ABSTRACT

Title of Thesis: AFRICAN AMERICAN RESIDENTIAL MOBILITY: AN ANALYSIS OF INDIVIDUAL AND CONTEXTUAL FACTORS

Cecily Darden Adams, M.A., 2006

Thesis Directed By: Professor William W. Falk
Department of Sociology

Building on the work of South and Deane (1993), I examine racial differences in residential mobility using multilevel analysis. I analyze 2001 and 2003 American Housing Survey sample data at the individual, household and neighborhood levels, and 2000 U.S. Census data at the metropolitan area level. I found that while African Americans experience higher residential mobility, after controlling for individual and contextual factors, being Black continues to decrease the likelihood of residential mobility. However, race currently has less of a suppression effect on residential mobility then previously. Home ownership remains the most important predictor of decreased residential mobility for both races. While racial differences in the determinants of residential mobility at the individual and household levels persist, metropolitan area predictors changed dramatically. Racial concentration and residential segregation measures no longer significantly predict residential mobility, while economic factors—median rent and home value—better explain racial differences in residential mobility.

AFRICAN AMERICAN RESIDENTIAL MOBILITY:

AN ANALYSIS OF INDIVIDUAL AND CONTEXTUAL FACTORS

By

Cecily Darden Adams

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Arts
2006

Advisory Committee:
Professor William W. Falk, Chair
Professor Reeve D. Vanneman
Associate Professor John Iceland

Dedication

This thesis is dedicated to my son

Victor

Learning *Together*—Kindergarten to Doctorate

Acknowledgements

Support from my advisors, professors, colleagues, family and friends has helped bring this thesis to fruition. I would like to specifically thank my committee, particularly Bill Falk as chair, for their patience, encouragement, insight, constructive advice, and detailed comments. I have a greatly enriched this thesis because of your assistance. Many other professors and colleagues have also inspired me to stay focused, engaged and committed to completing this paper and the remaining challenges of my graduate career—thank you! Finally, my family and friends have simply done what I needed—from being there when I need them to understanding my absence when work calls. There is no greater encouragement then knowing you are loved.

Table of Contents

List of Tables

Chapter 1: Introduction

Race and place of residence are inherently intertwined in the United States. Our national history brings with it an explicit segregation of the races, especially for African Americans and white Americans. The slavery and Jim Crow eras fostered legal and social segregation between African-Americans and white Americans. The urbanization of the early 20th century ushered in an era of racial mixing in the nation's cities, which by mid-century led to the suburbanization of white America and the urbanization of Black America (Oliver and Shapiro 1995). The Civil Rights Era of the 1960s and 1970s brought changes in the law and practice that made illegal explicit restrictions on mobility and discrimination in the housing, work, and educational markets. The legal barriers to residential mobility and residence selection were lifted. However, institutional and social barriers often remained, and some argue, continue to restrict residential mobility and housing selection for racial minorities (Charles 2003; Oliver and Shapiro 1995; Massey and Denton 1993).

The general factors which contribute to residential mobility and internal migration in the United States have been examined across disciplines, using a wide variety of theoretical approaches and empirical techniques. This has produced a broad, yet, often disconnected body of literature on the movement of Americans (Massey 1990). Much of this literature has focused on either the individual determinants or the structural causes for migration. In reviewing the literature on residential migration, Massey (1990) identified this disjuncture, and called for migration theory to move toward multilevel analyses. This research reported here does this. It responds to Massey and moves into a realm of "dynamic multilevel

theories" that explore the "variety of links among individual, household, and community characteristics and to consider how they jointly determine migration" (18).

Specifically examining racial differences in the multilevel effect of individual, household, neighborhood, and metropolitan area characteristics, Scott South and Glenn Deane developed a compelling model of racial differences in residential mobility (1993). This model is unique because of its integration of a multilevel analysis with an explicit focus on racial differences in residential mobility. It is also a current and evolving issue because racial minorities continue to experience differential residential segregation, lower home ownership, and the effects of inequality in many socio-demographic and life-cycle factors.

This research builds on the work of South and Deane. I incorporate a historical perspective in conducting a multilevel analysis of racial differences in residential mobility. I also add a greater focus on the role of racial residential segregation in restricting residential mobility by using a variety of segregation measures. Finally, I compare the findings of South and Deane to my findings, to determine if there have been changes in the twenty years since their data were collected.

