

Community Well-Being and the Great Recession

BY ANN OWENS AND ROBERT J. SAMPSON

The effects of the Great Recession on individuals and workers are well studied. Many reports document how and why individuals became more likely to be unemployed, to be in poverty, or to face foreclosure.

But how have neighborhoods fared during the Great Recession? Although most research has focused on individual-level outcomes, many of the conventional narratives about the Great Recession are in fact neighborhood-level narratives. In discussing the housing crisis, for example, we don't just focus on individuals facing foreclosure but on entire neighborhoods that were hard hit and with house after house on the same street all in foreclosure. Likewise, the unemployment crisis is often understood to be spatially clustered, with areas that depend disproportionately on construction, manufacturing, and other heavily-affected industries especially hard hit.

These narratives suggest a country increasingly divided into advantaged and disadvantaged neighborhoods. It matters that neighborhood-level inequality may be increasing because social science research has shown that aggregate neighborhood characteristics—beyond the traits of individuals themselves—influence the well-being and future life chances of residents. Declining neighborhood contexts could thus be a key channel through which the Great Recession has affected individuals and families and will continue to affect them into the future. If poor children are now growing up in increasingly disadvantaged neighborhoods with more unemployment, poverty, and abandoned houses, the recession may have quite profound long-term negative effects.

But we simply don't know if the Great Recession has indeed had this inequality-increasing effect at the neighborhood level. This article thus poses these neighborhood-level questions: To what extent have the impacts of the recession been spatially concentrated? Has this been a recession in which all communities have suffered roughly equally? Or has the pain been especially borne by some communities? In answering these questions, we pay particular attention to how communities that were disadvantaged before the recession fared, asking whether historically poor communities were especially hard hit.

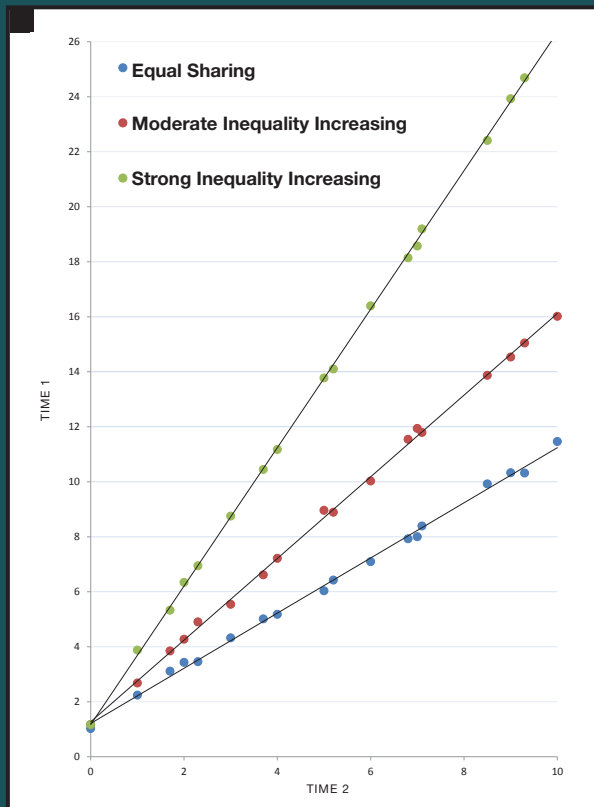
Monitoring the Rise of Neighborhood Inequality

These questions can be addressed by comparing the same neighborhoods before and after the recession on key indicators. It's useful to distinguish between three possible scenarios of how the pain of the recession is (or is not) equally shared, all illustrated in Figure 1.

Equal-sharing outcome: In the first scenario (blue dots), the equal-sharing outcome, rates of unemployment, poverty, or housing vacancy, increase by the same amount in each community. For example, if the recession affected community-level unemployment rates equally, unemployment would increase by roughly the same amount, say one point, in each community. Figure 1 shows that a community with 1% pre-recession unemployment (x-axis) has a post-recession unemployment rate of 2% (y-axis). A neighborhood with 5% pre-recession unemployment has a post-recession unemployment rate of 6%. Therefore, while the most-disadvantaged communities remain so, the absolute differences between the most- and least-disadvantaged communities remain the same before and after the recession (here, 4 percentage points). This type of recession effect does not reduce inequality but preserves the inter-community differences that prevailed before the recession.

