,702 | 0.4 |
| Remainder of Mount Pleasant | 1 | 558 | 0.1 |
| Totowa | 1 | 409 | 0.1 |
| Hillcrest | 1 | 316 | 0.0 |
| Remainder of Bedford | 1 | 228 | 0.0 |
| Remainder of Ramapo | 1 | 213 | 0.0 |
| Remainder of Cortlandt | 1 | 140 | 0.0 |
| 208 remaining cites/towns/places | zero | zero | 0.0 |
| LOS ANGELES-LONG BEACH-GLENDALE, CA |  |  |  |
| Los Angeles | 86 | 315,506 | 85.5 |
| Long Beach | 9 | 18,713 | 5.1 |
| Pomona | 3 | 10,302 | 2.8 |
| Palmdale | 3 | 8,160 | 2.2 |
| Huntington Park | 1 | 4,284 | 1.2 |
| Westmont | 1 | 3,667 | zero |
| Lancaster | 1 | 2,929 | 0.8 |
| Compton | 1 | 2,786 | 0.8 |
| Inglewood | 1 | 2,430 | 0.7 |
| Remainder of Los Angeles | 1 | 407 | 0.1 |
| 151 remaining cities/towns/places | zero | zero | zero |
| CHICAGO-JOLIET-NAPERVILLE, IL |  |  |  |
| Chicago | 97 | 229,302 | 87.9 |
| DeKalb | 3 | 11,092 | 4.3 |
| Joliet | 3 | 87,77 | 3.4 |
| Harvey | 2 | 5,295 | 2 |
| Chicago Heights | 2 | 3,374 | 1.3 |
| Robbins | 1 | 1,106 | 0.4 |
| Blue Island | 1 | 1,077 | 0.4 |
| Remainder of DeKalb | 2 | 653 | 0.3 |
| Markham | 1 | 289 | 0.1 |
| 404 remaining cities/towns/places | zero | zero | zero |

Source: U.S. Census Bureau, 2007-2011 American Community Survey, 5-Year Estimates.

Figure 14. Philadelphia and Camden Metropolitan Areas, 2007-2011


Source: U.S. Census Bureau, 2007-2011 American Community Survey, 5 Year Estimates.
the responsible husband and father, but rather of the 'hustler' who takes care of himself by exploiting others." They described the behavioral effects of growing up in "an environmental jungle characterized by personal insecurity and tension." ${ }^{9}$

William Julius Wilson's The Truly Disadvantaged (1987), based on the high-poverty community areas in Chicago, inspired a new generation of scholars to be concerned with the problems associated with the spatial concentration of poverty. In particular, he posited the existence of "concentration effects" that emerge when the poverty level in a neighborhood exceeded a threshold level. Wilson argued that these effects independently contribute
to the perpetuation of poverty and helped to produce neighborhoods with high levels of crime and violence and low levels of high-school completion, marriage, and labor force attachment. For example, Wilson argued that, in the high-poverty neighborhoods he studied,
children will seldom interact on a sustained basis with people who are employed or with families that have a steady breadwinner. The next effect is that joblessness, as a way of life, takes on a different social meaning; the relationship between schooling and post-school employment takes on a different meaning. The development of cognitive, linguistic, and other
educational and job-related skills necessary for the world of work in the mainstream economy is thereby adversely affected. In such neighborhoods, therefore, teachers become frustrated and do not teach and children do not learn. A vicious cycle is perpetuated through the family, through the community, and through the schools. ${ }^{10}$

Through such mechanisms, residence in high-poverty neighborhoods exacerbates the problems of poverty. For a given person with low income, residence in a ghetto or barrio community makes it harder for adults to find employment and harder for children to develop the skills to succeed. The high levels of crime, low quality of public services, and social spillover effects imposes a tremendous burden on families that the federal poverty line alone cannot measure.

## Consequences of Concentrated Poverty

In addition to the lack of role models for children, there are many other deleterious effects of living in highpoverty neighborhoods over and above the negative consequences of a lack of sufficient income. Lowincome neighborhoods have lower levels of education and employment, as well as higher rates of poverty, single-parent families, and other social problems. These characteristics may be compositional rather than causal; in other words, people with those characteristics may migrate into high-poverty areas to obtain cheap housing, or people who lack those characteristics may move out. From a policy perspective, however, the important question is whether these concentrations of poverty have dynamic effects on residents. Increasing evidence suggests that they do.