By analyzing the 2001 and 2003 American Housing Survey data on individual, household and neighborhood factors together with U.S. Census data from 2000 on metropolitan areas, I address the questions: What are the individual and structural factors that serve as incentives and disincentives to residential mobility? In particular, how, and in what patterns and magnitude do these multilevel effects

interact to affect the residential mobility rates for African Americans? Also, does this analysis suggest patterns of structural discriminatory practices or does it suggest re-analysis of other potential causes?

Chapter 2: Literature Review

The literatures on migration within the United States and on residential mobility by race often exist as separate bodies. The demographic analyses of migration usually detail the flows, patterns, and enumeration of residential mobility (i.e., Farley and Frey 1994; Frey and Liaw 2005; Long 1988). As a critique, Larry Long contended that demographers were most likely to focus on "…how much…and who?" in their studies of migration (Long 1988:1). He contended that answering the questions of "…why…and with what effect?" require the skills and insight of sociologists and other social scientists. The latter questions examine the individual, institutional, and structural causes and inhibitors to moving across a variety of groups, and the effect of their residential mobility on individuals, communities, racial/ethnic groups, and social classes. While I will discuss the findings of traditional demographers, I focus primarily on why and with what effect people move, specifically African Americans.

Factors Associated with Migration

Theoretical and methodological approaches to studying migration have changed dramatically over the past century, with many disciplines taking divergent approaches to studying migration (Long 1988; Massey 1990; Ritchey 1976). Traditional migration theory focused on the distinct assumption that residential mobility occurs when micro-level individuals weigh the costs and benefits of moving to a particular destination or staying in a present are (e.g., Lee 1966, Wilson 1988, Massey 1990). Thus, people, of certain characteristics, participate in "push" and

"pull" streams and counter streams of mobility. At the individual level, movers are determined in terms of socio-economic characteristics. At the macro level, mobility patterns are influenced by the economy, urbanization, and other factors associated with the opportunity structures of both the place of origin and the place of destination (Lee 1966, Long 1988, Massey, Massey 1994, Wilson 1988). In addition, the level of socioeconomic development of the region and/or society influences the distinction between migrants and non-migrants. In developed regions, migrants tend to be more educated than non-migrants; while in less developed regions, migrants tend to be less educated than their counterparts (Wilson 1988). However, selectivity of migrants diminishes with high volumes of migration and with the convergence of the socioeconomic conditions in the origin and destination areas (Lee 1966, Wilson 1988).

Importance of People—How Much? And Who?

Internal migration in the United States is typically discussed in terms of how many people are moving, how often they are moving, and who is moving. Synthesized by South and Crowder (1997), research indicates that certain individual characteristics are likely to influence residential mobility. Individuals who are socio-economically advantaged are more likely to convert their higher economic and human capital into residential mobility. Higher incomes and educational attainment are associated with increased residential mobility (Long 1988). In contrast, certain life-course transitions are associated with decreased residential mobility. For example, older Americans, home owners, married persons, and those with children are all less likely to move than their counterparts (Long 1988; South and Deane 1993; South and

Crowder 1997). Racial differences in residential mobility rates overall, however, have been found to be small or nonexistent (Long 1988; Sandefur and Jeon 1991; South and Deane 1993). In fact, Taeuber and Taeuber (1966) predicted that racial differences in residential mobility would diminish as African Americans became more integrated in the U.S. economy and society.

However, Blacks and whites continue to face different socioeconomic and structural constraints that have an affect on the *kind* of mobility experienced between the races. While Blacks are more likely to live outside of their state of birth (possibly a repercussion from the Great Migration), their moves within the previous five years are more likely than whites to be shorter within-county moves (Long 1988; Sandefur and Jeon 1991). In comparison, whites more often make longer inter-county and inter-state moves (South and Deane 1993). Also, Blacks are less likely than whites to convert socioeconomic advantage into residential mobility and residences in desirable neighborhoods—e.g., suburban, non-poor, low crime, or less segregated neighborhoods (Logan et al 1996; Massey and Denton 1987; South and Crowder 1997; South and Deane 1993).

Importance of Place—Where?

The origins and destinations of migration in the United States continue to evolve. Internal migration in the United States has historically been one of westward movement, and urbanization (Long 1988). However, recent trends in migration are dramatically affected by immigration. The nation's largest metropolitan areas are now magnets for immigrants, but have net out-migration of Americans (Johnson and Roseman 1990; Frey and Meyers 2003). Some of this out-migration of domestic

migrants is fueling suburbanization, while domestic migrants are also heading to metropolitan areas in the Southeast and West—the "sunbelt" (Frey and Meyers 2003).

