Class Differences in African American Residential Patterns in U.S. Metropolitan Areas:

1990-2000*

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* Direct all correspondence to John Iceland, Housing and Household Economic Statistics Division, Bldg 3 Rm 1472, U.S. Census Bureau, Washington, DC 20233-8500, jiceland@census.gov. This paper reports the results of research and analysis undertaken by Census Bureau staff. It has undergone a more limited review than official Census Bureau publications. This report is released to inform interested parties of research and to encourage discussion.
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Abstract

Residential patterns of various groups have received considerable attention in the past few decades. Using data from the 1990 Census and Census 2000, we examine changing residential patterns of African Americans of different income, occupational, and educational categories using the index of dissimilarity. We find that higher socioeconomic status (SES) African Americans generally live in more integrated neighborhoods than lower SES African Americans, though differences are modest. There were also modest declines in segregation for many, though not all, SES groups from 1990 to 2000. Residential patterns across SES groups within race groups do not differ as much. Among both African Americans and non-Hispanic Whites, dissimilarity scores are highest for those in the lowest and highest SES groups.
Introduction

Residential patterns of various groups have received considerable attention in the past few decades in both the academic literature and public policy discussions about urban inequality. Because neighborhoods vary by social class, it was thought that economic progress among minority groups, particularly African Americans, would result in greater integration. However, social scientists have observed that African Americans of various social classes live in very different neighborhoods than Whites.

There is still much to be gained by studying differences in residential patterns both within and between racial and ethnic groups. The aim of this paper is to provide a comprehensive view of economic residential patterns (sometimes referred to as residential segregation) for African Americans in U.S. metropolitan areas.

Using data from the 1990 Census and Census 2000, we examine residential patterns of African Americans of different income, occupational, educational categories using the index of dissimilarity. We analyze how their residential patterns differ from those of all non-Hispanic Whites, non-Hispanics Whites of the same socioeconomic class, and from African Americans of different socioeconomic classes. These comparisons permit a detailed accounting of changing urban settlement patterns for African Americans at different socioeconomic levels.

Background

A large body of research explores persisting differences in residential patterns by race and ethnicity and its relationship to urban inequality in U.S. metropolitan areas (Farley and Frey
1994; Massey and Denton 1993; Jencks and Peterson 1991; Galster and Hill 1992; O'Connor, Tilly and Bobo 2001). The overwhelming consensus is that while racial and ethnic segregation has been declining since the 1970s, it remains consistently high especially between Blacks and Whites. Many studies have examined the factors that contribute to differing racial and ethnic residential patterns (Massey and Denton 1993; Bobo and Zubrinsky 1996; Clark 1992). These factors include: preferences for living in neighborhoods with those of similar race and ethnicity, socioeconomic differences, and housing discrimination.

However, as Jargowsky (1996) points out, economic differences in residential patterns have received far less attention in empirical research compared to differences by race and ethnicity even though the former has been on the rise in recent decades. The vast literature on poverty in the U.S. shows that over the past thirty years economic inequality has been increasing and that poverty has become increasingly concentrated in central cities and among certain minority groups (Kodras 1997; Lynn and McGearry 1990; Massey, Gross, and Eggers 1991; Wilson 1987). Massey (1996) argues that since the 1970s, inequality has become increasingly geographic in nature with the affluent isolating themselves from the poor in separate neighborhoods.

The causes of economic differences in residential patterns have also been debated and are often discussed in the context of racial and ethnic segregation. Most well-known perhaps is Wilson's (1987) argument that poor Blacks have become isolated in poor inner city neighborhoods largely due to the out-migration of higher status Blacks. Massey and Denton (1993) counter that argument in their research that shows that the concentration of poverty among minority groups is primarily due to rising poverty rates for those groups coupled with
persistent differences in residential patterns by race. Assertions have also been made by researchers that contemporary segregation is more a matter of class than race (Clark 1992; Wilson 1987). This debate highlights the important distinction between economic segregation within versus between racial and ethnic groups. Using segregation indexes, researchers have measured economic residential patterns both within and between racial and ethnic groups by various measures of social class.