The poor are disproportionately concentrated in central cities due to the housing price gradient and exclusionary zoning, reinforced by continued racial segregation and discrimination in housing markets. While many jobs remain in the central city, especially high-skill jobs, the largest number and fastest growth of jobs appropriate for workers with lower skill levels are found in the suburbs." As a result, the poor, particularly the minority poor, suffer from a spatial mismatch that separates them from opportunities for employment and advancement.

Given racial and economic constraints on the housing mobility of low-income people, spatial mismatch may contribute to unemployment and low wages in the following ways. First, the difficulty and expense of a "reverse commute" lowers the effective wage rate and increases
the probability that the commute will be unsustainable. Second, information about jobs may be less likely to reach into inner-city neighborhoods that have few social, political, or economic ties to the suburbs. Third, employers in suburbs may exercise more racial discrimination in hiring, either because of their own biases or out of concern for customer reactions, because they operate in the predominantly white environment of the suburbs. Fourth, residents of inner-city neighborhoods may fear that they will be treated unfairly and viewed with suspicion in the suburban labor market, reducing the incentives to seek out suburban jobs and endure long commutes. ${ }^{12}$

Concentration of poverty has implications for educational outcomes because schools are creatures of neighborhoods. ${ }^{13}$ Often, the relationship is legally encoded in school attendance zone boundaries. Even for schools that draw on larger and less precise areas, such as magnet and charter schools, commuting time and transportation costs often restrict attendance to those who live relatively nearby. Schools usually closely reflect the racial and economic composition of the surrounding community. When they do differ, public schools will tend to have a greater proportion of minority and low-income children, due to life-cycle differences and differential selection into private schools and home schooling. Thus, schools are often even more segregated by race and income than is the surrounding community.

As a result, when poor families reside in different neighborhoods than middle- and upper-income families, their children will likely attend different schools than more affluent children. Over time, the schools themselves become different. Schools in poorer neighborhoods have greater needs than schools with more advantaged children. Teachers and school administrators may develop lower academic expectations when they deal predominantly with poor children, many of whom do not have resources or support in the home. In some inner-city schools, working hard and getting good grades is derided as "acting white." Even students who resist caving in to peer pressure may still be impeded in learning if enough classmates are disruptive and slow the pace of instruction. These so-called peer effects on students have been documented in a number of carefully controlled studies. ${ }^{14}$ Over and above peer effects, neighborhood conditions have spillover effects on academic achievement. ${ }^{15}$

A variety of studies have found that neighborhoods matter for child and adolescent development across a variety of developmental outcomes. ${ }^{16}$ For example, a
child's IQ at thirty-six months of age is related to the presence of affluent families in the child's neighborhood after controlling for family income, mother's education, family structure, and race. ${ }^{17}$ Girls with fewer affluent neighbors initiated sexual activity earlier and were more likely to have out-of-wedlock birth, again controlling for family characteristics. ${ }^{18}$ Children with a high proportion of poor neighbors have more behavioral problems, lower self-esteem, and more symptoms of depression. ${ }^{19}$

The concentration of poverty often makes for an unhealthy environment with few parks and recreational resources, greater pollution, more alcohol outlets, more advertising for alcohol and tobacco, and less availability of healthy foods. ${ }^{20}$ Residents of disadvantaged neighborhoods suffer higher rates of communicable diseases like tuberculosis, ${ }^{21}$ premature birth, ${ }^{22}$ self-report of poor health, ${ }^{23}$ diabetes, ${ }^{24}$ and obesity. ${ }^{25}$ Residence in economically and socially isolated census tracts increases the probability that adolescents will engage in health-risk behaviors. ${ }^{26}$

## Conclusion

Poverty has largely reconcentrated since 2000, and more people live in high-poverty neighborhoods today than ever before. At the same time, concentration of poverty in the new millennium is different than in 1990 and prior years is several significant ways. The white poor, for example, are increasingly likely to live in high-poverty areas, although African-Americans and Hispanics still make up the bulk of the population of these neighborhoods. Concentration of poverty has grown fastest in small to mid-size metropolitan areas, particularly in the Midwest. Within metropolitan areas, almost all high-poverty neighborhoods in metropolitan areas are found in a handful of citiesprincipal cities and a few older, inner-ring suburbs-while hundreds of other suburban areas have no high-poverty areas. Yet within larger cities, high-poverty neighborhoods are less clustered than they were in 1990, so that there are more pockets of poverty.