Moderate inequality-increasing: The second scenario (red dots) operates multiplicatively. Neighborhoods with higher initial rates of, for example, unemployment, experience larger increases in the unemployment rate.¹ Figure 1 presents a scenario in which the unemployment rate increases by a factor of 1.5 (with an additive increase of 1 point, so $y=1+1.5x$). For example, a neighborhood with 1% unemployment pre-recession would have a post-recession unemployment rate of 2.5% while a neighborhood with 5% unemployment pre-recession would have a post-recession unemployment rate of 8.5%. Therefore, the absolute difference between high- and low-unemployment communities would grow (here, from 4 to 6 points), and inequality would increase. The recession appears to have operated in this type of multiplicative fashion for other phenomena, with the most disadvantaged groups bearing the brunt of the recession's impacts (see <http://www.recessiontrends.org> for details).

FIGURE 1. Three Ideal-Typical Ways of Reproducing Spatial Inequality



Strong inequality-increasing: The final scenario in Figure 1 (green dots) differs from the previous one only due to its larger multiplicative factor (the slope is 2 rather than 1.5). When the multiplicative factor is very large, there's an especially large penalty borne by communities with high baseline rates.

In this article, we investigate how strongly a community's initial level of disadvantage determines the recession's impact. In Figure 1, each dot representing a neighborhood is very close to the fitted line, representing scenarios in which a neighborhood's initial level of disadvantage strongly dictates its outcome during the recession. If the relationship between initial conditions and the impact of the recession is not as strong (if the dots along the line were scattered more widely), it suggests that other variables influence which communities suffered most during the recession.

We examine how communities fared both in terms of the magnitude of the relationship between pre- and post-recession conditions (the slope of the line) and how precisely pre-recession conditions predict the impact of the recession (the degree of scatter around the line). The magnitude of the relationship reveals the extent to which the recession is inequality-increasing, with a slope over 1 indicating that poor communities bear more of the brunt than rich communities. The precision of the relationship indexes the role of neighborhood characteristics aside from initial disadvantage in determining a community's fate.

We examine community-level poverty, unemployment, and vacancy rates before and after the onset of the Great Recession in late 2007 and the economic collapse in the fall of 2008. Our

results show that the economic well-being of communities, important contexts for individual economic, social, and physical well-being, declined during the economic downturn in uneven ways. Just as we now know that the Great Recession operated to make the rich richer and the poor poorer, we show here that the Great Recession also led to increasing inequality at the neighborhood level.

Data and Procedures

Our analyses are constrained by how the government collects census data. Past research often defines neighborhoods using the *census tract*, an administratively defined unit of about 4,000 residents on average. The most recent census data on tract-level economic characteristics come from the American Community Survey (ACS) aggregated across the 5-year period from 2007-2011. This is a problem for studying the recession because the available data combine years before and after the recession began.

Because we wish to explore the effects of the Great Recession, we must therefore define neighborhoods in a different way. Our solution is to examine another Census-defined statistical area—Public Use Microdata Areas (PUMAs). PUMAs are geographically contiguous areas with at least 100,000 residents. Although PUMAs are clearly larger than the census tracts or zip codes (average population of 30,000) used in past research, they delineate all places in the U.S. into smaller geographic areas that are proxies for local communities. We compare 3-year estimates from the ACS that aggregate data from 2005 to 2007 (defined as pre-recession) with the latest 3-year ACS estimates currently available, from 2009 to 2011 (defined as post-recession).

We first present national estimates. Then, to explore variation in community patterns within cities, we present results for New York, Los Angeles, and Chicago. Focusing on particular cities allows us to explore some of the factors other than a community's initial disadvantage that shaped how it fared during the recession. Taken in combination, our article thus presents a national, big-city, and local perspective on community experiences in the Great Recession.

Community-Level Patterns

We begin with simple descriptive maps (see Figure 2) of the spatial distribution of changes in community well-being and then turn to a more formal discussion of the trends in inequality (see Figure 3). Figure 2 presents changes in poverty, unemployment, and vacancy rates for all PUMAs in the U.S. from 2005-07 to 2009-11.² Given the role of the foreclosure crisis in this recession, the vacancy rate provides an important indicator of community well-being in terms of the physical and social state of the neighborhood. High vacancy rates are associated with increased crime rates and decreased rates of neighborhood cohesion and residential stability, which influence individual well-being and community-level economic and social changes. When we compare the pre-recession and post-recession periods, we find that the poverty rate (top) increased in 84% of PUMAs (red and yellow shaded areas), the vacancy rate (middle) increased in 74% of PUMAs, and the unemployment rate (bottom) increased in 97% of PUMAs. On average, the changes were modest—about a 2 percentage point increase for poverty rates, 1 percentage point

for vacancy rates and, perhaps most troubling, nearly 4 percentage points for unemployment. The simple conclusion: In most communities, community-level economic well-being has clearly declined alongside families' and individuals' economic hardships, all in a relatively short time.