African American residential mobility is historically migration from the nation's South. The Great Migration, which occurred during and after World War I, was characterized by nearly one-quarter of southern born Blacks migrating north (Tolnay 1997). However, recent studies have found a reversal in this trend (Falk et. al. 2004; Frey 2004; Fuguitt et. al. 2001; Long 1988; Long and Hansen 1977). This return migration of mostly college-educated African Americans is fostering a growing southern Black middle class in southern metropolitan areas, notably Atlanta, Georgia and Washington, DC (Frey 2004). Crowder et al. (2001) also found the South beneficial for African American attainment. Among migrants, those who moved to the South experienced the most locational benefits, while some Northern-stayers experienced little to no benefits from residential mobility.

Within regions, suburbanization is increasing across all racial minority groups. However, in 2000, suburbanization among minorities was still less than that of whites (71%)—Asians, 58%; Hispanics, 49%; and, Blacks, 39%. (Logan 2001b; Charles 2001) These figures are up 38% for Blacks, 72% for Hispanics, and 84% for Asians since 1990, while whites only saw a 5% growth in suburban population (Logan 2001b). Blacks are experiencing lower rates of suburbanization and slower growth rates in suburbanization across time than Hispanics and Asians. However, their growth may be enabling African American mobility to the suburbs. Iceland (2004) confirms previous findings that multiethnic neighborhoods support lower

African American segregation, possibly because the presence of other racial groups serves as a "buffer" to Black-white segregation.

Suburbanization of African Americans is often addressed at the intersection with class. Some view the racial segregation of poor Blacks as the result of "Black flight" by the African-American middle class (Darden 1990; Wilson 1987). However, research has also found high levels of racial segregation for all African Americans, even for high-income Blacks (Massey and Denton 1993; Massey et. al. 1994). While these racial minorities are escaping the urban centers, they continue to live in more racially integrated and poorer communities than whites (Quillian 1999). For example, for the typical white American, eight of ten neighbors will be white. In comparison, only 54% of the neighbors will be white for the typical Asian, 36% for a Hispanic, and 33% for an African American (Logan 2001a; Logan 2001b). Also, Blacks in these suburban communities are significantly more likely to move to the city than suburban whites (South and Crowder 1997a; South and Crowder 1997b). Pattillo-McCoy (2000) summarizes this limited mobility through qualitative and geographic analyses. She blames residential segregation that limits the suburbanization of the Black middle class to move well beyond the spatial proximity of the urban ghetto and "ensures that Black middle class neighborhoods are continuously reincorporated into the ghetto" (2000).

Why Do African Americans Move…and Why Do They Stay?

Understanding the complex pattern of demographic characteristics of movers and map patterns of movement streams is crucial. Three models of residential mobility are asserted for racial/ethnic minorities—the spatial assimilation model, the

place stratification model, and the ethnic enclave model. The assimilation model asserts that as minorities and immigrants obtain the socio-economic and human capital of whites, their residential patterns will also become comparable (Taeuber and Taeuber 1965). In contrast, the stratification model assumes barriers to residential mobility and integration through acts of discrimination and prejudice (Massey and Denton 1993, Oliver and Shapiro1995). The ethnic enclave model asserts that residential location is determined by preferences for sharing neighborhoods with the same racial and ethnic groups.

Spatial assimilation research consistently finds that African Americans experience the most disadvantaged residential patterns compared to Asians and Hispanics, where objective measures of socio-economic status fail to fully explain this disadvantage (Charles 2003; Logan et al. 1996; Massey and Denton 1987, 1993; South and Crowder 1997a, 1997b, 1998; South and Deane 1993). For example, research finds African Americans are less able to translate mobility expectations into an actual move (Crowder 2001). Whites typically move into economically advantaged, suburban, white neighborhoods, while African American movers are more likely to move into poorer, urban, racially-mixed or Black neighborhoods (Crowder 2001; Harris 1999; Massey et al. 1994; South and Crowder 1979b, 1998). Recent research by race and class indicates that higher SES Blacks are slightly less residentially segregated than lower-SES Blacks (Iceland, Sharpe and Steinmetz 2005). Since the spatial assimilation model yields little assistance in explaining Black residential selection and mobility, this review focuses on the more subjective stratification and ethnic enclave models.

