Can Integrated Neighborhoods Survive?

Sources of Regional Variation in the Stability of Integrated Communities

with African American Residents

Jane Cover
University of Washington
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Introduction

African Americans have a long history of residential segregation in American society and are subject to geographic isolation to a greater extent than other ethnic minorities. Numerous studies have shown that for Hispanics and Asians, ethnicity has not been an insurmountable obstacle to residential integration, in marked contrast to the experience of African Americans. Whereas residential segregation is primarily a matter of class rather than race for Hispanics and Asians, African Americans experience residential segregation across all levels of socioeconomic status (Denton and Massey, 1988, 1991; Logan et al., 1996; Massey, 1990; Massey et al., 1985, 1987, 1989, 1990, 1992, 1993, 1999). Moreover, residential segregation for African Americans has proved quite resistant to change (Mumford Policy Center, 2001).

That said, there is considerable variation in both the degree of spatial isolation of African Americans and in the stability of integrated neighborhoods (Lee and Wood, 1991; Ellen, 2000; Farley and Frey, 1994). One of the perplexing questions in the study of residential segregation is why integrated African American neighborhoods are more stable in some parts of the country than in others. While regional variation in residential segregation has long been acknowledged, few studies have attempted to pinpoint why African Americans have apparently met with such differential success in attaining and sustaining residential integration.

The purpose of this study is to explore the sources of regional variation in the stability of integrated African American communities, using census data from 1990 and 2000. The study, which focuses on 124 Standard Metropolitan Statistical Areas (MSAs), predicts variation in the incidence of neighborhood racial change on the basis of the characteristics of component MSAs in each region. The principal thrust of the findings is that, while the size and growth rate of the African American population and the socioeconomic status of African Americans relative to

whites continue to be relevant as explanations for neighborhood racial change, there are additional factors at play. In particular, the presence of other (non black) ethnic minorities in the region is of critical importance in explaining why integrated neighborhoods have proved more stable in the West than elsewhere in the country.

Regional Variation in Residential Integration

Studies have consistently found that segregation is lowest and has declined most rapidly in the South and West, particularly in smaller cities (Massey and Denton, 1987; Farley and Frey, 1994; Frey and Farley, 1996; The Mumford Center, 2001). Moreover, integrated neighborhoods in Western cities exhibit far lower rates of racial consolidation than those in other regions (Lee and Wood, 1991; Ellen, 2000). One study found that whereas roughly two thirds of integrated neighborhoods in the Northeast, Midwest and South became increasingly African American during the 1970s, only one-third of the tracts in Western cities exhibited this pattern. An equal proportion of integrated neighborhoods were either stable or showed signs of displacement (Lee and Wood, 1991).

The apparent greater stability of integrated African American communities in the West encourages the exploration of Western distinctiveness in this regard. This study will test two theories that offer divergent explanations for regional variation in the residential stability – the *Classic Succession Model* and the *Reduced Social Distance Model*, as described below.

Conventional wisdom presumes that neighborhood racial integration is a temporary phenomenon, particularly for African Americans. That is, racially integrated neighborhoods will ultimately transition to become dominated by the minority group. According to the Classic Succession Model, the in-migration of African Americans into a neighborhood is accompanied

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by the out-migration of whites for whom the number of African American neighbors exceeds their level of tolerance (Duncan and Duncan, 1957). This process of invasion and succession is presumed to be more or less inevitable.

The Classic Succession Model suggests that we can attribute differences in the rate of neighborhood transition between the West and elsewhere to lower concentrations of African Americans, as well as a slower rate of black population growth. Simply put, when the representation of African Americans in a city is small and stable, whites are less reluctant to reside in the same neighborhoods because there is little threat of racial turnover (Massey and Denton, 1993). Thus the finding that integrated tracts in the West are more stable should be a function of containing a smaller proportion of African Americans than mixed areas of non-Western cities.

However, some researchers have argued that succession rates are lower even *within tracts with comparably large concentrations of African Americans* (Lee and Wood, 1991). Moreover, if the size of the African American population was the key factor behind lower rates of racial transition in the West, then we should expect to find regional effects eclipsed by the inclusion of 'percent black' in models predicting residential composition. A number of studies have found that neither the size of the African American population in the city nor the black-white growth differential "explain away" pronounced regional effects (Farley and Frey, 1994; Frey and Farley, 1996; Ellen, 2000).

In contrast, the Reduced Social Distance Model contends that increasing racial integration reflects rising incomes among African Americans since WWII, and a consequent decline in socioeconomic disparities between racial groups. According to this model, stable mixed neighborhoods will be those in which African Americans and whites are of comparable

socioeconomic status, or in which African American status exceeds that of whites. When whites see their African American neighbors as being of similar or better social class, their presence is not perceived to compromise property values.

According to the Reduced Social Distance Model, regional differences in residential integration can be attributed to geographic differences in the socioeconomic status of blacks relative to whites. In cities where racial integration is more stable, African Americans may be better off economically relative to whites than they are in places where integration is more fleeting. Perhaps improvements in the economic situation of African Americans in some parts of the country have impacted settlement patterns, reducing the association between race and residential location.

Indeed, there do appear to be regional differences in the economic situation of African Americans. In the Midwest and Northeast, increasing income inequality has shrunk the size of the black middle class (upper and lower), increased the size of affluent and poor classes, and was accompanied by a reduction in median family income (Massey and Eggers, 1990). Many of the cities of the Northeast and Midwest have witnessed a rise of concentrated black poverty in recent years. When a city exhibits conditions of extreme poverty and deprivation in some African American neighborhoods, racial consolidation may become more likely across all city neighborhoods. That is, the existence of extreme pockets of poverty (ghettos) in a city may strengthen the perceived association between African American race and deprivation.

In the South and West however, the economic pattern is more encouraging. Not only did black incomes improve, but also the proportion of the African American population classified as poor and lower middle class shrank, while the proportion affluent increased (Massey and Eggers, 1990). Moreover, high income African Americans live in less segregated neighborhoods in the

West than they do elsewhere in the country (Massey and Fischer, 1999). In fact, highly educated African Americans in San Francisco have been found to live in neighborhoods that are indistinguishable from those of other ethnic groups (Massey and Fong, 1990), indicating that spatial assimilation is attainable for African Americans in some settings. These stark regional differences in the economic well being of African Americans may play a role in explaining differences in residential integration between cities and regions. At least in the West and possibly the South, the social distance between African Americans and whites that is associated with socioeconomic disparities has shrunk, potentially impacting residential settlement patterns.

