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## **Unequal Neighborhoods: Trends in Spatial Concentrations of Affluence**

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## **Introduction**

The residential distribution of diverse socioeconomic groups is an important aspect of social stratification. This study focuses on the distribution of income and wealth across U.S. neighborhoods, and how those have changed over time in relation to other economic trends. Although there has been substantial attention paid to describing the prevalence and persistence of poor neighborhoods, we know much less about affluent neighborhoods. The study of neighborhood poverty helps us to understand economic deprivation, but it does not supply a full picture of social inequality. Some researchers suggest disparities between the poor and affluent are more strongly driven by the concentrated advantage of the affluent rather than the concentrated disadvantage of the poor (Brooks-Gunn, Duncan et al. 1993). An understanding of social inequality can only come about by looking at the full spectrum of deprivation and affluence. I will extend past research on residential segregation by investigating the spatial division between affluent, non-affluent/non-poor, and poor neighborhoods (Massey & Eggers 1993). Using census data, I describe trends in neighborhood income and look at neighborhood change in the U.S. between 1970 and 2000. I will also contextualize neighborhood change in space for a sample city. This paper will enhance our understanding about the relationship between household and neighborhood income trends, neighborhood mobility by income groups, and residential segregation by income, as well as offer insight on a relatively understudied dimension of social stratification.

## **Background**

### *Income Distributions*

The well-documented rise in income inequality may have led to increased levels of residential segregation by income (Sassen 1991; Massey & Eggers 1993; Massey & Fischer 2003). The

growing spread of the income distribution, especially at the top, may have further segregated affluent households from those with middle or lower incomes. Starting in the early 1970's, income inequality began to rise. The bottom of the income distribution fell from the middle between 1970 and 1980, while the top of the distribution diverged from the rest between 1980 and 1990 (Danziger & Gottschalk 1993, 1995; see Figure 1 about family income). The most disadvantaged faced increasing economic hardship, and the most advantaged faced increased benefits. The affluent, or those at the top of the income distribution, can isolate themselves and protect their resources through such means as private security and self governance (Briggs 2005). The isolation of the affluent deprives those left behind from beneficial resources, such as financial, social and human capital, that the affluent may have made available to their communities (Massey 1996). Furthermore, geographic isolation can contribute to additional income inequality (Wilson 1987; Massey & Eggers 1990; Coulton et al. 1996), as new businesses and income opportunities follow the movements of their more affluent workers. Once in a state of privilege, the affluent are subject to cumulative advantage, a process whereby it becomes easier to magnify one's advantage over time. The affluent can pool their resources to maintain safe and private neighborhoods with high quality schools for their children. These processes serve as powerful vehicles of social inequality (DiPrete & Eirich 2006). This study seeks to identify the prevalence of affluent neighborhoods and how they change over time compared to other neighborhood types.

There are documented income trends for neighborhoods, especially for poor neighborhoods (Jargowsky & Bane 1991; Jargowsky 1997; Quillian 1999). Concentrated poverty increased during the 1970s and 1980s, and faced a decline during the 1990s (Jargowsky 2003). The proportion of the urban population living in poor census tracts (at least 40 % of the

population is poor) increased from 3 percent in 1970 to 4.5 percent in 1990 (Jargowsky 1997: 38). Poor neighborhoods (census tracts with poverty rates of 40 percent or more) increased from 13 percent in 1980 to 17 percent in 1990. Poverty became less concentrated in the 1990s, with a decline in poor neighborhoods to 12 percent in 2000 (Kinsley & Pettit 2003).

Although information on neighborhood poverty concentrations speaks to the level of economic deprivation among U.S. neighborhoods, it cannot speak to neighborhood income inequality. My paper looks at the level of inequality between poor, affluent, and non-poor/non-affluent neighborhoods over time. There have been some neighborhood level investigations in recent years on concentrated affluence revealing that affluence is more highly concentrated than poverty (Massey 1996). In 1970, the average affluent person (living in a family whose income is four times the poverty line of a family of four) lived in a neighborhood that was 39 percent affluent; in 1980, this figure rose to 43 percent and then to 52 percent in 1990 (Massey 1996). From 1980 to 1990, the percentage of affluent neighborhoods (census tracts where the proportion of poor households is less than 3%) increased by over three percent, and then declined from 1990 to 2000 by less than two percent (Timberlake 2007). Indeed, trends in individual and neighborhood level income can share a similar pattern, particularly if proportions of the former compose the definition of the later. Still, the definitions of affluence used throughout these studies are arbitrary, and may not capture general conceptions of affluence.

### *Defining Affluence*

Most researchers define the affluent as households whose incomes are at least four times the poverty level for a family of four (Massey & Eggers 1993). Under this definition, a household would be considered affluent in 1989 if their household income was greater than or equal to \$50,696, regardless of household size (St. John 2002). This definition was devised to

serve as a counterpart to typical definitions of poverty; however, researchers agree that this tends not to match with common social conceptions of affluence<sup>1</sup> (Massey & Eggers 1993; Coulton et al. 1996). According to a U.S.-based opinion poll in 2005,<sup>2</sup> respondents felt that in order to be considered “rich”, a typical American family of four needs to make an annual income of \$100,000 to \$199,999 (27 percent of respondents) or \$200,000-\$299,999 (20 percent of respondents).

Although research on poverty has tested and accepted definitions to isolate the poor, there is no conventional definition to isolate the affluent or middle income. Part of this paper and upcoming work experiments with ways to divide the neighborhood income distribution into three groups and tests how this affects trends in neighborhood inequality and mobility. We do know, however, that neighborhoods vary in quality and availability of some key characteristics: public services, positive role models, protection, privacy, and political power. For example, public services, including schools, libraries, parks, health facilities, police departments, can vary along a continuum. Those at the bottom of the income distribution may fail to have access to these resources or have access to poor quality services, while those at the middle and top of the distribution have some increasing degree of availability and quality.

In fact, current housing policy is guided by the principle that these key neighborhood characteristics are what poor neighborhoods lack and the integration of higher income residents, producing mixed-income neighborhoods, will enable the poor residents to pull themselves out of poverty. Higher income neighbors that go to work regularly can serve as a positive role model

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<sup>1</sup> Some social perceptions of affluence involve a broad number of components, including a high income, high education, high occupational status, owning a home with a high value, and living in an area of low population density (Logan & Collver 1983).

<sup>2</sup> CBS News/New York Times Monthly Poll #1, March 2005 covering the United States. Adults aged 18 and over having a telephone at home were random-digit dialed through the eighth digit and stratified by geographic region, area code and size of place (N=1764).

for poor children and might connect poor adults with job opportunities. It is expected that higher income residents will not contribute to crime or delinquency within the neighborhood and work to maintain safety. Finally, the high tax base of the higher income population will help increase the quality and quantity of public services that the poorer residents will most benefit from, and increase organization and political power of the community (Popkin 2003).