Historically, the United States was structured around a bifurcated system of separate residential communities, schools, and other social and political groups. The call for equal rights during the civil rights era brought an end to legalized segregation. From the 1930s to the 1960s, the Federal Housing Authority supported white residential mobility to newly-constructed suburban neighborhoods, and restricted African American mobility to central cities through lending practices and "redlining" policies that promoted racial residential segregation (Oliver and Shapiro 1995). This differential access to the suburbs denied Blacks the advantages of suburban living (Darden 1990, Wilson 1987).

During the 1950's and 1960's, the laws supporting racial segregation in education, employment and housing were dismantled, culminating with the Fair Housing Act of 1968. However, while the legal impediments to racial integration were lifted, racial discrimination in the housing market still is a major barrier to residential mobility and overall racial equality (Massey and Denton, 1993). And while overt discrimination in the housing market has decreased, housing discrimination continues in institutionalized and less overt forms (Ross and Turner 2005). For example, in 1991, the Federal Reserve Bank uncovered systemic redlining among banks making housing loans (Oliver and Shapiro 1995).

African Americans continue to be the most racially segregated group, with 64 percent of Blacks needing to move to create a completely integrated society, according to Census 2000 data (Iceland 2004). Researchers debate whether the connection between neighborhood segregation, suburbanization and ultimate

residential mobility is primarily structural or preferential (Bobo and Zubrinsky 1996, Clark 1991, Denton and Massey 1991, Emerson et al. 2001, Farley and Frey 1994). The stratification approach asserts structural explanations as measured by discrimination, and the ethnic enclave model emphasizes personal preferences.

Structurally, African Americans and Hispanics continue to face higher racial discrimination in the rental markets than the home sales markets, with Hispanics experiencing higher adverse treatment in the rental markets than Blacks (Turner et al. 2002). In the housing market, Blacks continue to be rejected more often than whites for home mortgages, and their interest rates were found to be significantly higher than whites (Oliver and Shapiro 1995). Also, Black home buyers continue to experience high levels of residential steering to non-white communities and receive less information and assistance in obtaining financing than whites (Turner et al. 2002).

Supporting the preference model, Kryson and Farley (2002) contend that Black preference for racially similar neighbors significantly contributes to racial segregation. In contrast, others assert the preference is imposed by whites (Clark 1991; Denton and Massey 1991; Emerson et al. 2001). Denton and Massey clarify, "Neighborhood turnover does not appear to stem from minorities' preferences for co-residence with members of their own group," rather "the processes of racial transition are brought about primarily by whites' avoidance of neighborhoods that are near Black or Hispanic enclaves, and by their reluctance to be outnumbered by minorities" (58).

The literature on residential mobility, factors that facilitate it, and factors that impede it, have informed the research questions, hypotheses and findings of this paper.

Chapter 3: Research Questions

South and Deane examined the racial differences in residential mobility using a multilevel model that incorporated individual life-cycle, household, neighborhood and metropolitan area characteristics. The research reported here largely replicates several of the primary assumptions of the South and Deane model, expands on their model with further analyses of residential segregation, and compares these findings with the earlier analyses. In doing this, the current research addresses four major points. First, *What is the relationship between individual human capital, life-cycle, household, neighborhood, metropolitan area characteristics and the likelihood of residential mobility?* And more specifically, *do these multilevel factors interact differently for African Americans and white Americans?* That is, to what extents do the individual and contextual factors experienced by whites and Blacks differentially effect their residential mobility?

Second, this research will compare the findings from the questions above with the findings produced by South and Deane. This study varies from South and Deane's work on a few central points: (1) It updates their work with more current data. Where South and Deane analyzed 1979 and 1980 American Housing Survey (AHS) data and 1980 Census data, this analysis utilizes 2001 and 2003 AHS data as well as 2000 Census data. (2) South and Deane categorized race as Black and non-Black. This work defines race more clearly, thus allowing for more specific racial comparisons. (3) It discusses the similarities/differences in the attitudinal and structural analysis of contextual factors, and the relationship with residential mobility. Given that the ecological and demographic landscapes of metropolitan areas in the

U.S. have changed dramatically in the past twenty years, the following questions arise: *How have changes in individual and structural predictors affected residential mobility? Does a clearer definition of race expand or suppress the racial differences found by South and Deane? Is the attitudinal analysis of contextual factors, available in the AHS, consistent with the measured structural factors?*

A third major point this analysis addresses is whether spatial patterns of Black migration have changed significantly over time. *What impact does increases in suburbanization and home ownership, and decreases in residential segregation for African-Americans have on their residential mobility?* And, *are Blacks differentially affected by these changes when compared to whites?*