Studies of intergroup economic residential patterns tend to follow the line of social scientific reasoning that as racial and ethnic groups advance socioeconomically, they should become more integrated spatially. In particular, socioeconomic differences and varying housing costs vary across neighborhoods can also contribute to segregation because minority members may simply not be able to afford to live in the same neighborhoods as Whites (Pascal 1967; Clark 1988; Zubrinsky Charles 2001). Related to this factor, people’s perceptions of housing affordability in different neighborhoods may affect mobility decisions (Farley et al. 1993; Zubrinsky Charles 2001). For example, people of a particular minority group may be less likely to search for housing in certain neighborhoods if they have an impression that housing costs there are high.

However, empirical research shows considerable variation in the extent to which groups are integrated. The most overwhelming finding is that since the 1980s, unlike other groups, Blacks of every socioeconomic level continue to have very different residential patterns than Whites of the same socioeconomic level and than Whites in general (Denton and Massey 1988; Darden 1987; Massey and Fischer 1999; St. John and Clymer 2000). The levels of Hispanic and Asian segregation from Whites are found to be at moderate levels and consistently lower than
those for Blacks as their socioeconomic status rises. Using Detroit as a case study, Darden and Kamel (2000) find that Black/White differences in residential patterns remain high at every socioeconomic level in both the city and the suburbs.

Most studies of intergroup residential patterns have used the index of dissimilarity, which measures the evenness of a group’s distribution across neighborhoods in a metropolitan area. Using a different measure based on exposure, researchers have found that the probability of contact with Whites increases for all minorities including Blacks as status rises and that Blacks of higher status are more likely than Blacks of lower status to interact with higher status Whites (St. John and Clymer 2000; Massey and Fischer 1999). Similarly, Alba, Logan, and Stults (2000) find that when compared to lower status Blacks, middle-class Blacks are more likely to share neighborhoods with Whites. However, they also find that the White neighbors of middle class Blacks tend to be of lower class status and that middle class Blacks live in neighborhoods that are much less affluent than those of their White counterparts.
Studies of intragroup economic residential patterns reveal similar variations by race. According to Sims (1999), high status Blacks in the five large metropolitan areas studied were least likely to isolate themselves from their lower status counterparts when compared to Whites, Hispanics, and Asians. Using both census data and ethnographic data for Chicago, Patillo-McCoy (2000) presents evidence which contradicts Wilson's (1987) Black middle class out-migration hypothesis. She finds that while the Black middle class has increased in size since the 1970s, it has remained in close physical proximity to neighborhoods occupied by poor Blacks. However, using a unique measure of economic segregation, the neighborhood sorting index, Jargowsky (1996) finds that economic segregation in the 1980s was particularly large and widespread for Blacks and Hispanics.

Results of these studies have shown that counter to the expectations of some, rising socioeconomic status has not resulted in a much higher degree of sharing of neighborhoods between Whites and all minority groups (Sims 1999; Massey and Fischer 1999; Denton and Massey 1988; Darden 1987). Blacks and to a lesser degree, Hispanics, continue to live in different neighborhoods than Whites at high levels across all income levels. Thus, the general consensus is that racial and ethnic rather than class status remains the most salient factor in explaining residential location for Blacks and Hispanics. South and Crowder (1998) find that Blacks of all socioeconomic levels are less likely to achieve spatial mobility by moving out of poor neighborhoods.

What is clear is that there is still much to be gained by studying economic residential patterns between racial and ethnic groups. This paper updates our current knowledge of residential patterns by looking at change from 1990 to 2000, and by examining patterns for
different socioeconomic-- income, occupational, and educational-- groups.

**Data and Methods**

The data for this analysis were drawn from 1990 and 2000 Summary File 3 census files that contain both long- and short-form information. These files include population counts for all racial groups and for Hispanics by census tract in all metropolitan areas (MAs), as well as counts of these groups by income, occupation, education and other characteristics. We present data for independent MAs and Primary MAs, not Consolidated MAs. Town and city-based MAs are used in New England, as is usually done. When presenting comparable data for 1990 and 2000, we used the 2000 boundaries of metropolitan areas, as defined by the Office of Management and Budget (OMB) on June 30, 1999, to ensure comparability.\(^1\) Using this definition, there were 331 MAs in our analysis.\(^2\)

The 1990 census collected information on four race groups: White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander. There was an additional question on whether an individual was of Hispanic origin.\(^3\) In the 1990s, after much research and public comment, OMB revised the racial classification for Census 2000 to include five categories – White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander—and allowed individuals to report more than one race.