### *Research Questions*

This paper is part of a larger dissertation on trends in neighborhood economic inequality.

This preliminary work is guided by the following questions:

- (1) How does the trend in neighborhood income inequality compare to household income inequality?
- (2) What part of the distribution is driving the trend in neighborhood income inequality?
- (3) What is the degree of economic stability and instability for neighborhoods at the top, middle, and bottom of the distribution?
- (4) How has the degree of neighborhood mobility changed?

### **Data and Methods**

To investigate trends and mobility in affluent, poor, and non-affluent/non-poor neighborhoods, I use the Neighborhood Change Data Base (NCDB). Developed by the Urban Institute and GeoLytics Inc., these data contain three periods of long form U.S. decennial census data, from 1970 to 2000 (GeoLytics, Inc. 2003). A unique feature of these data is that the census tract boundaries can be normalized to the year 2000 boundaries, allowing for consistent comparisons of tracts over time. This means that the tract boundaries drawn in 2000 were mapped the same in earlier years and neighborhood characteristics were recalculated to describe

residents residing in the same boundary over time. This feature of the data is important because there is a high degree of boundary change between censuses. For instance, between 1990 and 2000, 46 percent of all tracts in the country had their boundaries redefined.<sup>3</sup> In this analysis, I will use census tracts to approximate neighborhoods. Census tracts are locally-determined geographic units averaging 4,000 persons that contain a relatively homogenous group of residents based on population characteristics, economic status, and living conditions.<sup>4</sup> Although census tracts may not capture people's conceptions of their neighborhoods (St. John 2002), this is the best approximation that is tracked consistently over time (White 1983) and is the smallest geographic unit available in the NCDB.<sup>5</sup>

I limit this analysis to census tracts within Primary Metropolitan Statistical Areas (PMSAs) or cities, making this analysis a study of all U.S. cities. I reduce the sample of all PMSA tracts (n=24,812) by sampling tract that only have a non-zero population size from 1970 to 2000. Some tracts contain a zero population in 1970 because the data are standardized to year 2000 tracts. As cities developed and expanded, more census tracts formed. Uninhabited land became populated and census tracts were created by 2000. I exclude tracts with zero population. I also exclude tracts in which more than 40% of the population is residing in group quarters in order to discard those areas dominated by military bases, prisons, colleges, and other formal institutions (Massey & Denton 1987; Wagmiller 2007). My final sample of city neighborhoods is 23,030.

I measure a neighborhood's average income by taking the average household income (last year) of residents within a census tract. Average household incomes are adjusted to the

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<sup>3</sup> <http://www2.urban.org/nnip/ncua/ncdb.html> viewed on 6/12/08

<sup>4</sup> [http://factfinder.census.gov/home/en/epss/glossary\\_c.html](http://factfinder.census.gov/home/en/epss/glossary_c.html) on 6/12/08

<sup>5</sup> Census tracts are delineated for most metropolitan statistical areas (MSA) and other densely populated counties. There are about 3,000 tracts outside of the 221 MAs and six states are fully tracted: CA, CT, DE, HI, NJ, RI, and DC. Tracts will have between 2,500 and 8,000 people ([http://www.census.gov/geo/www/cen\\_tract.html](http://www.census.gov/geo/www/cen_tract.html) on 7/17/08).

1999 national Consumer Price Index for all urban consumers (CPI-U) annual average for all items. This analysis is based on a comparison of affluent, non-affluent/non-poor, and poor neighborhoods from 1970 to 2000. As discussed earlier, the definition of these categories can be arbitrary. I want to capture neighborhoods whose incomes are at the top, bottom, and middle of the distribution. To measure a neighborhood's income, I average the incomes of households within a census tract. At this stage of the analysis, I explore two definitions of poor, middle, and affluent neighborhoods. The first definition treats the top 10 percent of the neighborhood income distribution as affluent, the bottom 10 percent of neighborhoods as poor, and the remaining neighborhoods as middle income. The second definition treats the top 20 percent of the neighborhood income distribution as affluent, the bottom 20 percent as poor, and the remaining 60 percent as middle income neighborhoods.

I measure the trend in the neighborhood income distribution by taking the local top, middle, and bottom of the distribution within PMSAs, assuring that each city will have neighborhoods that fall within all three income categories. This approach ensures that poorer cities across the nation will have a local affluent, middle, and poor population. Another possible approach is to classify neighborhoods in the top, middle, and bottom of the neighborhood income distribution across all city neighborhoods. This alternative approach would focus more on economic differences between cities rather than economic change within cities.<sup>6</sup> I will focus on this first approach in order to gain a local understanding of neighborhood segregation by income. Thus, in my analysis, Detroit, for example, will have affluent, middle, and poor neighborhoods, although the average incomes within many Detroit neighborhoods fall within middle and poor compared to all PMSA neighborhoods. The neighborhood income distribution is first

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<sup>6</sup> Appendix A1 shows a pair of graphs comparing the neighborhood income percentiles to the median when the distribution is assessed across all cities versus within cities. The trends are very similar, although the magnitude of inequality is greater when looking across cities than looking within cities.

determined within PMSAs and then averaged to create a neighborhood income distribution for all PMSAs. I compare the distance between percentile groups to determine the trend in neighborhood income inequality. I also compare the slopes in the percentile trend lines within the neighborhood income distribution to identify which part of the distribution is driving the pattern of neighborhood income inequality between 1970 and 2000.

I utilize transition matrices to identify affluent, non-affluent/non-poor, and poor neighborhood change over time. This method has been used by other researchers to identify census tract changes in the racial composition of neighborhoods over time (Alba et al. 1995) and changes in the typologies of tract clusters over time (Morenoff & Tienda 1997). This transition matrix is similar to mobility tables in which tract types in earlier periods are mapped against those types in later periods. The diagonals indicate neighborhood stability, while the other cells indicate change. It may also be that affluent neighborhoods change less or more than other neighborhood types. It may also be that the amount of neighborhood mobility varies over time. I then map poor, middle, and affluent neighborhoods within cities over time to visualize where neighborhood stability and mobility occur in space.

## **Results**

Neighborhood income inequality increased from 1970 to 2000. Between 1970 and 1980, this inequality was driven by increased deprivation at the bottom of the income distribution. From 1980 to 2000, neighborhood income inequality was driven by the heightened advantage of the top of the distribution. Figure 2 shows percentiles of the logged neighborhood income distribution (last year). Overall, income inequality grew between 1970 and 2000, denoted by the increasing distance between the top and bottom percentile points at each year. Between 1970 and 1980, the negative slopes at the bottom 10<sup>th</sup> and 20<sup>th</sup> percentiles are larger than the positive

slopes of the 90<sup>th</sup> and 80<sup>th</sup> percentiles. This suggests that the bottom of the income distribution drove increases in income inequality from 1970 to 1980. Between 1980 and 2000, the bottom of the distribution flattened and the top of the distribution pulled away from the rest. The positive and steep slopes of the lines at the top of the distribution between 1980 and 2000, combined with the flat lines at the bottom indicate that the affluent neighborhoods were driving income inequality.