The return to high levels of concentration of poverty is troubling given the increasing body of evidence that residing in high-poverty areas has independent effects on child development, educational attainment, health, and labor market outcomes. It is unclear whether the new forms of concentrated poverty are better or worse than the past. The fact that fewer high-poverty areas are dominated by a single racial group means that there has been a slight decoupling of racial and economic isolation.

Does that ameliorate the negative effects of residing in a high-poverty neighborhood? Moreover, is it better or worse to live in a small pocket of poverty rather than a large agglomeration of high-poverty tracts? On the one hand, the person in the larger poverty area may be more isolated from the social and economic mainstream. On the other hand, the person in the smaller pocket of poverty may have a hard time accessing social services and may be less likely to be able to draw on social capital. Groups like the Bedford-Stuyvesant Restoration Corporation would be less likely to form, and would find it harder to be successful, in a more dispersed pattern of high-poverty neighborhoods.

While the differences in the location, demographic composition, and spatial patterns of high-poverty areas are interesting, the primary finding of this paper is the rapid increase in the prevalence of such neighborhoods, undoing the progress of the 1990s. More research is needed on the factors that drive these changes, capitalizing on the variation in the levels and trends in concentrated poverty among metropolitan areas. In particular, we need to understand how changes in zoning, housing subsidies, growth management, and other public policies could reduce poverty concentration. The housing units and suburban communities that we have already built are not going to go away, but that is all the more reason to fundamentally rethink how we build our metropolitan regions going forward. The population of the United States today is approximately 313 million. By 2050, the population is projected to reach about 400 million-a 28 percent increase. As a nation, we will have to build more than 30 million new housing units to accommodate this growth, and millions more to replace older housing units that are abandoned or torn down. We have to choose whether to build these new units in the same fragmented, segregated patterns as in past decades, or whether we will begin to move towards a society in which there is less socioeconomic differentiation between communities. The decisions we make or fail to make about metropolitan development will go a long way to determining whether all citizens will have access to quality housing, safe neighborhoods, economic opportunity, and quality education for their children.

## Appendix: Data and Methodology

The data used in this analysis come from several different sources. The first is the 1990 Census of Population and Housing, Summary File 3 (SF3), and the corresponding file for the 2000 Census. These data are based on the "long
form" of the Census that includes questions about income. These questions are asked of a one in seven sample of the entire country at a point in time (April 15 of the Census year). The long form was given to about 1 in 7 of the nation's 100 million households, and asked about income among many other things. ${ }^{27}$ With millions of responses, the long form generated sufficiently large samples for most of the nation's 65,000 census tracts to generate useful poverty estimates. Virtually all quantitative work on the prevalence of and trends in concentrated poverty used long form data in one level of aggregation or another: block groups, census tracts, zip codes, minor civil divisions, and so on. The current population survey and other broad national surveys simply do not have sufficient numbers of respondents to estimate poverty at the census tract level.

The "long form" of the decennial census was discontinued after the 2000 Census. The American Communities Survey (ACS) is the replacement for the Census long form. Compared to the long form, the ACS surveys a much smaller number of households in any given year. However, unlike the census, new samples are conducted each month of the year. The ACS releases data annually, but for small geographies like census tracts, the annual data release consists of sixty-month (five year) rolling averages to protect the confidentiality of survey respondents. Three waves of the ACS five-year data have now been released. These surveys represent the sixty-month periods spanning 2005-2009, 2006-2010, and 2007-2011. In other words, each new release of the ACS census tract data has four years of overlap with the previous year's release.