Chapter 4: Hypotheses

Guided by the hypotheses tested by South and Deane, and the research questions listed above, the following hypotheses will be tested:

Hypothesis 1.a.: Individual, household, neighborhood and metropolitan area characteristics will have significant relationships with residential mobility for African Americans and whites. Consistent with previous research (Long 1988; South and Deane 1993), I expect that only slight racial differences will exist in the overall mobility patterns. **b.** In contrast, I expect racial differences will become more apparent when the life-cycle explanatory variables (gender, age, marital status, education) are added to the model. **c.** I also expect to find that controlling for contextual factors (household, neighborhood and metropolitan area characteristics) will further increase statistically the salience of race.

Hypothesis 2.a.: Migration selectivity will be most prominent among African American migrants. As a reaction to strong structural constraints, I expect individual level characteristics to figure prominently in those who migrate. **b.** The easing of external constraints will decrease the selectivity. If structural constraints lessen over the time period, I expect a lessening to the importance of individual selectivity.

Hypothesis 3 : Increases in suburbanization and home ownership, and decreased residential segregation will contribute to an increase in residential mobility for African Americans. As contributing factors to residential mobility, I expect they have become more prominent over the time period for this analysis. As these trends have accelerated over time, I also expect the effects of these factors on residential mobility to intensify over time.

Hypothesis 4: Using different measures of residential segregation will yield a fuller description of the role of residential segregation. I use the indexes for dissimilarity, isolation and exposure to better capture changing segregation. I expect results similar to those previously found, where African Americans have declining segregation and isolation from whites, and increasing exposure to them (Charles 2003).

Chapter 5: Data

Description of the Dataset

The primary data source for this analysis is the American Housing Survey (AHS) for 2001. The U.S. Census Bureau collects these data for the U.S. Department of Housing and Urban Development (HUD). Formerly the Annual Housing Survey, AHS was first administered in 1973. It was administered annually until 1984, when the administration schedule was changed to odd numbered years. South and Deane used the consecutive 1979 and 1980 administrations of the survey. For this analysis, I am utilizing the 2001 and 2003 data. The 2001 AHS consisted of a representative sample[1] of approximately 53,600 eligible housing units surveyed between August and November of that year. With an overall response rate of 90 percent, the sample includes housing units in all 50 states and the District of Columbia. The AHS is unique because it follows housing units rather than individuals. Thus, the 2003 AHS sample data are used to determine if the residents from 2001 remain in the unit in 2003—the constructed variable for residential mobility[2].

Data from the 2000 U.S. Census are used for the metropolitan area descriptive statistics. These data were released by the U.S. Census grouped by metropolitan statistical area (MSA). They were merged using the MSA codes, with some

[1] The current sample of housing units was established in 1985 based on the 1980 Census. Since then, the sample is updated with each survey administration to include newly constructed units as well as "units discovered through coverage improvement efforts every enumeration."(AHS B-1)

[2] South and Deane also use the following survey administration to predict whether the householder in the previous survey moved. However, the descriptive tables for residential mobility produced by HUD for the AHS reflect whether the householder moved into the unit in the previous year (using date of survey administration and date occupied residence). Thus, the percentages of residential mobility are not comparable between this analysis, which reflect approximately 2 years following 2001 administration, and AHS tables, which reflect the year prior to survey administration.

adjustments for changes to MSA composition and coding between the 1980 MSA codes (AHS data) and 2000 MSA codes (Census data). The MSA data for each dataset were recoded to correspond with the 2000 MSA codes.

Finally, the most complete data on white-Black residential segregation for the 2000 U.S. Census were available through the Lewis Mumford Center for Comparative Urban and Regional Research, University of Albany, State University of New York. These data were merged with the metro area data file using the metropolitan statistical area codes, which were configured according to the 2000 Census.

The research focus of this work required limiting the full AHS sample. Since measuring metropolitan area effects is essential, only residences within metropolitan areas were used. The full sample size fell to 27,718 after limiting the sample to residences located within a reported metropolitan statistical area. Because the AHS sampling is based on residences, rather than individual, another 8,086 cases were lost because of an "invalid interview" status, as coded by the AHS[3]. After further limiting the sample to cases for which the data were complete for the 2001 and 2003 AHS variables included in the analysis, the remaining effective sample data was 15,815. The African-American sub-sample consisted of 2,281 cases and the white sample contained 10,216 cases. The remaining 3,318 cases were of other races and ethnicities. They remain in the full sample, in order to make comparisons with South and Deane, who also included all races in the full analyses. However, South and

[3] Invalid interview status was assigned to residence addresses from the previous sample that were not coded as an occupied resident interview. These designations were: (1) respondents usual residence was elsewhere, housing unit was vacant, or a successful interview was not completed for that address (noninterview).