Another explanation offered for regional variation in residential stability is a higher frequency of gentrification (Massey and Denton, 1993). To the extent that poor African Americans are displaced from traditional black communities by moderate and high-income whites, we should expect to see a temporary pattern of racial integration during the displacement process, and this might explain the regional effects. Indeed, studies have shown higher rates of displacement in the West than elsewhere in the country. In their study of neighborhood stability in 58 central cities, Lee and Wood found that about one third of tracts in the West could be classified as undergoing displacement, versus less than 13% in each of the other regions (1991). However, they nonetheless found a lower incidence of succession in the West. Their findings highlight the importance of distinguishing displacement areas from other neighborhood types lest gentrifying communities be misclassified as stable and integrated, but also suggest that regional variation can not be solely attributed to higher rates of gentrification.

Another explanation for regional variation in residential stability concerns the settlement patterns of non black ethnic minorities. Segregation indices for African Americans are consistently lower in cities with substantial Hispanic and Asian populations (Farley and Frey,

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1994, Frey and Farley, 1996; Denton and Massey 1991, Lee and Wood, 1991, Iceland, 2002).

The apparent stability of integrated neighborhoods in the West may be a consequence of greater ethnic diversity in the region – specifically, the presence of Hispanics willing to live in a mixed race community. By their presence, Hispanics may reduce the likelihood of succession to a predominantly black area (Lee and Wood, 1991). Indeed, an in-depth examination of tracts in Los Angeles, which account for about one-quarter of the Western tracts in the Lee and Woods study, found that 88% of tracts with significant Hispanic populations ultimately transitioned to Hispanic dominance (Clark, 1993). Moreover, most of these tracts originally contained a large African American population, affirming that the growth of the Hispanic population may be behind the apparent "stability" of integrated tracts. Because Hispanics replaced departing whites, the neighborhoods gave the appearance of stability when neighborhoods were classified as stable based solely on the absence of any change in African American representation (percent black). This finding highlights the importance of classifying as stable only those neighborhoods that maintain both African American *and* white population.

Perhaps lower segregation indices in multiethnic cities indicate that whites are less reluctant to remain in multiethnic communities than in biracial (African American and white) ones. A mix of ethnic groups in the neighborhood may result in lower hostility between whites and blacks (Frey and Farley, 1996), or other ethnic minorities may act as a kind of physical 'buffer' between white and African American residential locations (Farley and Frey, 1994). Alternatively, Hispanics and Asians may simply be present in areas that do not have a history of rapid residential turnover and consequent antipathy between African Americans and whites (Farley and Frey, 1994).

However, some studies suggest that the lower segregation indices of multiethnic cities do not necessarily translate into greater stability of their integrated neighborhoods. Denton and Massey found that the probability of non Hispanic white population loss was *greater* in neighborhoods with more than one ethnic minority, and highest in neighborhoods containing Asian and Hispanic residents. They conclude therefore, that biracial (black and white) neighborhoods were in fact more stable than multiethnic ones (1991). Similarly, Ellen found that the size of the 'other minority' population *increased* the percent loss in non Hispanic white population. She cautions however, that this does not imply that whites are more averse to living among Hispanics and Asians. Rather, because white population is measured as a net loss, it may result from growing minority populations as well as dwindling white ones, and rapid immigration is likely driving the change in the neighborhood composition (Ellen, 2000).

The main thrust of this paper is to evaluate the importance of competing theories, Classic Succession and Reduced Social Distance, as explanations for regional in the stability of integrated neighborhoods. In the process, I will evaluate the importance of non black ethnic minorities as a stabilizing (or destabilizing) force in integrated African American neighborhoods.

Conceptual and Definitional Issues

Past research has been confounded somewhat by a lack of consensus regarding how integration should be measured. Some have suggested that biracial, integrated neighborhoods are those that are plus or minus 50% African American (Jargowsky, 1994), or in the case of multiethnic neighborhoods, equally proportioned across groups (Clark, 1993). Others suggest that integration is defined as a range, for example, between 10 and 90% African American (Ellen, 2000; Lee and Wood, 1991). In like fashion, stability is measured as divergence from

these levels. Thus Ellen (2000) and the Taeubers (1969) identified stable neighborhoods as those that did not change in African American and white proportion between two time periods by more than 10% and Lee and Wood defined stability as less than a 5 percentage point change in the African American population (1991). Because researchers differ in the criterion applied to define integration and stability, there is some inconsistency in the identification of integrated areas, compromising comparability across studies.

A related question that has become increasingly relevant is how best to measure integration in an increasingly multiethnic world. On the one hand, African Americans increasingly are settling in multiethnic neighborhoods (Denton and Massey, 1991; Frey and Farley, 1996; Iceland, 2002) and show a preference for ethnically diverse communities (Clark, 1992). This would suggest that segregation and integration should be defined and measured in a multiethnic, rather than two group (black – white) fashion. On the other hand, one has to question whether a world in which African Americans are perfectly integrated with other ethnic minorities, but whites continue to reside in largely white neighborhoods represents true integration. Repeated surveys have shown that whites display the greatest aversion to residential integration with African Americans (Bobo and Zubrinsky, 1996; Clark, 1986, 1992). Thus because true residential integration hinges on the willingness of whites to share a neighborhood with African Americans, I have chosen to define and measure integration largely in terms of the settlement patterns of whites and blacks.

In the interest of complementing the existing literature while capturing the phenomenon of interest – tracts likely to undergo racial change – this study will model residential change in a fashion similar to that of the Taeubers (1969), who did some of the early, definitive work on

residential succession. Neighborhoods are classified as showing evidence of consolidation, displacement or stability, as defined below.

Consolidating areas are those in which African American representation (the percent black) increased by at least 10 percentage points over the decade, accompanied by one of the following:

➢ A decrease in white population in both absolute and relative terms (percent white);

➢ An increase in white population in absolute terms, but because the African American population is growing faster, a decrease in white representation;

➢ A decrease in African American and white population in absolute terms, but a greater decline in white population, resulting in a decrease in white representation.

Displacement areas are those in which African American representation decreased by at least 10 percentage points, accompanied by one of the following:

➢ White population increase in both absolute and relative terms;

➢ Both African American and white population increase in absolute terms, but white population increasing more;

➢ Both African American and white population declining in absolute terms, but African American population declining more.

➢ Both white *and* African American representation decreasing, due to displacement by non black ethnic minorities.