The benefit of the ACS approach to census tract data is that researchers will have an annually updated time trend on census tracts. There is a downside to the ACS tractlevel data, however. In general, the ACS numbers based on moving averages of sixty monthly samples are not comparable to the point-in-time estimates from longform census data. Poverty levels fluctuate, especially in small areas, and some of the extremes of poverty may be obscured by averaging over a longer period. For example, imagine a metropolitan area where there are five high poverty neighborhoods each and every month, but over the course of time, the specific neighborhoods with high poverty levels change due to gentrification displacing the original poverty areas as shown in Figure 15 (see page 25). When the data are aggregated over five years, it is possible that zero neighborhoods will have poverty rates over 40 percent, on average, over the period. Thus, despite the fact that a point in time estimate from any specific month would have shown five poor neighborhoods, the five year
moving average could show no concentration of poverty. The inescapable conclusion is that comparing the 2010 ACS census tract data to the 2000 Census long form data can be problematic and possibly misleading. The sample size per census tract is smaller as well, introducing a greater degree of sampling error in the ACS data. ${ }^{28}$ But there is no alternative, and the problem of concentration of poverty is too important to ignore because of changes in data collection procedures.

## Identifying Poor Neighborhoods

In general usage, the exact boundaries of a given neighborhood are subjective and imprecise. Exceptions include cities which have drawn official neighborhood boundaries, as in Chicago, or places where whole neighborhoods were built at once by a single developer, often surrounded by a wall. These defined neighborhoods are not consistent from place to place in terms of size or sociodemographic consistency, they do not form a complete coverage of the nation, and often there is no consistent source of data on them. For this reason, the research literature often uses census tracts as proxies for neighborhoods. Census tracts are small administrative units designated by the Census Bureau that on average had about 4,300 residents in 2000. ${ }^{29}$

A person is considered poor if he or she lives in a family in which the total family income is below the poverty threshold defined by the Census Bureau and adjusted annually for inflation. Currently, the poverty threshold for a family of four is about $\$ 23,000 .{ }^{30}$ Typically, a census tract is considered a high-poverty neighborhood if 40 percent or more of the neighborhood's residents are classified as poor using the federal poverty definition. While any specific threshold is inherently arbitrary, the 40 percent level has become the standard in the literature and has been incorporated in federal data analysis and program rules.

Data from the 2000 Census show that this threshold is a valid indication of the kind of neighborhood distress described by Wilson. Table 11 (see page 26) shows that the proportion of families with children that have a married couple family structure is inversely correlated with the neighborhood poverty level, as one would expect. However, single parent families are not the dominant family type until the neighborhood poverty level of 40 percent is attained. This table does not distinguish cause and effect, but it does indicate that in neighborhoods above the 40 percent threshold, single-parent families are the norm,

Figure 15. Possible Bias in the American Communities Survey


MONTH 0
in contrast to neighborhoods below the threshold where married-couple families are the norm.

A similar finding applies to male employment and labor force participation. The norm in most neighborhoods is that adult males work in the mainstream labor market. Table 12 (see page 26) shows, not surprisingly, that male employment and labor force participation are inversely correlated with neighborhood poverty level. Nevertheless, in neighborhoods with poverty levels below 40 percent, more than half of adult males are employed. In neighborhoods with poverty rates of 40 percent or more, the norm for males is not to be employed. The majority of males in high-poverty neighborhoods are either unemployed or not in the labor force; that is, they are not even looking for work. Table 11 and Table 12 (see page 26) provide evidence for William Julius Wilson's view of highpoverty neighborhood contexts. A child growing up in a high-poverty neighborhood lives in a world where single parent families and lack of labor force attachment are the norms. ${ }^{31}$

## Geography

The spatial concentration of poverty can be defined of as the extent to which the poor in a given geographic area disproportionately reside in very high-poverty neighborhoods within that area. The larger area can be the country as a whole, states, cities, and counties-in fact, any geographic unit larger than the neighborhood unit. While concentration of poverty can be calculated at many geographic levels, the prevalence of poverty is a function of the labor market and the availability of housing of different economic levels is a function of the housing market. Such markets do not necessarily respect the political boundaries

of cities and towns that were established and often fixed long ago. Metropolitan areas, consisting of central urban places and tightly linked suburbs, are specifically designed to capture, as well as it is possible to do so, functional local housing and labor markets. Hence, metropolitan areas have been the unit of analysis for much prior work on the concentration of poverty, and will be the central focus of this analysis.