That the maps display recession-induced decline is hardly surprising. We are more interested in the spatial distribution of that decline. Were there any protected pockets? PUMAs in the middle of the country, from Texas to North Dakota, typically fared better, evidenced by the relative prevalence of areas shaded green (indicating declines). Communities in Michigan, Florida, and several Western states fared particularly poorly in the recession, and these are areas where foreclosures were concentrated as well (though sparsely populated states have few PUMAs, masking declines within them). When it comes to unemployment, however, there's less green in the "protected" midsection of the country, suggesting that labor market problems were widely shared and came closer to being a true across-the-board experience.

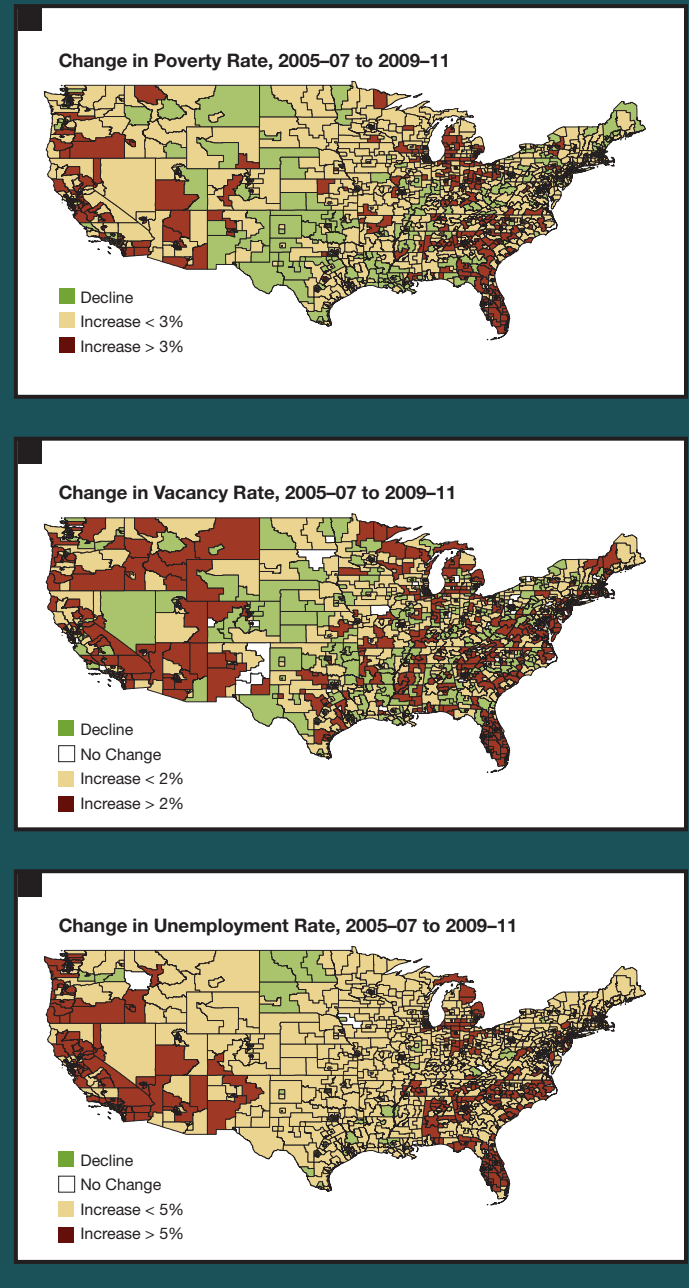
These maps tell us about the regional distribution of the recession's effects. We turn next to the question of whether disadvantaged PUMAs were hardest hit and thus became even more disadvantaged relative to advantaged PUMAs. Figure 3 presents scatterplots comparing poverty, vacancy, and unemployment rates in 2005-07 (on the x-axis) and in 2009-11 (on the y-axis). The first and very important conclusion: These plots reveal striking persistence in community-level inequality throughout the recession—PUMAs with the lowest economic profiles in 2005-07 remain at the bottom in 2009-11, while the well-off communities remain at the top.