Deane's subsamples consisted of Black and non-Black. This analysis makes an explicit Black-white subsample comparison.

Appropriateness of Data

While much debate surrounds the appropriateness of cross-sectional versus longitudinal data (Massey 1990; Long 1988) and decennial Census versus more frequently collected data (Long 1988), using the same data sources as South and Deane is quite appropriate. I combine American Housing Survey sample data at the individual level to measure the individual characteristics of respondents and their attitudes about structural determinants of residential mobility, and U.S. Census population data at the metropolitan area level to measure contextual effects.

This study replicates the measures used by South and Deane to the closest extent possible. Replication was not possible for some variables; these cases are clearly noted in the following description of the data.

Dependent Variable

Residential mobility is the dependent variable, defined in terms of whether the householder moved out of the unit between the 2001 administration of the AHS and the 2003 administration. Residential mobility is measured thus, 1) in terms of the householder and 2) in terms of whether a move occurred between the 2001 and 2003 administrations of the AHS at the residence. This is coded as a dichotomous variable indicating whether the householder occupied the same residence in 2001 and 2003 <0> or whether the residence was occupied by another householder in 2003 than surveyed in 2001 <1>. South and Deane also measured whether a respondent moved

between two administrations of the AHS, with one caveat, the AHS was administered annually then, so their analysis is based on consecutive years—1979 and 1980.

Independent Variables

The independent variables are divided into individual, household, neighborhood and metropolitan area factors.

Individual. The individual level data in this analysis all reference the responses of the householder in the 2001 administration of the AHS. The AHS defines householder as the "first household member listed by the respondent who is 18 years or over and is an owner or renter of the sample unit" (AHS C-5).

Race was recoded as a dummy variable, with a Black, non-Hispanic, as <1> and all others coded as <0>. The Black sample is based on those cases coded 1, and is 14.4 percent of the sample. The white sample consists of respondents who reported being white, non-Hispanic, and account for 64.6 percent of the sample. *Gender* of the respondent is coded <0> for men and <1> for women. *Age* of the respondent is a continuous variable that ranges from 14 to 93, with the median householder being 47 years old. *Marital Status* was recoded as a series of dichotomous variables, 'Never married', 'Married', 'Divorced/Separated', 'Widowed'. Each of these variables was coded as <1> when the condition was present. A dichotomous variable was created to indicate whether the respondent had children under 18 living in the household. *Children* is <1> if children are present, and <0> if no children are present. *Educational Attainment* was also recoded as a series of dichotomous variables. Similarly, 'Less than High School', 'High School Graduate', 'Some College, no BA', 'Bachelors Degree', and 'More than Bachelors Degree' were coded as <1> when the

condition was present.[4] *Income*, is a continuous variable of the family income in thousands of dollars.

Household. *Ownership of the dwelling* was recoded to a dichotomous variable to indicate whether the respondent owned the home <1> or not <0>. *Duration in residence* is a continuous variable measured in years the person reports living in the residence. *Persons per room* is a variable constructed from the number of bedrooms in the household divided by the number of persons in the household. It is a continuous variable. *Rating of home* is a categorical variable with its original scale of <1> being the worst possible rating and <10> being the best rating.

Neighborhood. Neighborhood effects are all in the form of attitudinal data provided by the respondent on the AHS. *Perceived neighborhood crime* is the dichotomous measure of whether the respondent perceives crime in their neighborhood, where <1> is yes and <0> is no. *Public transportation satisfactory* is also a dichotomous measure of neighborhood satisfaction, where <1> is yes and <0> is no. *Rating of neighborhood*, a categorical variable with its original scale of <1> being the worst possible rating and <10> being the best rating, is identical in measurement to *rating of home*.