The income trend discussed above is adjusted for inflation, but it is still affected by economic growth. To isolate the trend of income inequality, I take a ratio of the income percentiles to the median. Figure 3 more clearly expresses that, after controlling for inflation and economic growth, neighborhood income inequality grew steadily between 1970 and 2000. The bottom of the distribution was most responsible for this inequality between 1970 and 1980, and the top of the distribution drove up inequality between 1980 and 2000.

How does the trend of income inequality at the neighborhood level within PMSAs compare to trends at the household level across the U.S.? <sup>7</sup> Figure 4 compares the neighborhood level and household level income trends. Data for household income trends comes from the Current Population Survey (CPS). <sup>8</sup> I observe comparable income points that are also adjusted to the CPI-U for 1999. For this comparison, I treat year 1970 as the reference period and track percentile ratios to the median of later years to those ratios in 1970. These ratios are then logged, making the zero value the line of reference. This outlines the degree to which inequality has changed since 1970. If the shape of the distribution remains unchanged, the ratio of any

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<sup>7</sup> Unlike neighborhood income, the distribution of household income is not assessed within cities. It is not necessary to make a local designation for the household income distribution in order for it to be comparable to the neighborhood distribution, however, because household income is portable.

<sup>8</sup> Appendix A2 presents my household income analysis using CPS data, 1967 to 2006, offering a broad perspective on the trend in the distribution.

percentile to the median will be constant, and the line will remain at the value of zero across the period.

Overall, the bottom of the household income distribution remained relatively stable, with a dramatic and steady increase at the top of the distribution. In contrast to the neighborhood distribution, poorer households did not experience much change from their relative state to the median from 1970 to 2000. Once household incomes are averaged within neighborhoods, there appears a clear drop relative to the median from 1970 to 1980. This drop of the income distribution at the neighborhood level suggests that although the income of households at the bottom of the distribution remained relatively stable, poor households were increasingly concentrated geographically in neighborhoods. This corresponds to the findings of concentrated neighborhood poverty. The rising inequality from households at the top of the distribution did not manifest at the neighborhood level until 1980 and grew steadily since. The magnitude of income inequality at the household level is higher than that at the neighborhood level, as we would have expected. Averaging incomes of households within neighborhoods reduces the effect of any one household in that neighborhood (unless they are the only resident). Both graphs point to overall increases in household and neighborhood income inequality over time; however, there is a distinctly different trend between 1970 and 1980 between the household and neighborhood income distributions. Observing neighborhood income inequality, then, is crucial for interpreting spatial income inequality.

Growing neighborhood inequality implies mobility, which is not inherently a social problem. However, if these inequalities are accompanied by a decline in mobility and the patterns are condemning areas to be persistently in their state (e.g. the poor stay poor and the affluent stay affluent), this is cause for greater social concern. Transition matrices track the economic life-

course of neighborhoods across their position along the income distribution for each time period. I assign neighborhoods to categories at the top, bottom, or middle of the neighborhood income distribution within PMSAs. I plot neighborhoods according their position in one time point against their position at a later time point. Table 1 shows mobility tables for neighborhoods in the top 20 percent, bottom 20 percent, and middle 60 percent, as well as the top 10 percent, bottom 10 percent, and middle 90 percent. The diagonals indicate neighborhood stability, while the remaining cells indicate upward or downward mobility. Using information from these tables, I calculate the percent of stable neighborhoods between the decades and across the 30-year time-span. In Figure 5, I present the results for neighborhoods at the top and bottom 10 percent and the middle 80 percent of the income distribution.<sup>9</sup> The middle neighborhoods are the most stable, but this is expected because they have to experience a greater magnitude of mobility in order to switch states. The proportion of stable affluent neighborhoods is higher than the poor neighborhoods between each decade; however, over the full period, this difference is small.<sup>10</sup> More striking, however, is the amount of neighborhood stability for all neighborhood types across the time periods. Neighborhood stability has been increasing from 1970 to 2000. The percent of stable affluent neighborhoods, for instance, is 69 percent in the 1970 to 1980 period and steadily increases to 76 percent in the 1990 to 2000 period. In 1970 to 1980, 60 percent of poor neighborhoods were stable, but by the 1990 to 2000 period, 68 percent are stable. This trend indicates that a smaller proportion of neighborhoods experience mobility suggests an increasing rigidity of neighborhood stratification; this, in combination with increases in income inequality is cause for social concern.

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<sup>9</sup> Trends in the results are similar when affluent neighborhoods are defined as the top 20 percent of the income distribution, poor neighborhoods are the bottom 20 percent, and the remaining 60 percent are middle income.

<sup>10</sup> The difference in the proportion of stable neighborhoods between affluent and poor neighborhoods is non-existent once we define poor neighborhoods as the bottom 20 percent of the distribution and affluent neighborhoods the top 20 percent.

A proportion of the neighborhoods remain in their respective category at all four time points. I refer to these neighborhoods as being in chronic states. The concentrated poverty literature and policy-makers are especially concerned with chronically poor neighborhoods, or neighborhoods that have been poor for a long duration, because these continually deteriorate, making it increasingly more difficult for its poor residents to escape social and economic deprivation. Of all neighborhoods, 3.8 percent were poor (bottom 10 percent) at all four time points. However, 4.9 percent of neighborhoods were chronically affluent (top 10 percent), fostering cumulative advantage for its affluent residents and maintaining neighborhood inequality. This finding speaks to the importance of considering affluent neighborhoods in our efforts to understand the mechanisms behind neighborhood inequality. The middle 80 percent of the income distribution experiences high levels of stability, with 64.7 percent of all neighborhoods remaining in the middle at all four data points. Again, this stability at the middle is expected because they have to experience a greater magnitude of mobility in order to switch states.

The proportion of chronically poor and affluent neighborhoods may appear small, but this is predominantly a product of my neighborhood classification system. I have forced the two ends of the neighborhood income distribution to be a small proportion of the neighborhood population. Another way to conceptualize chronic states is to look at the proportion of chronic neighborhoods given that they were in a certain state in 1970. Under this condition, I find that 37.8 percent of neighborhoods that were poor in 1970 (n=2,331), were also poor in 1980, 1990, and 2000. Of all affluent neighborhoods in 1970 (n=2,331), 48.1 percent were also affluent in 1980, 1990, and 2000. Finally, of those neighborhoods in the middle income category in 1970

(n=18,368), 81.2 percent were also in the middle from 1980 to 2000. This paints a clearer picture of long term income characteristics of neighborhoods in U.S. cities.