But has inequality increased? The reference line in each scatterplot has a slope of 1, representing the "equal sharing" scenario of Figure 1. Departures from this line reveal if recession effects have increased inequality. If the equal-sharing process played out, dots would fall into a line with a slope of one that was shifted on the y-axis by an equal amount for all communities. Instead, we find that the slopes for poverty, unemployment, and housing vacancies are all slightly larger than one. For didactic purposes, Figure 1 presents the possibility of extremely steep slopes, but it's unlikely that a single recession, even an extreme one, could generate such a precipitous increase in neighborhood-level inequality.

We find that poverty rates increased by a multiplicative factor of 1.004.³ Therefore, poverty rate increases are borne fairly equally across communities during the recession, though they increased slightly more in neighborhoods with higher pre-recession poverty rates. Vacancy rates increased multiplicatively by a factor of 1.04, indicating a slight inequality-increasing effect of the recession.

The unemployment scatterplot departs most strikingly from the reference line, indicating the stronger inequality-increasing effects of the recession. Unemployment increased by a factor of 1.10 during the recession. While Figure 2 showed widespread increases in unemployment across the U.S., the magnitude of the increases was higher in places that initially had high unemployment rates, increasing inequality. Neighborhoods with 1% unemployment pre-recession have 1.1% unemployment post-recession, while neighborhoods with 10% unemployment

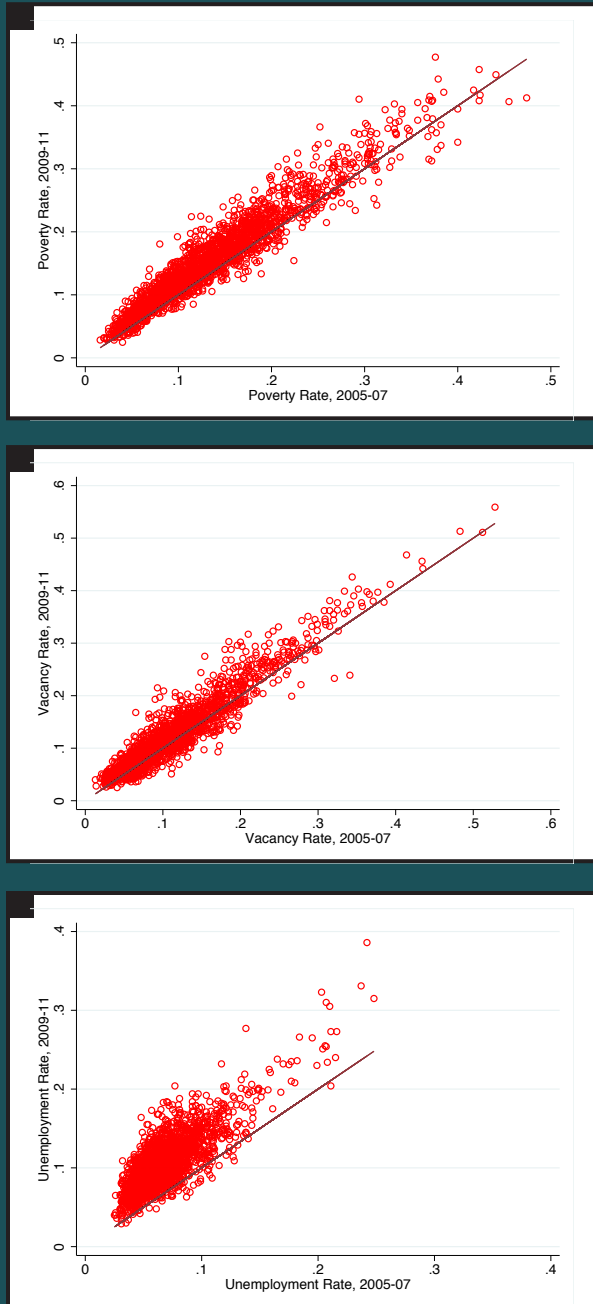
FIGURE 2. Poverty, Vacancy, and Unemployment Rates Before and After the Great Recession



pre-recession have 11% unemployment post-recession, increasing the absolute difference between the two neighborhoods by nearly 1 point. The inequality-increasing impact on unemployment likely arises because industries that were especially hard hit by the Great Recession, such as manufacturing, were typically industries that were already in trouble. In effect, the Great Recession accelerated a deindustrialization process that was already underway, and manufacturing-intensive PUMAs, which had preexisting high unemployment rates, experienced disproportionate increases in unemployment.