The Taeubers defined residential stability in a very stringent manor (as they acknowledged), requiring stability in both absolute numbers and proportional representation (Taeubers, 1969, p. 104). This study will relax those restrictions slightly, focusing only on proportional change. Stable areas are defined as those in which African American representation

neither increased nor decreased over the period by 10 percentage points or more, without losing

white population (by 10 percentage points or more). Stable areas are further classified by level

of African American representation in the latter period.

> Established black: > 90% African American in 2000

> Integrated black: 11 – 90% African American in 2000

> Nominally black: 1 – 10% African American in 2000

> Established non black: < 1% African American in 2000.

The requirement that the white population maintain its level of representation in order for a tract

to be defined as stable enables us to distinguish 'truly' stable areas from those that give the

appearance of stability, as the white population is replaced by other racial minorities. This

distinction produces an additional category, areas that are stable with respect to the black

population, but are replacing departing whites with non black minorities. These neighborhoods

are called 'non black minority consolidation' communities in this classification scheme.

Most studies that have examined integration patterns have diverged from the type of

classification system originally employed by the Taeubers and Duncans, opting instead to test for

evidence of succession by measuring change in either the percent white (Ellen, 2000) or the

percent black (Lee and Wood, 1991) between time periods. This classification system is an

improvement over these approaches because it employs a more precise specification of what is

meant by consolidation, displacement and stability. This system requires that a minimum

threshold of change in African American representation be surpassed for a tract to be identified

as a consolidation or displacement area (10 percentage point difference between the initial and

terminal years of a decade). Moreover, this system accommodates situations in which both white

and black representation may be decreasing in tandem (when both are replaced by some other

ethnic group), or when the black population is stable but other minorities replace departing

whites. I anticipate that defining racial change in a more exact fashion will bring greater clarity

to the task of illuminating the factors that influence change in the racial configuration of

neighborhoods.

Data Description

The source of data for this study is the Neighborhood Change Database (NCDB), which

includes selected long form census data for the period from 1970 to the year 2000 (Urban

Institute and Geolytics, 2002;). For this study, only data from 1990 and 2000 is used in the

analysis, though some descriptive information is presented for 1980. The NCDB is appropriate

for temporal comparisons because the data has been normalized to the year 2000 tract

boundaries. Thus, temporal changes in the variables of interest are not confounded by the fact

that the boundaries of tracts inevitably change between each census. This data set was

constructed using GIS software to overlay the 2000 tract boundaries with those of earlier years to

assess the magnitude of boundary changes. By applying the 1990 block population data, weights

were calculated that reflect the proportion of people in each 1990 tract that was redefined as part

of a 2000 tract. These population weights were then applied to the 1970, 1980 and 1990

variables to convert them to the 2000 tract boundaries. The use of GIS software represents a

significant improvement over past efforts to adjust for boundary changes because the population

in tracts that change boundaries can be allocated to the new tract(s) in relation to their

representation. So for example, if a tract is divided into three new tracts, the residents need not

be allocated evenly to the new tracts (as was previously the case), but rather allocated in

accordance with the block level changes. [For a more complete discussion of this procedure,

refer to Appendix J of the Data Users Guide, available on the Geolytics website
(www.geolytics.com).]

The unit of analysis for the NCDB is the census tract. The clear advantage of using census tracts is that they are sufficiently small (with average populations of 4000) so as to approximate neighborhoods, and yet provide the full range of census information. Moreover, census tracts have a long history of use as the unit of analysis for neighborhood studies. The disadvantage of using tracts is that tract-level racial integration may disguise considerable block group or even block level segregation. As an example, a tract may appear integrated because of the presence of a public housing complex located within a single block group. Keeping in mind the caution that census tracts may in a presumably small number of cases, misrepresent the true level of racial integration, this study will nonetheless keep with convention and define neighborhoods on the basis of census tracts.

Tracts identified as part of a metropolitan area in the 2000 census with populations of 250,000 or greater in 1990 are included in the full sample, totaling 144 metropolitan areas. In terms of estimating the influence of metropolitan-level conditions, tract data were aggregated to the Primary Metropolitan Statistical Area (PMSA) level if the area has over 1 million residents and thus has such a designation, and to the Metropolitan Statistical Area (MSA), for smaller cities.[1] Not all tracts in a metropolitan area are necessarily defined by the Census Bureau as urban. Tracts were dropped from the study if the percentage of the tract's 2000 population living in a census-designated urban area was less than 90% (1750 tracts dropped). The sample was further limited to tracts where less than 25% of the residents live in institutional settings, such as prisons, nursing homes, military barracks, dormitories, etc, (1843 tracts dropped). Tracts were

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[1] Two tracts were dropped from the sample because they lacked a PMSA/MSA designation.

required to have a minimum population size of 1000 residents in both 1990 and 2000 (1534 tracts dropped). The final sample is comprised of 40623 tracts.

For the multivariate component of the analysis, the sample was restricted to tracts located in MSAs that were at least 5% African American, covering 124 MSAs (251 tracts dropped). Moreover, the analysis focuses only on black consolidating vs. truly stable areas (7595 tracts).

Because the Neighborhood Change Data Base facilitates comparison of change in communities across decennial years, it represents a huge development for the measurement of population trends using census data. However, the NCDB is not without its limitations. Not all census variables are available, which necessitates measuring some concepts in less than ideal ways. For example, the NCDB does not include measures of occupation by race, so it is not possible to measure socioeconomic status by the proportion of African Americans in professional or managerial occupations. (In this case, it is possible to measure social class as the proportion of African Americans with a college degree, or using black per capita income).

The Census Bureau altered the racial classification system for the 2000 census, with respondents given the opportunity to report multiple racial identities. This change complicates somewhat the study of residential integration over time. In the interests of comparability, the NCDB reassigns multiracial individuals to single races in descending order of priority as follows:

- ➢ Black + any other race, assign to black
- ➢ Asian + any other race, assign to Asian
- ➢ Native Hawaiian/Other Pacific Islander (NH/OPI) + any other race, assign to NH/OPI
- ➢ White + any other race, assign to white

> ➢ Native American + any other race, assign to Native American

> ➢ "Some other race", assigned to 'Other race' when this is the sole response.

The assignment of mixed race individuals to a single racial category unavoidably introduces some bias into the measurement of residential segregation over time.