Metropolitan Area. All of the following metropolitan area characteristics replicate the South and Deane measures. While they used the 1980 Census for SMSA characteristics, this study merged 2000 U.S. Census data and residential segregation data from the Mumford Center for 2000 with the AHS data. *Percent Black* is measured to explore the effect of the proportion of African Americans in a given

[4] South and Deane measure educational attainment as a continuous variable in years. This was not possible for this analysis because of the inconsistent grouping of school years in the current AHS format.

metropolitan area. *Percent urban* is the percent of the population located in an urban area. South and Deane used percent suburban, which was not directly replicable. *Percent housing units vacant* measures neighborhood abandonment. *Median rent* and *median value of owned homes* measures housing values for the area for renters and owners. *Residential segregation* was measured by South and Deane using the index of dissimilarity for each MSA. This analysis also uses the index of dissimilarity as a starting point, but also explores measures for racial isolation (white-white and Black-Black) and exposure (white-Black and Black-white). The dissimilarity index is used because it is the most common measure of residential segregation and for purposes of comparison with the South and Deane article that uses it. I, however, conducted exploratory analysis using other previously mentioned dimensions of segregation and the appropriate indices in an effort to best capture the effect of residential segregation on mobility.

As a brief overview, the dissimilarity index measures evenness—how evenly the units are spatially distributed—and is measured in terms of the percentage of a group that would have to change residence for each neighborhood to have the same distribution. I will also measure exposure—the degree to which the average minority group 'experiences' segregation" (Iceland et al. 2002, p. 120)—using the exposure index, which measures the likelihood of sharing common neighbors. Finally, I will measure clustering—the intra-group proximity, or racial/ethnic enclaves—using the isolation index, which accounts for a race being likely to live near others of the same race. I contend that exposure and clustering may be more appropriate dimensions on which to measure segregation for this research. Between 1980 and 2000, all of these

measures indicated overall declines in residential segregation: dissimilarity (-12%), isolation (-.9%) and exposure (-4.3%). (See Table 1) Clearly, the dissimilarity index measured a larger decrease in overall segregation as well as a supporting a finding that over 80 percent of metropolitan areas experience more than 5 percent declines in segregation. The indices support a more modest improvement in segregation.

Chapter 6: Methods

Preliminary descriptive analysis highlights the racial differences that exist between African Americans and white Americans. Whites are more likely to be married, have higher income and educational attainment, own homes, live in their homes longer, rate their home and neighborhood highly. In contrast, African Americans are more likely to be never married or divorced/separated, have dropped out of high school, live in more crowded living quarters, perceive neighborhood crime, find the public transportation system satisfactory. (Table 2)

When comparing descriptive data on the dependent variable between South and Deane and this analysis, residential mobility is lower in the current analysis for the full and sub-samples—between 3 and 4 percentage points, depending on the sample. The current descriptives reflect 19.6 percent of 2001 AHS respondents moving before the 2003 administration overall, with 20.1 percent for Blacks, and 18.3 percent for whites.

Thus, these descriptive results suggest the need for further multivariate analyses to explore the relationship between race, residential mobility and these other independent factor. They also suggest that residential mobility has changed since the South and Deane analysis, so an updated analysis and comparison is warranted.

Because the dependent variable is a dichotomous measure of residential mobility, this analysis will utilize logistic regression. The first several models replicate the models put forward by South and Deane, analyzing the individual, household, neighborhood and metropolitan area effects on residential mobility for a full sample as well as Black and white samples. The results from these models are

compared with their results to determine if residential mobility selectivity has changed over the past 20 years. I also explore the use of various residential segregation measures. Finally, I use hierarchical generalized linear modeling (HGLM) to conduct a multilevel analysis. This special form of HLM is required when conducting multilevel analyses with dichotomous outcomes.

Chapter 7: Results

Logistic Regression Models

The first regression model explores the relationship between the key independent variable, race, and residential mobility. In Table 3, logistic regression shows race alone does not significantly predict residential mobility. South and Deane also found the coefficient for race alone to be small and statistically insignificant—0.038 and 0.030, respectively.

The second model, reflected in Table 4, includes the remaining individual householder factors and the household factors. The relationship between race and residential mobility is significant in this model, and predicts that the odds of a Black householder moving were 78 % of that for non-Blacks. This lower residential mobility for Blacks than non-Blacks was also found by South and Deane, but their model predicted further barriers to mobility with the same odds being 72%.

This model also predicts an inverse relationship between residential mobility and several other individual and household variables. As expected, individuals are less likely to move as they age. The odds of householders with children moving are 72% of that of childless householders. Those with less than a high school degree are less likely to move than individuals with a high school degree. Owning your home strongly reduces the likelihood of moving—the odds of a home owner moving are 27% that of those who do not own their home. The longer the duration the individual lived in the residence predicts a decrease in the likelihood that they will move. Also, a higher home rating is associated with a lower likelihood of leaving it. In contrast,

only higher income and being widowed predict an increased likelihood of moving in this model.