As is evident in Figure 3, there is some scatter around these lines, suggesting that factors besides initial poverty, vacancy, and unemployment rates shaped the recession's effect on these

FIGURE 3. PUMA-level Poverty, Vacancy, and Unemployment Rates in 2005-07 and 2009-11



characteristics. What were these other factors? In exploratory analyses, we found that (a) increases in poverty, vacancy, and unemployment rates from 2005-07 to 2009-11 were higher in communities with higher initial proportions of Hispanic and black residents, and (b) unemployment rates increased more in communities with higher initial proportions of immigrants.⁴ These results imply that the scatter in Figure 3 arises in part because communities with Hispanics, blacks, or immigrants suffered disproportionately even when those communities didn't have especially high initial poverty, vacancy, or unemployment rates. We explore this further in the next section.

Overall, we conclude that the recession did increase inequality among neighborhoods, particularly with respect to unemployment. PUMAs with especially high poverty, unemployment, and housing vacancy rates before the recession pulled away during the recession and became even more disadvantaged in absolute terms. That minority and immigrant communities were particularly affected demonstrates that the recession has exacerbated long-standing economic and racial inequalities.

Unemployment in Big-City Communities during the Great Recession

Our national results describe an overall trend of growing community inequality during the recession. We now turn to the “big three” of U.S. cities to explore how the recession impacted unemployment within New York, Los Angeles, and Chicago. We focus on unemployment because the recession's inequality-increasing effect was largest for unemployment and because pre- and post-recession unemployment rates were most scattered around the trend line, suggesting that other characteristics, like minority and immigrant composition, also determined which communities were hardest hit by the recession.

Figure 4 presents the change in unemployment rates from 2005-07 to 2009-11, shaded in Figure 2, for PUMAs in the New York (left), Los Angeles (middle), and Chicago (right) metropolitan areas. PUMAs where more than 50% of the population was black or Hispanic pre-recession (majority-minority communities) are identified with black triangles. Minority areas on average tend to have higher levels of poverty and unemployment than white communities—the question here is whether the Great Recession exacerbated this inequality.

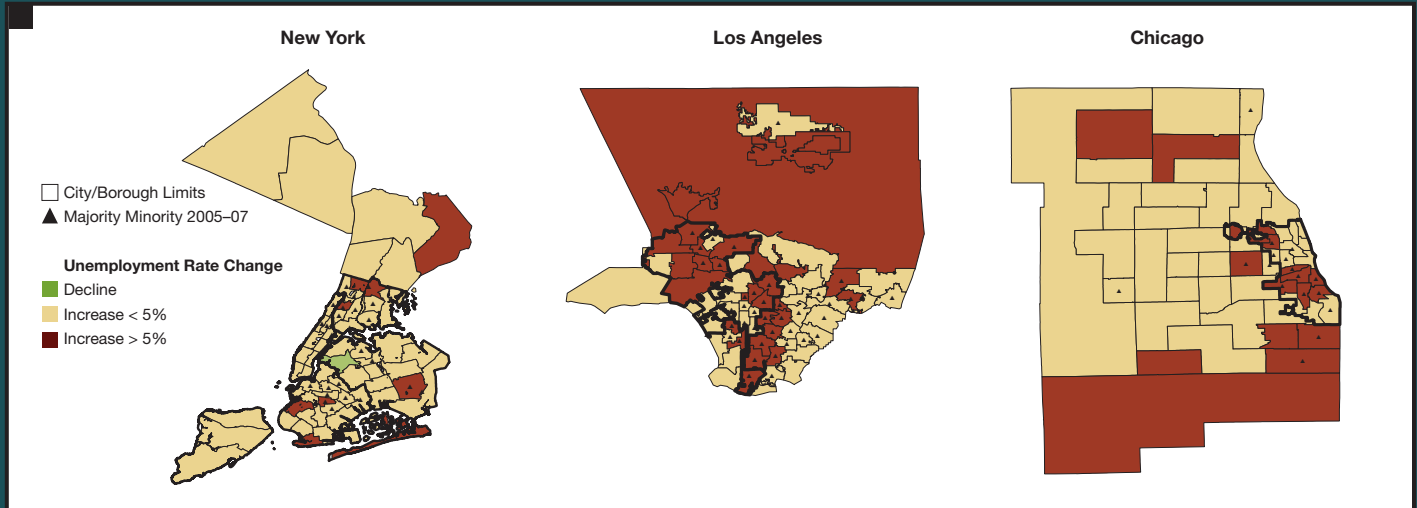
Starting with New York, Figure 4 shows that of the 8 PUMAs with large increases in unemployment rates (shaded red), 5 were majority-minority communities prior to the recession. The relationship between community racial composition and the impact of the recession is stronger in Los Angeles, which had the most majority-minority communities—41 of 66 total PUMAs. In 22 of these 41 PUMAs, the unemployment rate increased by over 5 points. Of the 29 PUMAs with large increases in unemployment rates, 76% were majority-minority communities.