Analytic Approach

While the classification scheme elaborates multiple types of consolidation, displacement and stability, the analytic portion of this study will focus only on truly stable areas that are between 10 and 90% African American in 2000 and those neighborhoods that experience black consolidation (7595 tracts, combined). Established African American neighborhoods (> 90% black), neighborhoods containing few African Americans (< 10% black), areas experiencing displacement, and areas with a consolidating non black minority population are excluded from the analysis. By focusing only on consolidating black versus truly stable neighborhoods, we can establish whether the greater stability of Western tracts can largely be attributed to a higher incidence of displacement or the replacement of departing whites by other minorities. That is, any regional variation in the incidence of black consolidation provides evidence that there are factors at play other than displacement and the replacement of departing whites with other ethnic minorities.

Logistic regression is employed to identify the factors that differentiate neighborhoods where black consolidation is taking place from those that are stable, in the process identifying which of the models (Classic Succession vs. Social Distance) receives more empirical support. Independent variables reflect conditions in 1990, while the dependent variable represents the probability of neighborhood change (vs. stability) over the decade.

Results

        Before pursuing the question of regional distinctiveness, it is useful to illustrate the classification system applied to the 1980s and 1990s and evaluate the extent to which residential segregation patterns have changed over the last two decades. As shown in Table 1, it appears that, slowly but surely, non black neighborhoods are becoming a thing of the past. The most pronounced change between the 1980s and the 1990s is the decline in the number of areas that were less than 1% African American. About one in five neighborhoods contained few if any African Americans in the 1990s – a marked decrease from nearly one-third in the 1980s. However, we do not see a commensurate increase in the number of stable integrated communities. There is a slight increase in the number of nominally black neighborhoods, and a moderate increase in the number of areas that were minority consolidation communities in the 1990s. Moreover, we continue to find evidence of black consolidation, as whites either move from or avoid moving into neighborhoods containing African Americans. In fact, the percentage of neighborhoods undergoing black consolidation actually increased slightly during the 1990s. All told, these descriptive findings do not suggest that there has been any radical shift in the willingness of whites to share a neighborhood with African Americans.

        Focusing on regional differences in neighborhood type for the 1990s (Table 2), the South stands out as a region with a substantial number of integrated areas, and fewer non black neighborhoods. About one sixth of Southern neighborhoods in the sample were integrated during the 1990s. In contrast, the Midwest and West contained few such areas (9 and 5%, respectively). It is not surprising to find few communities that are at least 10% African American in the West, given the low African American representation in the region (6%).

However, it is more surprising to find such low integration in the Midwest where the urban population is nearly 20% African American.

Despite (or perhaps because of) the integrated nature of Southern neighborhoods, the South experienced considerably more black consolidation than elsewhere in the country. About one in seven Southern neighborhoods (14%) was in the process of consolidating during the 1990s, compared with 10% or less in the other regions. It appears from this simple analysis that although other studies show that the South has lower Indices of Dissimilarity than the Midwest or North, a considerable share of black integrated Southern communities are nonetheless in the process of becoming more racially homogeneous. In contrast, black consolidation was quite rare in the West, where only 1% of neighborhoods gained African Americans while losing whites. However, minority consolidation was very prevalent, with 39% of Western neighborhoods gaining non black minorities while the black population remained stable and the white population shrank.

Turning to the comparison of true stable integrated neighborhoods and areas experiencing black consolidation, we find large differences in the incidence of consolidation by region (Table 3). Whereas more than half (52%) of integrated neighborhoods in the Midwest grew increasingly African American, less than 20% of integrated areas in the West were undergoing black consolidation. Western tracts, whether consolidating or stable have a smaller proportion of African Americans than do tracts in the other regions. This lends support to the idea that Western tracts are slow to consolidate simply because they have lower concentrations of African Americans, thus a black presence in a neighborhood poses little threat of racial turnover. In all regions, the average increase in the percent black over the course of the decade was not sufficient

to produce majority black neighborhoods, suggesting that the process of consolidation may proceed considerably slower in the 1990s than was historically the case.

It is noteworthy that, on average, nearly 40% of the residents of stable integrated areas in the West are non black minorities, while about one fourth of the residents in consolidating tracts are non black minorities. Across all regions except the South, the level of non black minority representation is higher in stable communities than in consolidating ones, suggesting that non black minorities may stabilize integrated areas. On the other hand, the rate of increase in the non black minority population is higher in consolidating areas, particularly in the West, suggesting that these neighborhoods are becoming increasingly multiethnic.

The incidence of stability and succession for select metropolitan areas (the five cities in each region that have the greatest number of tracts in the sample) is shown in Table 4. These cities reflect the regional patterns described above, with some notable exceptions. Neighborhoods in New York are considerably more stable and have greater minority representation (black and non black combined) than neighborhoods elsewhere in the region. Detroit displays a remarkable tendency toward black consolidation compared with other major Midwest cities. New Orleans appears to have a higher proportion of stable neighborhoods than other Southern cities, whereas Riverside-San Bernardino has a greater proclivity for black consolidation compared with other Western cities. Stable neighborhoods in Los Angeles and San Diego are, on average, about one half non black minorities, and when African American representation is factored in, these communities are found to have quite low white representation.

Thus far the descriptive analysis has demonstrated that the West differs considerably from other parts of the country in terms of the stability of integrated African American neighborhoods. The next step is to explore the source of this variation. Table 5 portrays how the

regions differ with respect to the key independent variables in the analysis, as well as the bivariate correlation between the independent variables and black consolidation. All of the independent variables are measured at the MSA level in 1990, except the difference in black and white growth rates, which reflect population change over the course of the decade. The West can be characterized by a smaller African American population and a comparatively larger non black minority population. With respect to socioeconomic factors, we find that a larger share of the black population has attained middle class or better socioeconomic status (> $25,000 in household income) in the West (51% vs. 48%, 39% and 40% in the Northeast, Midwest and South, respectively). Moreover, the difference between the relative size of the white and black middle class is smallest in the West (18 percentage point difference vs. 20, 25 and 24 percentage points in the Northeast, Midwest and South, respectively). At the other end of the socioeconomic spectrum, once again we find the situation of African Americans to be somewhat better in the West, where 22% live below poverty as compared with 25% in the Northeast, 32% in the Midwest, and 28% in the South. There are fewer neighborhoods that are both established black (at least 75% African American) and poor (poverty rate greater than 20%) in the West as well. Based on these descriptive statistics, we expect socioeconomic factors to play a role in the lower incidence of succession in the West.