But, what of the 26.5 percent of neighborhoods that transition between states? Looking at the neighborhoods with extreme mobility over these periods reveals that affluent neighborhoods transitioned to poor more often between 1970 and 1980 than any other period. Although this extreme mobility was not common, it suggests that the process of “affluent flight” could have occurred, such that affluent residents were fleeing from the spill-over effects of incoming poor residents or increased concentrations of poverty that made proximity to these areas undesirable (Massey & Eggers 1993). This pattern might also point to suburbanization, where affluent households escape city living for a single family home in the suburbs, leaving behind poor households.

The mobility tables also reveal that poor neighborhoods were able to transition into affluence more often from 1980 to 1990 than any other period. This extreme mobility might suggest that poor neighborhoods were undergoing gentrification, whereby affluent households move into poor neighborhoods, capitalizing on lower housing and living costs, revitalizing the homes and community, and pushing poor residents out. This process thus pulls poor neighborhoods into affluence.

In order to contextualize the life-course of these poor, middle, and affluent neighborhoods, I map them in space for one PMSA - Detroit. Figure 6 shows maps of Detroit’s neighborhoods distinguishing those at the top and bottom 10 percent of the neighborhood income distribution and the middle 80 percent. Affluent neighborhoods in Detroit are tightly clustered in 1970. We see that over time, this cluster splinters off in a direction further away from downtown, which also houses the poorest neighborhood cluster in the city. This pattern could reflect affluent

flight, suburbanization, or both processes. I also compare the neighborhood income percentiles to the median in Detroit with those for the full sample of PMSAs. Figure 7 indicates that the poor neighborhoods, marked in dark green in Figure 6, have residents with much lower incomes on average than poor residents in all cities. Although incomes for poor neighborhoods in all cities stagnate after 1980, the poor neighborhoods in Detroit continue to fall from the median. Affluent neighborhoods in Detroit follow a similar pattern to those in all cities.

## **Discussion**

This analysis investigates trends in neighborhood income inequality and segregation. I find that neighborhood income inequality grew from 1970 to 2000. The bottom of the income distribution was most responsible for this inequality between 1970 and 1980. From 1980 to 2000, however, the increase in income inequality among neighborhoods was driven by the increasing advantage of those at the top of the income distribution. This pattern of increasing income inequality was also present at the household level<sup>1</sup> (at a greater magnitude than at the neighborhood level), although it was entirely driven by the top of the distribution throughout the period of 1970 to 2000. Increasing neighborhood inequality was also accompanied by increases in neighborhood stability, suggesting a stabilizing of neighborhood stratification. Some neighborhoods chronically remained in their positions at all four data points. This was slightly more common among affluent neighborhood than poor neighborhoods, supporting the idea that the cumulative advantage of the affluent is just as important an issue as the cumulative deprivation of the poor. Affluent neighborhoods experiencing extreme downward mobility were most prevalent from 1970 to 1980 and suggest a process of affluent flight. Poor neighborhoods

experiencing extreme upward mobility were most common from 1980 to 1990, suggesting that these were undergoing the process of gentrification.

The next steps for this analysis are to calculate a concrete spatial measure of neighborhood income segregation within U.S. cities. Past segregation research uses indices such as the index of dissimilarity and the social isolation index (Duncan & Duncan 1955; Massey & Denton 1987; Jargowsky 1997) to count the number of white versus black neighborhoods within a city, for instance, and identify the likelihood that whites are exposed to blacks, or that blacks are exposed to other blacks; however, these indices treat each neighborhood as a discrete and independent unit without accounting for its spatial relationship to other neighborhoods (Reardon & Firebaugh 2002). I plan to look at the spatial segregation of neighborhoods by income groups and account for the distance between neighborhood types (Reardon & Firebaugh 2002; Fetiosa et al. 2004)

This paper will also continue to explore different ways to conceptualize poor, middle, and affluent neighborhoods. One key component that I feel has been neglected from the economic inequality literature is wealth. Economic inequality is higher if wealth is taken into account (Keister & Moller 2000). The correlation between income and wealth is relatively low, suggesting that the degree of economic inequality may be different if wealth is considered with income (Keister & Moller 2000). Wealth inequality was large but constant during the 1960s and 1970s, and it grew substantially during the 1980s with a slight decline in the early 1990s (Keister 2000). Shifts in wealth inequality may further inform the relationship between income trends and spatial segregation.

In a national opinion poll,<sup>11</sup> respondents felt that wealth (39 percent) and income (22 percent) determine which social class (middle class, working class, or upper class) a person is in. In addition, respondents felt that a symbol of wealth and status in the United States were mainly having a house/home (27 percent) or having money/bank account (21 percent). The NCDB has data on housing values that I can incorporate with income to better identify the affluent from the middle. Spatial trends between poor, middle, and affluent neighborhoods may change with these new distinctions.

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<sup>11</sup> CBS News/New York Times Monthly Poll #1, March 2005 covering the United States. Adults aged 18 and over having a telephone at home were random-digit dialed through the eighth digit and stratified by geographic region, area code and size of place (N=1764).

Table 1. Transition Matrices Measuring Neighborhood Mobility between Poor, Middle, and Affluent States, NCDB, 1970-2000 (n=23,030)

A. Neighborhood Mobility, Neighborhood Income (last year) within PMSAs, Quintiles

		<b>1980</b>			
<b>1970</b>	20th%	middle 60%	80th%	Total	
20th%	3,330	1,267	34	4,631	
middle 60%	1,147	11,370	1,251	13,768	
80th%	156	1,129	3,346	4,631	
Total	4,633	13,766	4,631	23,030	
		<b>1990</b>			
<b>1980</b>	20th%	middle 60%	80th%	Total	
20th%	3,462	965	206	4,633	
middle 60%	1,164	11,721	881	13,766	
80th%	5	1,082	3,544	4,631	
Total	4,631	13,768	4,631	23,030	
		<b>2000</b>			
<b>1990</b>	20th%	middle 60%	80th%	Total	
20th%	3,645	978	8	4,631	
middle 60%	980	11,893	895	13,768	
80th%	6	897	3,728	4,631	
Total	4,631	13,783	4,631	23,030	
		<b>2000</b>			
<b>1970</b>	20th%	middle 60%	80th%	Total	
20th%	2,919	1,565	147	4,631	
middle 60%	1,643	10,447	1,678	13,768	
80th%	69	1,756	2,806	4,631	
Total	4,631	13,768	4,631	23,030	

B. Neighborhood Mobility, Neighborhood Income (last year) within PMSAs, Deciles

		<b>1980</b>			
<b>1970</b>		10th%	middle 80%	90th%	Total
10th%		1,408	919	4	2,331
middle 80%		856	16,782	730	18,368
90th%		75	659	1,597	2,331
Total		2,339	18,360	2,331	23,030
		<b>1990</b>			
<b>1980</b>		10th%	middle 80%	90th%	Total
10th%		1,420	806	113	2,339
middle 80%		911	16,920	529	18,360
90th%		0	642	1,689	2,331
Total		2,331	18,368	2,331	23,030
		<b>2000</b>			
<b>1990</b>		10th%	middle 80%	90th%	Total
10th%		1,590	740	1	2,331
middle 80%		739	17,081	548	18,368
90th%		2	547	1,782	2,331
Total		2,331	18,368	2,331	23,030
		<b>2000</b>			
<b>1970</b>		10th%	middle 80%	90th%	Total
10th%		1,266	1,042	23	2,331
middle 80%		1,058	16,308	1,002	18,368
90th%		7	1,018	1,306	2,331
Total		2,331	18,368	2,331	23,030