A consistent set of geographic boundaries was used for all years in this analysis, covering the entire United States. The country is divided in three types of areas: metropolitan areas, micropolitan areas, and rural/small town areas as described below. Metropolitan areas are defined as a core county and contiguous counties that are closely related in terms of commuting patterns and other criteria. A metropolitan area has a core urban area with a population of at least 50,000 residents. It also includes all counties containing the core urban area and any adjacent counties with a high degree of social and economic integration with the urban core. Some very large metropolitan areas are split into "metropolitan divisions," such as Dallas and Ft. Worth. I consider the metropolitan divisions as separate areas in this analysis. ${ }^{32}$ Based on the criteria employed by the Census Bureau in 2010 and counting the divisions as separate metropolitan areas, there are 384 metropolitan areas comprising 84 percent of the U.S. population in 2010. The largest is the New York metropolitan division, with a population of 11.6 million, and the smallest is Carson City, Nevada, with a population of 55,000 as of the 2010 Census.

While most of the population lives in metropolitan areas, there are many significant cities that are not part of larger

Table 11. Family Structure by Neighborhood Poverty Level, 2000

| NEIGHBORHOOD <br> POVERTY | FAMILY STRUCTURE (\%) |  |  |
| :---: | :---: | :---: | :---: |
|  | MARRIED <br> COUPLE | MALE <br> HEADED | FEMALE <br> HEADED |
| 0 to 4.9\% | 85.2 | 3.9 | 10.9 |
| 5 to 9.9\% | 76.7 | 6.1 | 17.2 |
| 10 to $14.9 \%$ | 70.9 | 7.3 | 21.8 |
| 15 to $19.9 \%$ | 66.0 | 7.8 | 26.2 |
| 20 to $29.9 \%$ | 59.2 | 8.1 | 32.7 |
| 30 to $39.9 \%$ | 50.0 | 8.1 | 41.9 |
| 40 to $49.9 \%$ | 43.3 | 7.7 | 48.9 |
| 50 to $59.9 \%$ | 36.3 | 6.5 | 57.1 |
| 60 to $69.9 \%$ | 32.8 | 5.2 | 62.0 |
| 70 to $79.9 \%$ | 14.6 | 4.4 | 81.0 |
| 80 to $89.9 \%$ | 8.0 | 1.3 | 90.7 |
| 90 to $100 \%$ | 11.2 | 4.4 | 84.4 |
| Total | 72.9 | 6.2 | 20.9 |

Note: Includes all families with children age 0-18.
Source: U.S. Census Bureau, 2000 Census, Summary File 3.
metropolitan agglomerations. These so-calledmicropolitan areas have an urban core of at least 10,000 but less than 50,000 persons. These are cities like Lebanon, New Hampshire, Gallup, New Mexico, and Eureka, California. As is the case with metropolitan areas, a micropolitan area includes the central counties and adjoining counties that are closely linked to it. The largest micropolitan area is Seaford, Delaware, with a population of 194,000 , and the smallest is Tallulah, Louisiana, with a population of 12,000 . There are 576 micropolitan areas that included about 10 percent of the U.S. population.

The remaining 6 percent of the U.S. population live in small towns and rural areas. For the purpose of completeness, these areas are included in the analysis, separately by state. ${ }^{33}$ Texas has the largest small town/rural population, with 1.4 million persons not living in either a metropolitan or micropolitan area. Four states-Connecticut, Delaware, New Jersey, Rhode Island-are sufficiently urban that there are no counties and zero persons so classified.

In this geographic scheme, every U.S. county is therefore classified as metropolitan, micropolitan, or part of the small town/rural remainder. These definitions are then applied retroactively to the past census data from 1990 and 2000. While the boundaries of cities and towns change frequently due to mergers, splits, and annexations, county boundaries

Table 12. Labor Force Status by Neighborhood Poverty Level, 2000

| NEIGHBORHOOD <br> POVERTY | LABOR FORCE STATUS |  |  |
| :---: | :---: | :---: | :---: |
|  | EMPLOYED | UNEMPLOYED | NOT IN <br> THE LABOR <br> FORCE |
| 0 to 4.9\% | 74.4 | 2.4 | 23.2 |
| 5 to 9.9\% | 69.9 | 3.2 | 26.9 |
| 10 to 14.9\% | 65.3 | 4.0 | 30.7 |
| 15 to $19.9 \%$ | 62.2 | 4.8 | 33.0 |
| 20 to $29.9 \%$ | 57.5 | 6.1 | 36.4 |
| 30 to $39.9 \%$ | 51.3 | 8.0 | 40.7 |
| 40 to $49.9 \%$ | 46.0 | 9.4 | 44.7 |
| 50 to $59.9 \%$ | 41.5 | 11.3 | 47.2 |
| 60 to $69.9 \%$ | 39.0 | 10.8 | 50.2 |
| 70 to $79.9 \%$ | 34.7 | 13.7 | 51.6 |
| 80 to $89.9 \%$ | 34.4 | 9.9 | 55.6 |
| 90 to $100 \%$ | 17.9 | 18.8 | 63.3 |
| Total | 66.5 | 4.0 | 29.5 |