Turning to the bivariate correlations between the independent variables and the dependent variable (the last column in Table 5), there are significant correlations between the relative size of both the black and non black minority populations and the incidence of black consolidation. While the size of the African American middle class is not correlated with black consolidation, the relative size of the African American middle class compared with the white middle class does appear to be an important predictor. Similarly, while the size of the black poor

population is not significant, the existence of established black areas experiencing extreme poverty is associated with black consolidation.

The results of a logistic regression estimating the impact of the explanatory variables on the odds of black consolidation are shown in Table 6. We are interested both in the effects of the coefficients on the odds as well as the degree to which introducing different explanatory variables diminishes the regional disparities. Model 1, which contains only the regional dummy variables shows that there are large differences in the odds of black consolidation between the West and other parts of the country. The greatest disparity in odds is between the West and the Midwest (3.9), followed by the South (3.4) and the Northeast (2.1). Were the greater stability of integrated areas of the West solely due to higher rates of displacement and/or the replacement of departing whites by other ethnic minorities, we would not find significant, pronounced regional differences in the incidence of consolidation.

In Model 2, the factors at the heart of the Classic Succession Model are introduced. We find that these variables behave in the predicted fashion – the odds of consolidation increase with the magnitude of the black population in the city, the size of the difference in growth rate between the black and white population, and the size of the urban area. Though the effects are consistent with the Classic Succession Model, these demographic factors do not explain much of the regional diversity in the incidence of black consolidation. The coefficients for the South and the Northeast diminish slightly in magnitude, but the coefficient for the Midwest actually *increases* in size when the demographic profile of the component MSAs is controlled. Model 2 suggests that the smaller African American population in the cities of the West is not the principal explanation behind the greater stability of integrated neighborhoods in that region.

Rather, it appears that the size of the non black minority population, introduced in Model 3, is a critical factor behind regional variation. The odds of consolidation decrease in relation to the magnitude of the non black minority population in the city, and regional differences in the odds of consolidation between the Northeast and the West are reduced to non significance. While the odds of black consolidation remain significant in the Midwest and South, they are reduced by 55% and 49%, respectively.

Model 4 introduces the key variable underlying the Social Distance Model, the socioeconomic gap between African Americans and whites. As expected, the greater the general disparity between the size of the white and black middle (or better) class, the higher the odds of consolidation. When introduced, the relative magnitude of the African American population in the city loses its significance. Given the regional differences in social distance shown in descriptive results, we might expect the regional coefficients to decrease in magnitude by a substantial amount when the relative status of African Americans in the city is held constant. In fact, controlling for the lower status of African Americans compared with whites has very little effect on the odds of consolidation associated with each region.

A second measure of African American socioeconomic wellbeing, the percent of neighborhoods that are established black and poor is introduced in Model 5.[2] The odds of consolidation are generally higher when there are economically distressed established African American communities in the city. This finding is consistent with the idea that the presence of extreme pockets of poverty that are also predominantly African American strengthens the perceived association between African American ethnicity and economic deprivation. With this model we explain some of the variation between the West and the Midwest, as the odds of

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[2] Due to issues of multi-collinearity, it could not be introduced in the same model with the relative status of African Americans.

consolidation in the Midwest decline from 2.1 to 1.7. Comparisons of the BIC statistics for these models suggest that this model is the best fit to the data.

These models have shown that, while the factors associated with the Classic Succession Model are important predictors of racial consolidation, differences in the size and growth rate of the African American population are not the source of the regional variation in rates of consolidation. Similarly, while these models have shown that the status of African Americans relative to whites is a significant factor in the incidence of racial succession, we find little evidence that regional differences in rates of consolidation can be attributed to the better socioeconomic status of African American relative to whites in the West. On the other hand, the size of the non black minority population does account for much of the regional variation, and, at least in the Midwest, severe poverty in African American neighborhoods contributes to higher rates of consolidation across all neighborhoods. Even in the fully specified model, however, the odds of consolidation are more than 50% greater in the Midwest and South than they are in the West. There are additional factors not yet explored that underlie these regional residuals.

One possible source of the geographic variation in the incidence of consolidation that this study has overlooked may be found in our history. Current segregation patterns may largely be a legacy of settlement patterns that arose during the post WWII period. Rapid residential turnover in the destination cities for the Great Migration and the consequent development of white suburbs with traditions of hostility toward African Americans may have created patterns of racial segregation that persist even to the present day. Cities in the Midwest and Northeast developed white suburbs in the post WWII period to escape from the rapid influx of African Americans in the central cities. Because each suburb had their own zoning laws, schools and police system,

legal remedies to combat discriminatory practices had little impact on segregation at the MSA level, affecting only the specific suburban municipality in question.

Perhaps cities of the West exhibit greater racial integration because their suburbs arose more recently, after the Fair Housing Law (1968) began to shape settlement patterns. Moreover, because citizens in the West have had less experience with rapid residential turnover, the association between African American ethnicity and property devaluation is less pronounced. Because of these development patterns, Western cities may contain fewer neighborhoods with reputations for hostility to African Americans or areas known as exclusive African American enclaves (Farley and Frey, 1994).

A city's historic experience with segregation is considerably more complicated to measure than its current demographic and socioeconomic profile. However, one summary measure available from the work of the Taeubers is the extent of racial segregation as of 1960 (1967). In Table 7, I have added the Taeuber 1960 indices of black – white dissimilarity for a subset of cities to the best model from Table 6 (column 5).[3] We find that, controlling for the level of segregation in 1960 reduces the regional coefficients to non significant levels. This suggests that we are still living with the legacy of rapid residential turnover that occurred during the post war years, before the Fair Housing Laws began to shape residential settlement patterns. The process of invasion and succession that occurred in the target cities for the Great Migration began a process of segregation that continues to the present day. Isolation in racially segregated neighborhoods sustains residential segregation by increasing African American economic disadvantage and by widening the gap between black and white socioeconomic status (Massey, 1990; Massey and Denton, 1993). Greater economic deprivation in the African American

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[3] Differences in the odds for the fully specified model from Table 6 and the same model shown in column 1 of Table 7 reflect the fact that the Taeuber Indices of dissimilarity were not available for all of the MSAs included in the analysis.

population only increases the aversion of whites to sharing a neighborhood, thus perpetuating high levels of residential segregation.

Conclusion

This study contributes to our understanding of the factors that underlie regional differences in the stability of integrated neighborhoods in a number of ways. First, the analytic approach allows us to be fairly confident that regional variation is not explained by a higher incidence of gentrification in the West, nor is it largely an illusion created by the replacement of departing whites with other ethnic minorities.