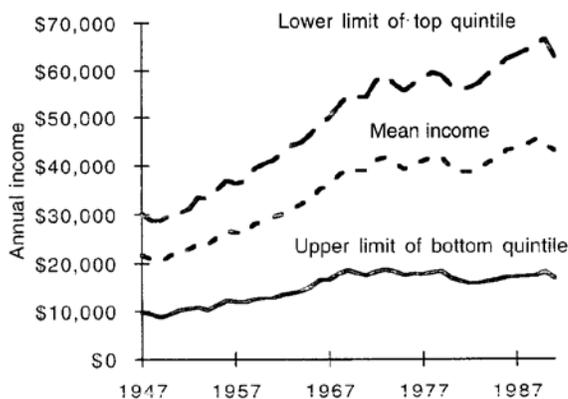


Figure 3.3 Family income at three points in the income distribution, 1947–1991. Figures in 1991 dollars. (Source: U.S. Bureau of the Census. Current Population Reports, ser. P-60.)

Figure 1. Danzinger & Gottschalk, 1995, Figure 3.3, pg. 49

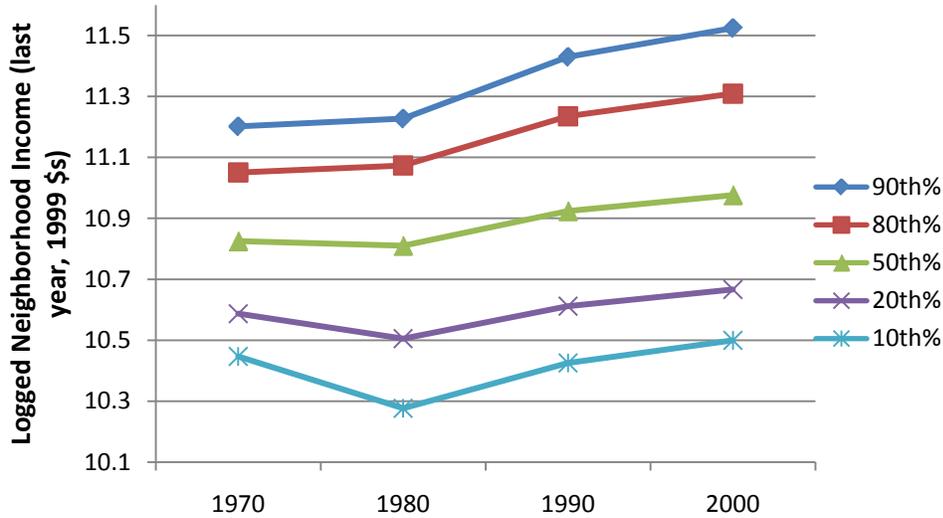


Figure 2. Logged Neighborhood Income Percentiles, NCDB 1970-2000

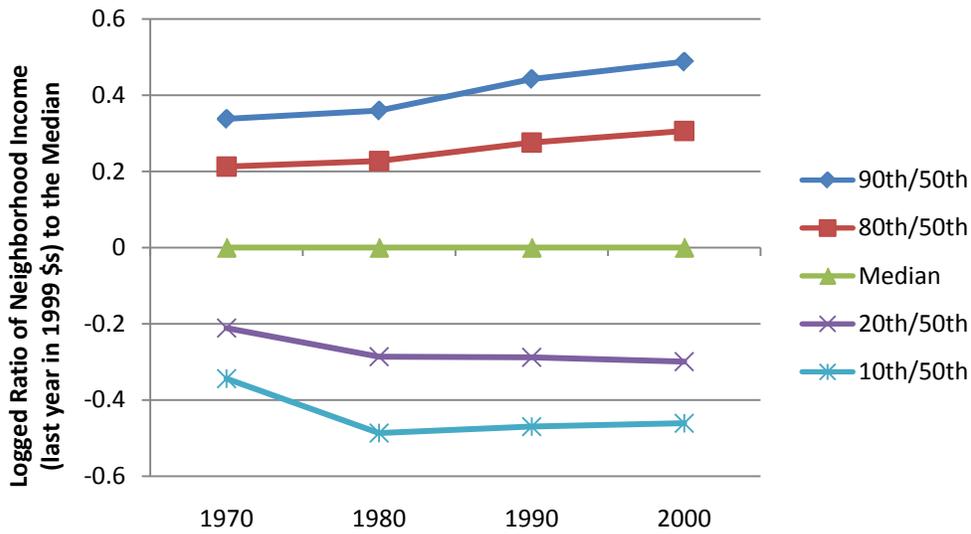


Figure 3. Logged Ratio of Neighborhood Income Percentiles to the Median, NCDB, 1970-2000