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\(^1\) The OMB will redefine MAs based on Census 2000 counts in 2003.

\(^2\) The index of dissimilarity estimates presented in the results are weighted by the Black population of the socioeconomic group in question. This has the advantage of giving relatively little weight to metropolitan areas with small Black populations, where index scores are sometimes skewed by random factors.

\(^3\) The Population Censuses have a special dispensation from OMB to allow individuals to designate “Some Other Race” rather than one of those specifically listed. The vast majority of individuals choosing that option are Hispanic (Grieco and Cassidy 2001). The decennial census questions also ask about specific Asian and Pacific Islander races (e.g., Chinese).
Census 2000 figures indicate that 6.8 million, or 2.4 percent of the population, reported more than one race. This study focuses on the residential patterns of Blacks and non-Hispanic Whites. In 2000, Blacks in this analysis include those who identified as being Black either alone or in combination with another race. Non-Hispanic Whites consist of those who marked only White and who indicated that they were not Hispanic.4

This analysis uses the index of dissimilarity to measure residential patterns. The dissimilarity index is a measure of evenness, and it is also the most widely-used segregation index. Dissimilarity, which ranges from 0 (complete integration) to 1 (complete segregation), measures the percent of a group’s population that would have to change residence for each neighborhood to have the same percent of that group as the metropolitan area overall.

We examine residential patterns of Blacks of various socioeconomic status (SES) levels vis-à-vis all non-Hispanic Whites, non-Hispanic Whites of similar SES levels, and also Blacks of different SES levels. We look at three dimensions of SES—income, occupation, and education. Because the dissimilarity index involves comparisons of two groups at a time, it is preferable to have a relatively small number of categories within each of the SES dimensions. Education is split into four groups: less than high school, high school graduate, some college, and college graduate. Occupations are also split into four general categories: managerial, professional, and technical; sales and administrative; service occupations; and farming, precision crafts, and operators. Income is represented by both approximate household income quartiles in each of 1990 and 2000, and also by an indicator of poverty.5

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4 Previous research indicates that Black segregation scores are similar across the two methods of defining the Black population (Iceland, Weinberg, and Steinmetz 2002).

5 For the education segregation indexes, only people aged 25 and over are included in the analysis. For the occupation indexes, only workers are included. Household income indexes omit people in group quarters, while the
Results

Table 1 shows the dissimilarity index for Blacks versus all non-Hispanic Whites and Blacks versus non-Hispanic Whites of the same SES group for 1990 and 2000. Indexes are weighted by the Black population of the socioeconomic group and year in question. This represents the residential patterns experienced by the average African American (rather than the average metropolitan area). The average index of dissimilarity score was 0.682 in 1990 and 0.642 in 2000. This represents a modest decline in Black-White segregation over the period, consistent with other studies (e.g., Iceland, Weinberg, and Steinmetz 2002). This score is still quite high—the 0.642 score in 2000 indicates that 64.2 percent of the residents of one race group would have to change residences for there to be an even distribution of Blacks and non-Hispanic Whites across neighborhoods in all of the metropolitan areas.

(Table 1 here)

Index of dissimilarity scores vary by SES group. When comparing Black residential patterns to those of all non-Hispanic Whites, we find that segregation was highest for the lowest income quartiles, the poor, those with less education, and for people in service occupations in both 1990 and 2000. The differences are moderate. Even among high SES groups, segregation tends to be high in absolute terms.6

In terms of change over the decade, segregation tended to remain the same or increase for lower SES groups, but modestly declined for the highest SES groups. For example, segregation

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poverty indexes do not include people not in the poverty universe—such as people in institutions, military group quarters, and college dormitories.

6 Massey and Denton (1993) consider dissimilarity scores above 0.60 to be high (pg. 75).
of Blacks in the lowest income quartile increased from 0.695 in 1990 to 0.715 in 2000. Similarly, the index among the poor Black population increased from 0.713 to 0.724. In contrast, the dissimilarity score for African Americans in the highest income quartile declined modestly from 0.629 to 0.605. The score for managers, professionals, and technical occupations declined from 0.580 to 0.571.