With respect to the prevailing theories – Classic Succession and Reduced Social Distance – neither emerges as a very satisfying explanation for regional variation. While the relative size of the African American population in the MSA increases the likelihood of consolidation, the smaller black population in the West does not appear to be the principal source of regional variation in rates of consolidation. Nor are Western neighborhoods more stable because African Americans are comparatively better off there relative to the white population.

It does appear however, that regional differences can be partially explained by the larger non black minority population in the West. We are left however, with little inkling as to why this might be the case. It is left to future research to evaluate whether this finding may be due to the spatial arrangement of ethnic groups within multiethnic neighborhoods, the spatial location of multiethnic neighborhoods within MSAs, lower levels of hostility between African Americans and whites in multiethnic cities, or is indicative of greater tolerance for diversity among whites exposed to many ethnic groups.

Table 1: Racial Configuration of Neighborhoods, 1980s and 1990s

	1980s %	1990s %	Difference
Stable Communities: < 10 percentage point change in Black representation			
Stable, Highly Black > 90%	4.6	4.4	-0.2
Stable, Integrated Black 10 – 89%	10.5	10.8	0.3
Stable, Nominally Black 1 – 9%	31.3	33.2	1.9
Stable, Non Black < 1%	28.8	18.6	-10.2
Racially Changing Communities			
Black Consolidation > 10 percentage point Black increase	7.3	8.5	1.2
Minority Consolidation > 10 percentage point White decrease, Black population stable	15.6	22.5	6.9
Displacement > 10 percentage point Black decrease	1.9	2.1	0.2
Total Percent	100.0	100.0	
Number of Tracts	37777	40623	

Table 2: Racial Configuration of Neighborhoods by Region, 1990s

		Northeast	Midwest	South	West	Total
Stable, highly Black						
	%	3.0	7.9	6.3	0.1	4.4
	n	293	715	766	5	1779
Stable, Integrated Black						
	%	11.9	9.2	16.1	4.5	10.8
	n	1161	835	1961	434	4391
Stable, nominally Black						
	%	34.3	35.9	29.9	33.5	33.2
	n	3350	3246	3654	3226	13476
Stable, non Black						
	%	23.6	23.6	10.5	19.1	18.6
	n	2309	2134	1278	1840	7561
Black Consolidation						
	%	6.9	10.0	14.5	1.1	8.5
	n	671	905	1771	108	3455
Minority Consolidation						
	%	18.5	12.7	20.2	38.6	22.5
	n	1804	1144	2462	3711	9121
Displacement						
	%	1.8	0.6	2.5	3.1	2.1
	n	178	54	310	298	840
Total N		9766	9033	12202	9622	40623
Tract % Black in Sample, 2000		14.9	18.9	23.4	6.2	16.3

Table 3: Frequency of Stability vs. Black Consolidation by Region in the 1990s

Region	Neighborhood Type	N Tracts	% Tracts	% Black 1990	Change in % Black	% Non Black Minority, 1990	Change in % Non Black Minority
Northeast	Stable	1161	63.4	43.4	-0.2	25.4	3.1
	Black Consolidation	671	36.6	22.3	19.7	13.6	5.9
	Total	1832	100.0	35.7	7.1	21.1	4.1
Midwest	Stable	835	48.0	36.4	1.9	8.0	1.6
	Black Consolidation	905	52.0	25.9	20.7	6.4	2.8
	Total	1740	100.0	30.9	11.7	7.1	2.2
South	Stable	1961	52.5	34.0	1.0	6.5	2.6
	Black Consolidation	1771	47.5	25.9	19.8	6.9	4.7
	Total	3732	100.0	30.2	9.9	6.7	3.6
West	Stable	434	80.1	29.4	-1.9	39.1	4.9
	Black Consolidation	108	19.9	14.5	13.8	25.3	11.2
	Total	542	100.0	26.4	1.2	36.3	6.2
Total	Stable	4391	56.0	36.5	0.6	15.0	2.8
	Black Consolidation	3455	44.0	24.9	19.8	8.6	4.6
	Total	7846	100.0	31.4	9.0	12.2	3.6

Table 4: Frequency of Stability vs. Black Consolidation in Integrated Neighborhoods of Select Cities

Region	MSA		N Tracts	% Tracts	% Black	Change in % Black	% NB Minority	Change % NB Minority
Northeast	Boston	Stable	45	58.4	40.9	-1.1	20.5	3.5
		Black Consolidation	32	41.6	14.8	15.9	16.0	9.3
		Total	77	100.0	30.0	5.9	18.6	5.9
	New York	Stable	504	75.0	50.6	-1.4	38.7	2.8
		Black Consolidation	168	25.0	26.6	26.4	23.0	3.5
		Total	672	100.0	44.6	5.6	34.8	3.0
	Newark	Stable	68	57.1	61.1	-0.3	19.1	3.2
		Black Consolidation	51	42.9	29.8	18.5	17.7	3.3
		Total	119	100.0	47.7	7.8	18.5	3.2
	Philadelphia	Stable	162	53.8	32.6	1.1	10.8	2.5
		Black Consolidation	139	46.2	22.4	20.5	7.8	6.4
		Total	301	100.0	27.9	10.1	9.4	4.3
	Pittsburgh	Stable	68	56.7	26.9	3.4	1.7	1.2
		Black Consolidation	52	43.3	23.6	16.0	1.5	1.0
		Total	120	100.0	25.5	8.9	1.6	1.1
Midwest	Chicago	Stable	113	49.8	37.7	-0.3	25.9	1.5
		Black Consolidation	114	50.2	26.3	23.7	14.1	2.0
		Total	227	100.0	32.0	11.8	19.9	1.7
	Cleveland-Lorain-Elyria	Stable	67	46.9	30.8	3.0	7.0	1.6
		Black Consolidation	76	53.1	19.6	23.4	4.9	1.8
		Total	143	100.0	24.9	13.8	5.9	1.7
	Columbus	Stable	53	45.7	38.0	2.9	2.4	1.6
		Black Consolidation	63	54.3	20.5	17.0	2.5	3.4
		Total	116	100.0	28.5	10.6	2.5	2.6
	Detroit	Stable	55	28.8	46.1	2.4	4.0	1.4
		Black Consolidation	136	71.2	38.4	23.8	4.8	1.1
		Total	191	100.0	40.6	17.6	4.6	1.1
	St. Louis	Stable	63	44.4	29.7	2.6	2.8	1.2
		Black Consolidation	79	55.6	25.3	23.4	2.6	1.4
		Total	142	100.0	27.3	14.1	2.7	1.3

Table 4: Frequency of Stability vs. Black Consolidation in Integrated Neighborhoods of Select Cities (cont.)