Source: U.S. Census Bureau, 2000 Census, Summary File 3.
change only rarely. Thus, the state and county codes of the 2010 inventory of metropolitan and micropolitan areas can be retroactively applied to the census tract data of previous years. ${ }^{34}$

For some purposes, it is useful to look at the political jurisdictions that make up metropolitan areas. There is a bewildering array of legal settlement types, governed by state laws and categorized in different ways by the Census Bureau for statistical purposes. Incorporated municipal entities-cities, towns, and other forms of governmentare called "places" by the Census Bureau. Places-the boundaries of which are determined politically-often do not nest neatly within other geographic borders; a case in point is New York City, which spans five counties. Census tracts, the neighborhood units for this work, are often split across the boundaries of places. To make matters worse, some areas are unincorporated, or are treated as such by the Census Bureau even though they seem to have a functioning government. Thus, the "place" concept does not form a complete coverage of the nation. "Minor civil divisions" are an alternative statistical geography consisting of counties or parts of counties corresponding to local governance structures. But these entities chop up larger cities, because they are required to nest within counties; New York City, for example, appears as five separate units in this scheme. For the local jurisdiction analysis presented
in Table 10, I constructed a synthetic geography, consisting of places where they exist and are tabulated by the Census Bureau (summary level 160), supplemented by minor civil divisions for areas not tabulated in the place data (summary level 070, excluding those within recognized places). This forms a mutually exclusive and collectively exhaustive set of local-level boundaries for the nation as a whole.

In the analysis of cities and towns within metropolitan areas, split census tracts must be accounted for. In this analysis, census tracts are categorized as high-poverty or not based on the whole-tract poverty rate. The populations within them are allocated to city or town in which they are located.

## Race and Ethnicity

Comparisons over time based on census data are complicated by changes in way the Census Bureau reports race and ethnicity. In 2000 and beyond, the Census Bureau allows respondents to choose more than one race category. In practice, fewer than two percent of non-Hispanic persons choose more than one race. The census considers race to be a separate issue from Hispanic origin. Since the questions are asked separately, persons of Hispanic origin can be of any race. In practice, most persons who identify themselves as Hispanic identify their race as either "White" or "other race." In this analysis, "Hispanic" refers to anyone who identified as "Hispanic" regardless of race. "White," "Black," and "Asian" refers to non-Hispanic persons who identified those categories as their only racial group. Thus, multi-racial persons are not included in the analysis. In the 1990 data, poverty status is not available for non-Hispanic whites, so it is estimated. ${ }^{35}$


#### Abstract

About the Author Paul A. Jargowsky is a professor of public policy and director, Center for Urban Research and Urban Education, at Rutgers University-Camden, a senior research affiliate, National Poverty Center, at the University of Michigan, and a Century Foundation Fellow. He has been involved in policy development at both the state and federal levels and was a visiting scholar at the U.S. Department of Health and Human Services, where he helped design the simulation model used for welfare reform planning. His book, Poverty and Place: Ghettos, Barrios, and the American City (Russell Sage Foundation, 1997), is a comprehensive examination of poverty at the neighborhood level in U.S. metropolitan areas between 1970 and 1990.