When comparing Blacks to non-Hispanic Whites of the same socioeconomic status, patterns differ somewhat. Dissimilarity scores tend to lower for high SES groups, as before, but not uniformly. In particular, dissimilarity scores for income groups do not show a uniform pattern of higher scores for the lower two quartiles. For example, in 2000, the dissimilarity score for the lowest quartile was 0.632, very similar to the score for the highest income quartile, 0.629. The score for the second lowest quartile (0.609) is lower than both of these scores. Together with the results in the first two columns of Table 1, this indicates that while high-income Blacks are more likely than low-income Blacks to live in the same neighborhoods as non-Hispanic Whites, levels of segregation between high-income Blacks and high-income Whites in particular remain high.

For other SES dimensions, higher SES Blacks are generally more likely to live with higher SES non-Hispanic Whites than are lower SES Blacks with lower SES non-Hispanic Whites. Within-SES group dissimilarity score changes from 1990 to 2000 tended to be rather modest. More generally, the fact that segregation is lower when the comparison group is changed from all non-Hispanic Whites to same SES non-Hispanic Whites suggests that SES explains some of the overall high levels of segregation.

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7 These scores are not statistically different.
Table 2 shows the index of dissimilarity for SES groups as compared to others within the same race group. This analysis sheds light on the extent of segregation of African Americans of various SES levels from other African Americans, and likewise of non-Hispanic Whites from other non-Hispanic Whites. Overall, the dissimilarity scores in Table 2 are considerably lower than those in Table 1, suggesting more modest differences in residential patterns within race groups. For example, the dissimilarity score for African Americans in the lowest income quartile in 2000—0.312—indicates that 31 percent of such African Americans would have to move in order for all tracts to have the same mix of high and low SES groups in the 331 metropolitan areas in this analysis. The corresponding score for Blacks in the lowest quartile with non-Hispanic Whites in the lowest quartile from Table 1 was 0.632.8

Among both African Americans and non-Hispanic Whites, those of the lowest and highest income and educational categories have higher dissimilarity scores than those in the middle categories, indicating greater integration among those in the middle classes, so to speak. Managers and professionals also have higher segregation than other groups among African Americans, and they are higher than two of the remaining three groups among non-Hispanic Whites.

The table also indicates very modest patterns of change from 1990 to 2000. The dissimilarity score remained the same or declined slightly for nearly all African American socioeconomic groups. For example, the dissimilarity score for poor African Americans declined from 0.330 to 0.316 over the decade. For non-Hispanic Whites, there were only very small

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8 Scores in Table 2 are again weighted by the size of the socioeconomic group in question, so as to represent the
changes over the decade, with increasing indexes outnumbering declines.

With some exceptions, Table 2 also shows that African Americans of various socioeconomic strata have higher dissimilarity scores than Whites of the same strata, indicating modestly higher levels of segregation among African Americans that non-Hispanic Whites. For example, the dissimilarity score for African Americans with a Bachelor’s degree or higher was 0.343 in 2000, a little higher than the corresponding 0.316 score for non-Hispanic Whites.

Conclusion

The residential patterns of African Americans still differ greatly from those of non-Hispanic Whites. Findings indicate that these differences persisted across various socioeconomic groups, though higher SES African American were generally moderately less segregated than low SES African Americans. Overall, class differences appear to explain only a modest amount of the difference in African American and non-Hispanic White residential patterns. The segregation of low-SES Blacks from Whites increased slightly in the 1990s, but the segregation of higher-SES Blacks from Whites declined modestly.

Within race groups, levels of class segregation are moderate to low, at least as compared with levels of segregation across race groups. Middle SES groups of both Blacks and Whites are the least segregated, while the highest and lowest SES levels were more segregated. Contrary to what some may have hypothesized, there was little evidence that low SES Blacks became more segregated from other SES Blacks in the 1990s.
References


Pascal, Anthony. 1967. The Economics of Housing Segregation. Santa Monica: RAND.