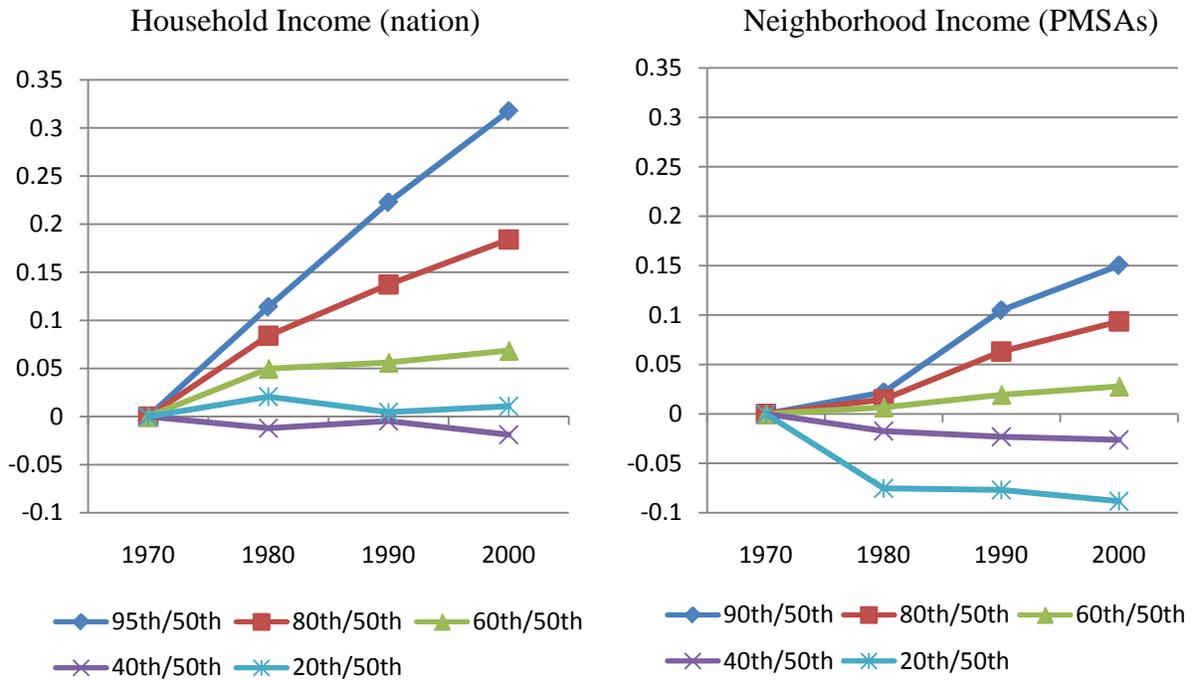


Figure 4. Income Percentiles to the Median, Household and Neighborhood Comparison (index 1970=1), NCDB & CPS 1970-2000

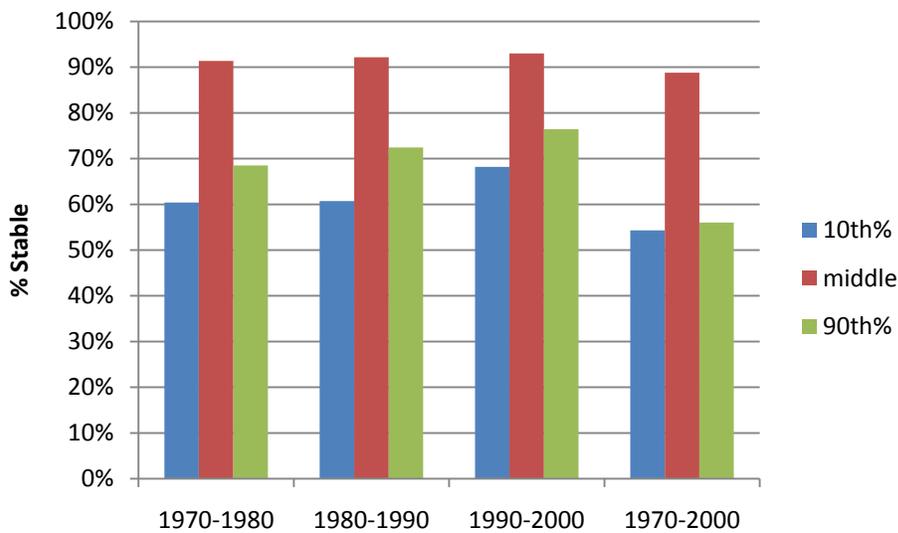


Figure 5. Percent of Poor, Middle, and Affluent Neighborhoods in a Stable State between Periods, NCDB 1970-2000

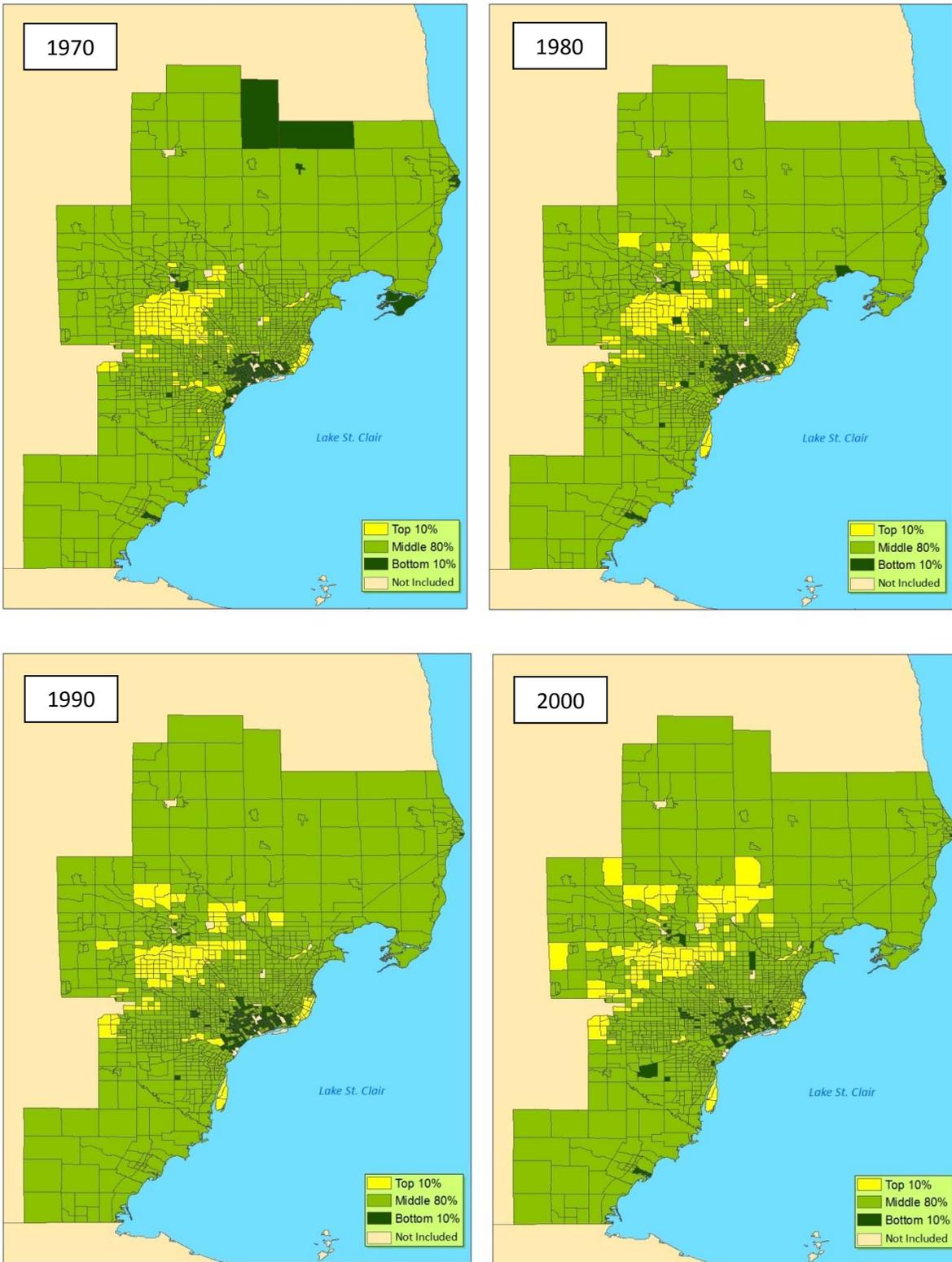


Figure 6. Detroit's Affluent (top 10%), Middle (80%) and Poor (bottom 10%) Neighborhoods, NCDB, 1970 to 2000