Region	MSA		N Tracts	% Tracts	% Black	Change in % Black	% NB Minority	Change % NB Minority
South	Atlanta	Stable	82	31.7	37.3	0.2	2.9	3.1
		Black Consolidation	177	68.3	23.5	23.1	4.7	7.8
		Total	259	100.0	27.9	15.8	4.1	6.3
	Baltimore	Stable	80	39.8	24.6	2.2	4.0	2.5
		Black Consolidation	121	60.2	30.2	22.8	3.6	2.0
		Total	201	100.0	28.0	14.6	3.7	2.2
	New Orleans	Stable	112	64.0	43.1	1.4	6.3	0.6
		Black Consolidation	63	36.0	37.5	19.7	8.7	0.2
		Total	175	100.0	41.0	8.0	7.1	0.5
	Norfolk-VA Beach-Newport	Stable	114	58.2	32.2	2.8	4.8	1.3
		Black Consolidation	82	41.8	23.7	15.5	6.4	2.9
		Total	196	100.0	28.7	8.1	5.5	2.0
	Washington	Stable	126	43.9	32.9	0.0	9.1	3.6
		Black Consolidation	161	56.1	31.8	19.3	9.0	3.8
		Total	287	100.0	32.3	10.8	9.1	3.7
West	Los Angeles-Long Beach	Stable	161	80.1	36.3	-2.7	48.4	5.3
		Black Consolidation	40	19.9	20.0	15.2	28.2	8.9
		Total	201	100.0	33.0	0.9	44.4	6.0
	Oakland	Stable	70	90.9	38.3	-2.5	27.6	5.3
		Black Consolidation	7	9.1	15.1	12.0	25.8	9.2
		Total	77	100.0	36.2	-1.2	27.4	5.7
	Riverside-San Bernardino	Stable	13	40.6	19.5	-1.2	44.0	6.2
		Black Consolidation	19	59.4	11.0	13.1	30.5	14.6
		Total	32	100.0	14.4	7.3	36.0	11.2
	Sacramento	Stable	25	78.1	19.5	-0.2	31.5	4.8
		Black Consolidation	7	21.9	10.5	13.4	25.5	13.5
		Total	32	100.0	17.5	2.8	30.2	6.7
	San Diego	Stable	17	85.0	25.6	-1.6	51.2	5.5
		Black Consolidation	3	15.0	12.1	14.3	35.3	5.9
		Total	20	100.0	23.5	0.7	48.8	5.5

Table 5: Key MSA Characteristics by Region, 1990
(Means, Standard Deviations and Bivariate Correlation with Black Consolidation)

	Northeast		Midwest		South		West		Total		Bivariate Correlation
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
% Black	16.9	7.0	14.6	4.7	23.1	8.5	9.7	2.8	19.0	8.4	0.075**
% other minority	15.5	11.2	4.9	4.2	7.1	9.1	34.3	13.3	10.3	11.8	-0.142**
Log Population	15.0	1.0	14.3	0.9	13.9	0.8	14.9	1.1	14.3	1.0	0.008
Difference in growth rates (Black – White growth rate)	19.5	5.8	16.5	5.7	21.3	14.3	21.8	15.9	19.9	11.6	0.127**
% Blacks that have middle class (or better) income	48.4	8.2	39.6	4.4	40.1	9.6	50.6	4.0	42.6	9.1	-0.002
Difference in % middle class (White – Black middle class)	19.5	4.1	25.1	3.2	24.6	4.2	17.7	4.4	23.1	4.8	0.120**
% of Blacks living below poverty	25.0	5.7	32.2	4.2	28.3	8.0	21.6	2.4	27.9	7.2	0.011
% of tracts that are established Black and very poor	5.1	2.5	8.9	4.7	9.2	6.0	1.0	1.5	7.7	5.5	0.143**
N	1761		1639		3717		478		7595		

** p < .001

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Exp(B)	S.E.	Exp(B)	S.E.	Exp(B)	S.E.	Exp(B)	S.E.	Exp(B)	S.E.
Regions (West is reference)										
Midwest	3.945**	0.123	4.753**	0.128	2.120**	0.150	1.998**	0.151	1.700*	0.153
South	3.440**	0.117	3.247**	0.133	1.661*	0.149	1.647*	0.148	1.737*	0.148
Northeast	2.121**	0.123	2.052**	0.127	1.145	0.140	1.230	0.141	1.193	0.140
Demographic Factors										
Percent Black			1.018**	0.004	1.017**	0.004	1.011	0.004	0.984	0.006
Difference in Black – White growth rate (1990s)			1.030**	0.002	1.033**	0.002	1.036**	0.003	1.033**	0.002
Log Population			1.126**	0.027	1.327**	0.032	1.335**	0.032	1.339**	0.032
Percent Other Minorities					0.968**	0.003	0.973**	0.003	0.970**	0.003
Socioeconomic Factors										
Difference in relative size of Black and White middle class							1.035**	0.007		
Percent of tracts that are established Black and poor									1.060**	0.008
Constant	0.265	0.112	0.019	0.417	0.005	0.444	0.002	0.485	0.005	0.445
X^2	212		426		536		557		585	
Df	3		6		7		8		8	
N	7595		7595		7595		7595		7595	
BIC	-186		-372		-474		-486		-513	
BIC difference M_1, M_2		186								
BIC difference M_2, M_3				102						
BIC difference M_3, M_4						12				
BIC difference M_4, M_5								27		

** $p < .0001$
* $p < .001$

Table 7: Logistic Regression Odds Ratios of Black Consolidation by MSA Characteristics, including Historic Experience with Segregation

	Model 1		Model 2	
	Exp(B)	**S.E.**	**Exp(B)**	**S.E.**
Regions (West is reference)				
Midwest	1.696*	0.154	1.566	0.160
South	1.711*	0.150	1.494	0.164
Northeast	1.191	0.142	1.159	0.143
Demographic Factors				
Percent Black	0.986	0.006	0.989	0.006
Difference in Black – White growth rate (1990s)	1.032**	0.003	1.031**	0.003
Log Population	1.306**	0.033	1.298**	0.034
Percent Other Minorities	0.970**	0.003	0.971**	0.003
Socioeconomic Factors				
Percent of tracts that are established Black and poor	1.054**	0.009	1.048**	0.009
Historic Experience				
Indices of Dissimilarity, 1960			1.010	0.005
Constant	0.007	0.464	0.003	0.597
X^2	518		522	
N	7247		7247	

** $p < .0001$
* $p < .001$

References

Bobo, Lawrence; Zubrinsky, Camille L. 1996. "Attitudes on Residential Integration: Perceived Status Differences, Mere In-Group Preference, or Racial Prejudice?" *Social Forces*; 74, 3, Mar, 883-909.