## Notes

1. The total number of census tracts also increased by 11 percent from 2000 to 2007-2011, due to tracts being split in areas of population growth in an effort to keep the average population of census tracts stable. These new tracts, however, do not account for new high-poverty tracts, since they are usually formed in growing and prosperous areas in the outer suburbs. Indeed, high-poverty tracts are more likely to be joined than split due to population declines.
2. The number of white residents of high-poverty areas may be inflated in neighborhoods composed primarily of college students in towns with large universities, such as College Station, Texas, Gainesville, Florida, and Bloomington, Indiana. Students living in dorms are already excluded from this analysis, but students in private housing are not. There is no easy way to disentangle students who are not living in group quarters, since many universities are located in bona fide high-poverty areas, such as Temple University in North Philadelphia, and students sometimes seek affordable housing in existing low-income neighborhoods. While the number and population of white high-poverty neighborhoods may be in a sense overstated due to "student ghettos," the trend over time is not. In fact, the rate of increase in the number of white residents of high-poverty neighborhoods is substantially higher in areas that have a less than average percentage of residents enrolled in college or graduate school than in those with enlarged student populations.
3. Alaska and Hawaii are omitted for space reasons. Concentration of poverty is low or zero for most groups in these two states.
4. The category includes the Cleveland, Detroit, and Indianapolis metropolitan areas, which all experienced large increases in concentration of poverty.
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of Neighborhood on Dropping Out of School and Teenage Childbearing."
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27. The remaining households received the short form, which asks for only a handful of data items and no economic information. Starting with the 2010 Census, households receive only the short form.
28. The average unweighted sample count in Summary File 3 of the 2000 Census was 664 (from Table P2) compared to 387 from the 2007-2011 ACS data (Table B00001).
29. "Census tracts are small, relatively permanent geographic entities within counties (or the statistical equivalents of counties) delineated by a committee of local data users. Generally, census tracts have between 2,500 and 8,000 residents and boundaries that follow visible features. When first established, census tracts are to be as homogeneous as possible with respect to population characteristics, economic status, and living conditions." (United States Bureau of the Census, Geographic Areas Reference Manual [Washington, D.C.: U.S. Department of Commerce, Economics and Statistics Administration, 1994].)
30. See "How the Census Bureau Measures Poverty," United States Census Bureau website, http://www. census.gov/hhes/www/poverty/about/overview/measure.html.
31. An alternative approach to measuring the concentration of poverty is to measure the exposure of the poor to poverty using the Lieberson exposure/isolation index, P* (Douglas S. Massey and Mitchell L. Eggers, "The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970-1980," American Journal of Sociology 95, no. 5 [1990]: 1153-88; Douglas S. Massey and Mary J. Fischer, "How Segregation Concentrates Poverty," Ethnic and Racial Studies 23, no. 4 [2000]: 670-91). The advantage of this measure is that it "makes use of all information about a group's distribution across income categories and neighborhoods, leading to a more accurate description of the spatial situation of the poor" (Massey and Fischer, "How Segregation Concentrates Poverty," 675). The disadvantage is that it does not reflect the concern that concentration effects emerge when neighborhood poverty is above a critical threshold (Paul A. Jargowsky, Poverty and Place: Ghettos, Barrios, and the American City [New York: Russell Sage Foundation, 1997], 23; Wilson, The Truly Disadvantaged).
32. For example, the NewYork-Northern New Jersey-Long Island metropolitan area spans the states of New York, New Jersey, and Pennsylvania, and is comprised of four metropolitan divisions: 1) New York-White PlainsWayne, with a population of 11.6 million; 2) Nassau Suffolk, with a population of 2.8 million; 3) Edison-New Brunswick, with a population of 2.3 million, and 4) Newark-Union, with a population of 2.1 million. Each of these divisions is larger than most metropolitan areas and they are sufficiently distinct that it makes sense to treat them separately in the analysis.
33. Unlike the other two categories, this residual category may consist of non-contiguous counties.
34. The exceptions are Broomfield County, Colorado, which was created out of parts of two other counties; the county of Clifton Forge, Virginia, which was merged into another county; and Miami-Dade County, Florida, which was merely rename and but received a new identification code as a result. In this analysis, the tracts in Broomfield County tracts are consistently assigned to their metropolitan area as of the 2000 Census. The Clifton Forge and Miami census tracts are recoded to the new county values.
35.The number of non-Hispanic white poor persons in 1990 is estimated by subtracting the identified Hispanic poor and the poor of other races from the total number of poor persons, and likewise for the nonpoor.

[^0]:    Source: U.S. Census Bureau, 1990 Census and 2000 Census, Summary File 3; 2009, 2010, and 2011 American Community Survey, 5-Year Estimates.

[^1]:    *Metropolitan areas with at least 100,000 Hispanic residents.

[^2]:    Source: U.S. Census Bureau, 1990 Census, Summary File 3, and 2007-2011 American Community Survey, 5 Year Estimates.