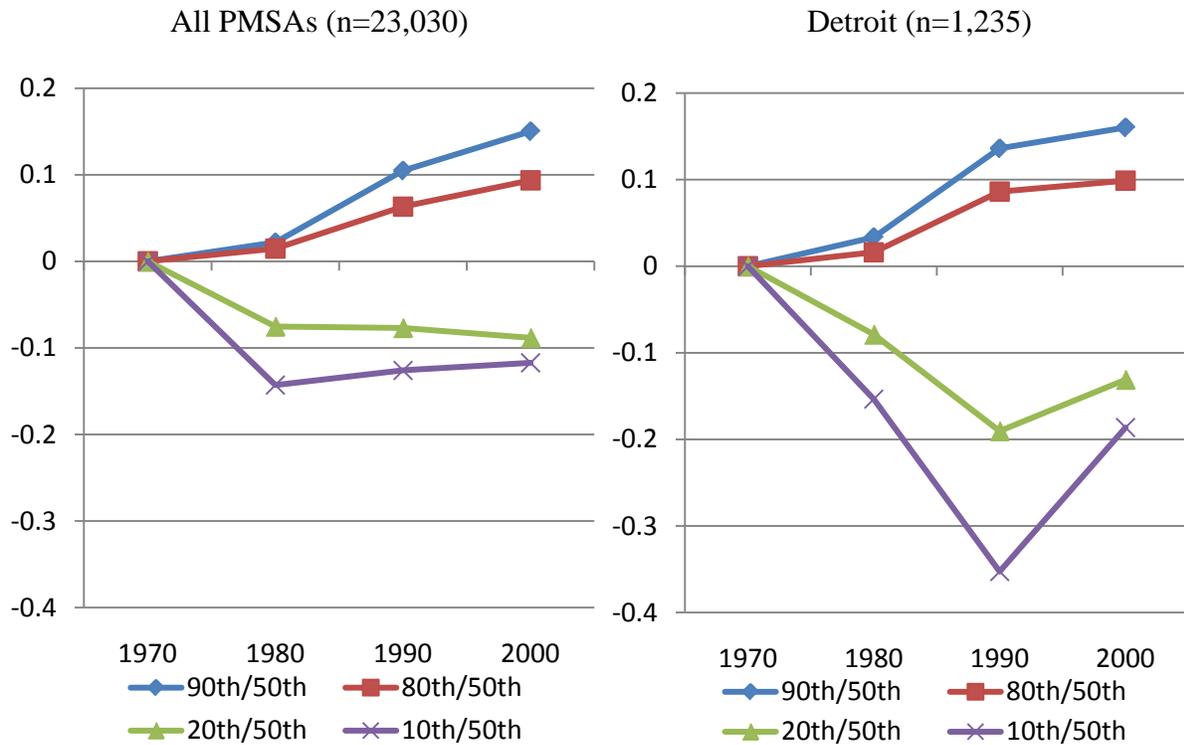


Figure 7. Neighborhood Income Percentiles to the Median, All PMSAs Compared to Detroit (index 1970=1), NCDB 1970-2000

## References

Alba, R. D., N. A. Denton, et al. (1995). "Neighborhood Change under Conditions of Mass Immigration: The New York City Region, 1970-1990." International Migration Review **29**(3): 625-656.

Briggs, X. d. S., Ed. (2005). The Geography of Opportunity: Race and Housing Choice in Metropolitan America. Washington DC, Brookings Institution Press.

Brooks-Gunn, J., G. J. Duncan, et al. (1993). "Do Neighborhoods Influence Child and Adolescent Development?" The American Journal of Sociology **99**(2): 353-395.

Coulton, C. J., J. Chow, et al. (1996). "Geographic Concentration of Affluence and Poverty in 100 Metropolitan Areas, 1990." Urban Affairs Review **32**(2): 186-216.

Danzinger, S. and P. Gottschalk, Eds. (1993). Uneven Tides: Rising Inequality in America. New York, Russell Sage Foundation.

Danzinger, S. and P. Gottschalk (1995). America Unequal. Cambridge, Harvard University Press.

DiPrete, T. A. and G. M. Eirich (2006). "Cumulative Advantage as a Mechanism for inequality: A Review of Theoretical and Empirical Developments." Annual Review of Sociology **32**: 271-297.

Duncan, O. D. and B. Duncan (1957). The Negro population of Chicago: a study of residential succession. Chicago, University of Chicago Press.

Feitosa, F. F., G. Câmara, et al. (2004, November). Spatial Measurement of Residential Segregation. IV Brazilian Symposium on GeoInformatics, Campos do Jordão.

GeoLytics, I. (2003). CensusCD neighborhood Change Database 1970-2000 Tract Data. East Brunswick, NJ.

Jargowsky, P. A. 1997. Poverty and Place: Ghettos, Barrios, and the American City. New York: Russell Sage Foundation.

Jargowsky, P. A. (2003). Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s. The Living Cities Census Series. Washington D.C., The Brookings Institution: 1-23.

Jargowsky, P. A. and M. J. Bane (1991). Ghetto Poverty in the United States, 1970-1980. The Urban Underclass. C. Jencks and P. E. Peterson. Washington, D.C., Brookings Institution Press.

Keister, L. A. (2000). Wealth in America: Trends in Wealth Inequality. Cambridge, Cambridge University Press.

Keister, L. A. and S. Moller (2000). "Wealth Inequality in the United States." Annual Review of Sociology **26**: 63-81.

Kingsley, G. T. and K. L. S. Pettit (2003, May). Concentrated Poverty: A Change in Course. Neighborhood Change in Urban America. Washington, D.C., Urban Institute: 1-11.

Massey, D. S. (1996). "The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-First Century." Demography **33**(4): 395-412.

Massey, D. S. and N. A. Denton (1987). "Trends in the Residential Segregation of Blacks, Hispanics, and Asians." American Sociological Review **52**: 802-825.

Massey, D. S. and M. L. Eggers (1990). "The Ecology of Inequality: Minorities and the concentration of poverty, 1970-1990." American Journal of Sociology **95**: 1153-1188.

Massey, D. S. and M. L. Eggers (1993). "The Spatial Concentration of Affluence and Poverty During the 1970s." Urban Affairs Quarterly **29**(2): 299-315.

Massey, D. S. and M. J. Fischer (2003). The Geography of Inequality in the United States, 1950-2000. Brookings-Wharton Papers on Urban Affairs: 1-40.

Morenoff, J. D. and M. Tienda (1997). "Underclass Neighborhoods in Temporal and Ecological Perspective." The Annals of the American Academy **551**: 59-72.

Quillian, L. (1999). "Migration Patterns and the Growth of High-Poverty Neighborhoods, 1970-1990." The American Journal of Sociology **105**(1): 1-37.