Clark, William, A.V. 1992. "Residential Preferences and Residential Choices in a Multiethnic Context." *Demography*, 29: 451-466.

Clark, William, A.V. 1991. "Residential Preferences and Neighborhood Racial Segregation: A Test of the Schelling Model." *Demography*, 28: 1-19.

Clark, William, A.V. 1986. "Residential Segregation in American Cities: A Review and Interpretation." *Population Research and Policy Review*, 5: 95-127.

Crane, Jonathan. 1991. "The Epidemic Theory of Ghettos and Neighborhood Effects on Dropping Out and Teenage Childbearing." *American Journal of Sociology* 96:1226-59.

Denton, Nancy A. and Douglas S. Massey, 1991. "Patterns of Neighborhood Transition in a Multiethnic World: U.S. Metropolitan Areas, 1970 – 1980." *Demography* Vol. 28 (1).

Denton, Nancy and Douglas Massey. 1988. "Residential Segregation of Blacks, Hispanics, and Asians by Socioeconomic Status and Generation." Social Science Quarterly, Vol. 69: 4.

Duncan, Otis Dudley, and Beverly Duncan. 1957. The Negro Population of Chicago: A Study of Residential Segregation. University of Chicago Press, Chicago and London.

Ellen, Ingrid Gould. 2000. Sharing America's Neighborhoods: The Prospects for Stable Racial Integration. Cambridge, MA: Harvard U Press.

Ellen, Ingrid Gould. 2000. "The New White Flight? The Dynamics of Neighborhood Change in the 1980s." chapter in Immigration Research for a New Century.

Farley, Reynolds; Frey, William H. 1994. "Changes in the Segregation of Whites from Blacks during the 1980s: Small Steps toward a More Integrated Society." *American Sociological Review*; 59, 1, Feb, 23-45.

Frey, William H.; Reynolds Farley. 1996. "Latino, Asian and Black Segregation in U.S. Metropolitan Areas: Are Multi-ethnic Metros Different." *Demography*, Vol. 33, No. 1. (Feb., 1996), pp. 35-50.

Iceland, John. 2002. "Beyond Black and White: Metropolitan Residential Segregation in Multi-Ethnic America." Paper presented at the American Sociological Association Meetings, Chicago, Illinois.

Jargowsky, Paul. 1996. "Take the Money and Run: Economic Segregation in US Metropolitan Areas." *ASR*, Vol. 61.

Lee, Barrett A. and Peter B. Wood, 1991. "Is Neighborhood Racial Succession Place-Specific?" *Demography*, Vol. 28 (1).

Massey, Douglas S. 2001. "Segregation and Violent Crime in Urban America." Chpt in <u>Problem of the Century: Racial Stratification in the United States</u>, Anderson, Elijah, & Massey, Douglas S. [Eds], New York: Russell Sage, pp 317-344.

Massey, Douglas S. 1990. "American Apartheid: Segregation and the Making of the Underclass" *The American Journal of Sociology*, Vol. 96, No. 2. (Sep., 1990), pp. 329-357.

Massey, Douglas and Mary Fischer. 2000. "How Segregation Concentrates Poverty." *Ethnic and Racial Studies*, Vol. 23:4.

Massey, Douglas and Mary Fischer. 1999. "Does Rising Income Bring Integration? New Results for Blacks, Hispanics and Asians in 1990." *Social Science Research*, Vol. 28.

Massey, Douglas. 1996. "The Age of Extremes: Concentrated Affluence and Poverty in the Twenty-First Century." *Demography*, Vol. 33: 4.

Massey, Douglas, Andrew Gross, and Kumiko Shibuya. 1994. "Migration, Segregation, and the Geographic Concentration of Poverty." *ASR*, Vol. 59:3.

Massey, Douglas and Nancy Denton, 1993. <u>American Apartheid: Segregation and the Making of the Underclass</u>. Harvard University Press: Cambridge, MA.

Massey, Douglas and Nancy Denton. 1992. **"**Residential Segregation of Asian-Origin Groups in U.S. Metropolitan Areas." *Sociology and Social Research*, Vol. 76: 4.

Massey, Douglas and Mitchell Eggers. 1990. "The Ecology of Inequality: Minorities and the Concentration of Poverty, 1970 – 1980." *American Journal of Sociology*, Vol. 95: 5.

Massey, Douglas, and Eric Fong. 1990. "Segregation and Neighborhood Quality: Blacks, Hispanics, and Asians in the San Francisco Metropolitan Area." *Social Forces*, 69: 1.

Massey, Douglas and Nancy Denton, 1987. "Trends in the Residential Segregation of Blacks, Hispanics and Asians, 1970 – 1980." *American Sociological Review*, Vol. 52.

Massey, Douglas, Gretchen Condran and Nancy Denton. 1987. "The Effect of Residential Segregation on Black Social and Economic Well-Being." *Social Forces*, Vol. 66:1.

Miethe, Terance D., and David McDowall. 1993. "Contextual Effects in Models of Criminal Victimization." *Social Forces* 71:741-59.

Mumford Policy Center, 2001. "Ethnic Diversity Grows, Neighborhood Integration Lags Behind." Revised report by the Lewis Mumford Center, December 18, 2001.

Taeuber, Karl E.; Alma F. Taeuber. 1969. Negroes in Cities: Residential Segregation and Neighborhood Change. Atheneum. New York.

Taeuber, Karl E.; Alma F. Taeuber. 1965. "The Changing Character of Negro Migration." *American Journal of Sociology*, Vol. 70, No. 4. (Jan.), pp. 429-441.

Urban Institute. 2003. "*CensusCD* Neighborhood Change Database (NCDB) 1970 – 2000 Tract Data: Data Users' Guide, Long Form Release." Prepared by Peter A. Tatian.