Table 1. Dissimilarity Index for African Americans with Non-Hispanic Whites by Socioeconomic Status: 1990 and 2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0.682</td>
<td>0.642</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Household Income Quartiles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$17,499 or less ($19,999 or less for 2000)</td>
<td>0.695</td>
<td>0.715</td>
<td>0.615</td>
<td>0.632</td>
</tr>
<tr>
<td>17,500-32,499 (20,000-44,999)</td>
<td>0.645</td>
<td>0.654</td>
<td>0.607</td>
<td>0.609</td>
</tr>
<tr>
<td>32,500-49,999 (45,000-74,999)</td>
<td>0.640</td>
<td>0.624</td>
<td>0.627</td>
<td>0.614</td>
</tr>
<tr>
<td>50,000 or over (75,000 or over)</td>
<td>0.629</td>
<td>0.605</td>
<td>0.646</td>
<td>0.629</td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.713</td>
<td>0.724</td>
<td>0.630</td>
<td>0.636</td>
</tr>
<tr>
<td>Non-Poor</td>
<td>0.620</td>
<td>0.613</td>
<td>0.614</td>
<td>0.612</td>
</tr>
<tr>
<td>Education (population 25 years and over)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12th grade or less, no high school diploma</td>
<td>0.697</td>
<td>0.701</td>
<td>0.627</td>
<td>0.634</td>
</tr>
<tr>
<td>High school diploma only</td>
<td>0.652</td>
<td>0.655</td>
<td>0.623</td>
<td>0.624</td>
</tr>
<tr>
<td>Some college</td>
<td>0.611</td>
<td>0.612</td>
<td>0.599</td>
<td>0.594</td>
</tr>
<tr>
<td>Bachelor's degree or higher</td>
<td>0.575</td>
<td>0.564</td>
<td>0.584</td>
<td>0.575</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial, Professional and Technical</td>
<td>0.580</td>
<td>0.571</td>
<td>0.578</td>
<td>0.575</td>
</tr>
<tr>
<td>Sales and Administrative</td>
<td>0.625</td>
<td>0.621</td>
<td>0.605</td>
<td>0.602</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>0.649</td>
<td>0.651</td>
<td>0.607</td>
<td>0.611</td>
</tr>
<tr>
<td>Farming, Precision, and Operators</td>
<td>0.625</td>
<td>0.627</td>
<td>0.520</td>
<td>0.518</td>
</tr>
</tbody>
</table>

Note: Includes 331 metropolitan areas as defined by OMB on June 30, 1999. The African American category in 2000 refers to African Americans alone or in combination with another race. Weighted averages are weighted by the African American population of that year of that socioeconomic group. Income consists of total household income. NA not applicable.

Table 2. Dissimilarity Indexes by Socioeconomic Status Within Race Groups: African Americans and non-Hispanic Whites: 1990 and 2000

<table>
<thead>
<tr>
<th>Dissimilarity</th>
<th>African Americans of a socioeconomic status with all other African Americans</th>
<th>Non-Hispanic Whites of a socioeconomic status with all other non-Hispanic Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Income Quartiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$17,499 or less ($19,999 or less for 2000)</td>
<td>0.324</td>
<td>0.312</td>
</tr>
<tr>
<td>17,500-32,499 (20,000-44,999)</td>
<td>0.195</td>
<td>0.185</td>
</tr>
<tr>
<td>32,500-49,999 (45,000-74,999)</td>
<td>0.238</td>
<td>0.231</td>
</tr>
<tr>
<td>50,000 or over (75,000 or over)</td>
<td>0.364</td>
<td>0.360</td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.330</td>
<td>0.316</td>
</tr>
<tr>
<td>Non-Poor</td>
<td>0.340</td>
<td>0.326</td>
</tr>
<tr>
<td>Education (population 25 years and over)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12th grade or less, no high school diploma</td>
<td>0.271</td>
<td>0.268</td>
</tr>
<tr>
<td>High school diploma only</td>
<td>0.148</td>
<td>0.155</td>
</tr>
<tr>
<td>Some college</td>
<td>0.214</td>
<td>0.189</td>
</tr>
<tr>
<td>Bachelor's degree or higher</td>
<td>0.364</td>
<td>0.343</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial, Professional and Technical</td>
<td>0.243</td>
<td>0.236</td>
</tr>
<tr>
<td>Sales and Administrative</td>
<td>0.153</td>
<td>0.141</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>0.186</td>
<td>0.184</td>
</tr>
<tr>
<td>Farming, Precision, and Operators</td>
<td>0.181</td>
<td>0.181</td>
</tr>
</tbody>
</table>

Note: Includes 331 metropolitan areas as defined by OMB on June 30, 1999. The African American category in 2000 refers to African Americans alone or in combination with another race. Weighted averages are weighted by the African American or non-Hispanic White population of that year and socioeconomic group.