Popkin, S. 2003. "Testimony of Susan Popkin, Proposed H.R. 1614 HOPE VI Reauthorization and Small Community Mainstreet Revitalization and Housing Act," prepared for the Committee on Financial Services. Washington DC: Urban Institute.

Reardon, S. F. and G. Firebaugh (2002). "Response: Segregation and Social Distance—A Generalized Approach to Segregation Measurement." Sociological Methodology **32**(1): 85-101.

Sassen, S. (1991). The Global City: New York, London, Tokyo. Princeton, Princeton University Press.

St. John, C. (2002). "The Concentration of Affluence in the United States, 1990." Urban Affairs Review **37**(4): 500-520.

Timberlake, J. M. (2007). "Racial and Ethnic Inequality in the Duration of Children's Exposure to Neighborhood Poverty and Affluence." Social Problems **54**(3): 319-342.

Wagmiller, R. L. (2007). "Race and the Spatial Segregation of Jobless Men in Urban America." Demography **44**(3): 539-562.

White, M. J. (1983). "The Measurement of Spatial Segregation." American Journal of Sociology **88**(5): 1008-1018.

Wilson, W. J. (1987). The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy. Chicago, IL, University of Chicago Press.

Appendix A1.

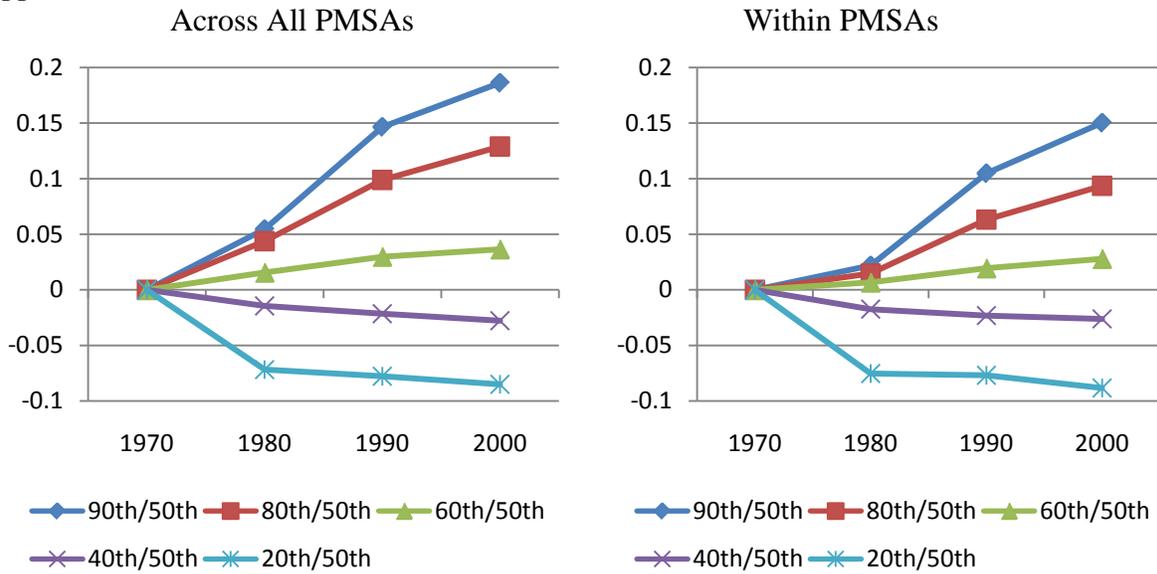


Figure A1. Neighborhood Income Percentiles to the Median, Measured Across All PMSAs Compared to Within PMSAs (index 1970=1), NCDB 1970-2000

Appendix A2.

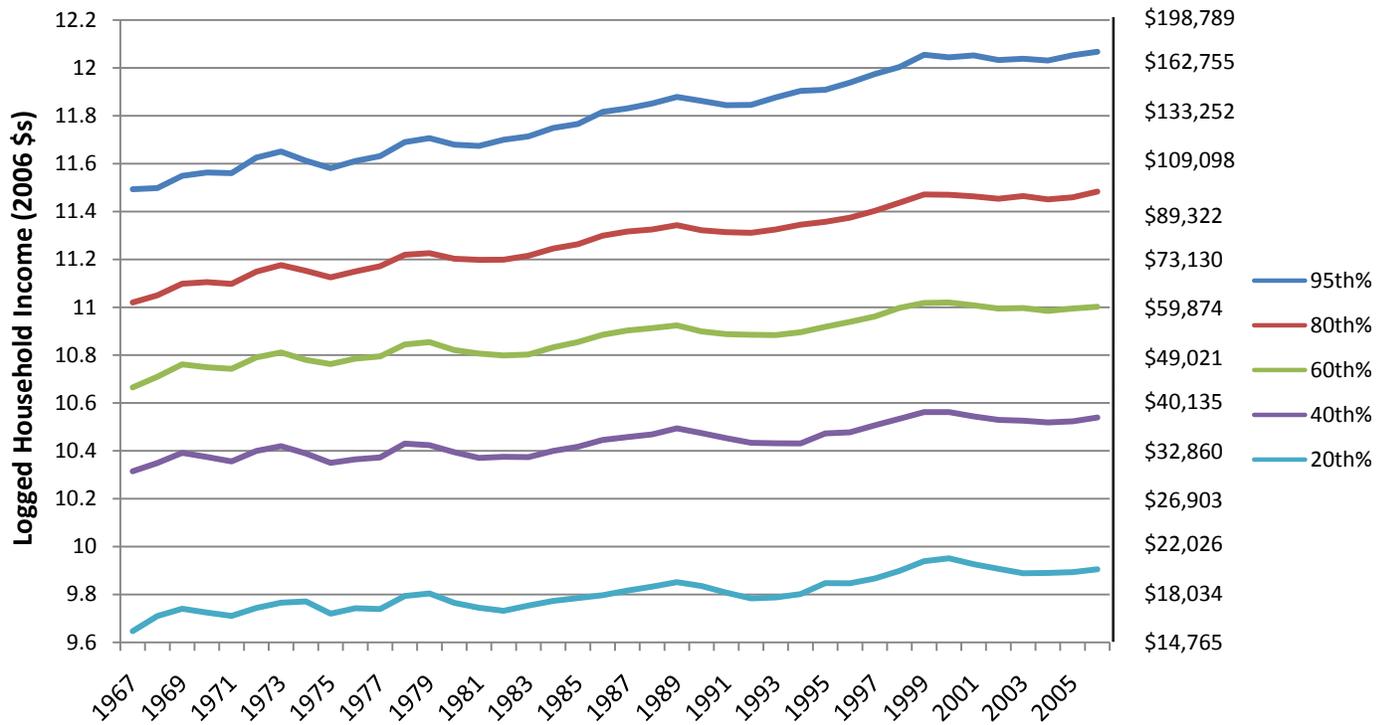


Figure A2. Logged Household Income Percentiles (inflation-adjusted), CPS, 1967-2006