The pattern holds in Chicago: of the 16 PUMAs with large increases in unemployment rates, 10 were majority-minority. Unemployment increased in every PUMA in Chicago, but most strikingly in the historically disadvantaged “black belt” on the city's south side. Evidence from smaller “community areas” in Chicago provides further evidence that community-level disadvantage endured and deepened.⁵ Sampson (2012: 405) finds that community areas with the highest levels of concentrated disadvantage in 2000 had the highest foreclosure rates during the recession.⁶ This further emphasizes our main result: on average, historically disadvantaged neighborhoods experienced a disproportionate deterioration in their conditions during the recession.

Communities, Inequality, and the Great Recession

The story of the Great Recession has largely been told in individual terms. Important research documents the burgeoning numbers of long-term unemployed, the rising poverty rate, and the growing number of homeowners facing foreclosures.

FIGURE 4. Changes in the Unemployment Rate by Community Racial Composition



The purpose of this article has been to turn our attention to how neighborhoods fared. To what extent has the Great Recession hit already-disadvantaged neighborhoods especially hard and thus increased neighborhood-level inequality?

Our analyses show that communities, like families and individuals, have suffered economic hardships during the Great Recession and that these hardships were distributed unequally. Many of the nation's most vulnerable communities have borne the brunt of the economic crisis, as poverty, vacancy rates, and particularly unemployment rates increased more in disadvantaged and minority neighborhoods.⁷ The simple result is a growing divide between the have and have-not communities.

Should we care? Yes. The large body of social science research on the importance of neighborhoods as a social context means that increased economic disadvantage in disadvantaged neighborhoods will further reduce the well-being of poor fami-

lies and individuals. Beyond its direct effects on individuals, the Great Recession has shaped the economic contexts where Americans live and perpetuated and deepened community inequality, potentially leading to further negative impacts for those individuals living in disadvantaged communities. Because neighborhood effects can take time to register, this legacy of the Great Recession may only be gradually revealed over the next decades and generations.

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End Notes

1. A slope less than one suggests that the recession is reducing spatial inequality. We don't represent this possibility in Figure 1.
2. The maps are shaded to indicate decline, no change, moderate increase, and large increase (distinguished by the 75th percentile of each change indicator).
3. Excluding the poorest 5% of PUMAs, the slope for poverty is 1.03, suggesting poverty

increased multiplicatively in most communities but not the very poorest.

4. Regression models predicted changes in poverty, unemployment, and vacancy rates from 2005-07 to 2009-11 from poverty rate, unemployment rate, vacancy rate, percent non-Hispanic black, percent Hispanic, and percent foreign-born in 2005-07.
5. Chicago has 77 community areas (versus 19 PUMAs) with an average population of 37,000.

6. Concentrated disadvantage captures a neighborhood's welfare receipt, poverty, unemployment, female-headed households, minority composition, and density of children.

7. Other research finds that neighborhood economic disadvantage became more concentrated since 2000 at the tract-level (Reardon and Bischoff 2011; Berube, Kneebone, and Nadeu 2011), consistent with our PUMA-level results.

Additional Resources

Berube, Alan, Elizabeth Kneebone, and Carey Nadeau. 2011. "The Re-Emergence of Concentrated Poverty: Metropolitan Trends in the 2000s." Metropolitan Opportunity Series. Metropolitan Policy Program, Brookings Institution.

Lerman, Bob and Sisi Zhang. 2012. "Coping

with the Great Recession: Disparate Impacts on Economic Well-being and Mobility in Poor Neighborhoods." Washington, DC: Urban Institute, Opportunity and Ownership Project Research Report.

Reardon, Sean F. and Kendra Bischoff. 2011. "Growth in the Residential Segregation of Fami-

lies by Income, 1970-2009." US 2010 Project Report. Brown University and Russell Sage Foundation.

Sampson, Robert J. 2012. *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago: University of Chicago Press.