In addition to analyzing the full sample, Model 2 is also analyzed for the Black and white subsamples. Most of the variables remain significant for both subsamples, however, none of the education variables remain significant. Interestingly, higher income increases the likelihood of residential mobility for whites, but the relationship is not significant for the Black subsample. South and Deane hypothesized that their inverse relationship between income and residential mobility was caused by reinvestment into homes. I contend this direct relationship, for whites only, supports the literature that whites can better translate socio-economic advantage into residential mobility than Blacks can. Also, since 1980, family incomes have grown tremendously and there is a widening gap in family income between Blacks and whites in the AHS sample. South and Deane reported 1979 mean family incomes as $12,940 and $19,200 for Blacks and whites respectively. Converted to current dollars, 1979 family income is equivalent to $31,570 and $46,840, respectively, in 2001[5]. This analysis found family income means at well above these levels— $39,740 for Blacks and $76,377 for whites.

The effect of being widowed, having children, and personal rating of the house on residential mobility are lower in the Black sample then the white sample. However, the effects of age, owning your home and duration in the residence on moving are higher for the Black sample then the white sample—meaning that these factors are more of a constraint to moving for Blacks than whites. As found by South

[5] Family income in 1979 is converted to 2001 dollars using the consumer price index for the respective years. The calculator used was available through the Bureau of Labor Statistics website http://data.bls.gov/cgi-bin/cpicalc.pl.

and Deane, the most significant of these variables is home ownership. Blacks, historically, and in this sample, have lower home ownership than whites. But, unique to this analysis, I find that Blacks who own homes are even less likely to move than whites.

Model 3 appears in Table 5. This full model includes the individual and household factors from Model 2 as well as neighborhood and metropolitan area factors. Being African American continues to have a significant inverse relationship with the likelihood of residential mobility. Like race, all of the variables that were significant in Model 2 maintain their significance and odds within a percentage point, except the home ownership variable. In Model 2, the odds of moving if you own the home decrease from 26.6% of that for those who do not own their home to 25.1% in Model 3. This is the largest change between the models. It represents a slight increase in the effect of homeownership, reflected by a lower likelihood of residential mobility, when neighborhood and metropolitan area effects are controlled for.

South and Deane were unable to find significant neighborhood effects. This analysis, however, found that perceived neighborhood crime significantly decreased the odds of residential mobility. This relationship held for the white sample, while not significant for the Black sample. Similar to South and Deane's analysis, this work also found negative coefficients for crime in predicting mobility. This suggests that increased media attention to crime may increase perceptions of crime.

In the full model, percent Black, percent urban, and the median value of owned homes in the metropolitan area were all found to have inverse relationships with residential mobility. Thus, the odds of moving are significantly lower in metro

areas with higher Black populations, more urban areas, and higher housing values. Conversely, the odds of residential mobility increase in metropolitan areas with higher median rents. Higher housing values would clearly be a disincentive to moving for home owners, while renters may move more frequently seeking the lowest rent available.

In comparison to the South and Deane analysis, the metropolitan area statistics were the most divergent from this analysis. They found vacant housing units, a sign of urban decay, to increase the likelihood of residential mobility, while residential segregation, measured by the index of dissimilarity, deceased the likelihood of moving. My analysis did not find significant coefficients for either of these variables. In contrast, percent Black, median rent and housing values significantly predicted residential mobility in this analysis, but not in the South and Deane analysis. Like income since 1979, rents and housing values have increased tremendously[6]. While the median 1979 rent was $210 and $213, for Blacks and non-Blacks respectively, these represent $513 and $522 in 2001 rents. These values represent significantly lower rents than actually experienced in 2001—$650 and 656, for Blacks and whites, respectively. However, the median home value has increased only slightly for Blacks from $57,000 reported in 1979, which converts to $139,850 in 2001 dollars to $140,000 in this sample. For non-Blacks, the reported $59,000 converts to $144,220 in 2001 dollars to $148,000 for whites. Changes in the racial composition of cities, suburbanization, and residential segregations coupled with these changes in housing costs could be driving the greater influence of these economic factors on residential mobility.

[6] I, again, calculated the 1979 dollar values to 2001 dollars using the consumer price index.

When looking at the sub-samples by race, income remains insignificant as a predictor of racial mobility for the Black sample, while higher incomes continue to increase the likelihood of moving for whites. The effect of being widowed increases the odds of residential mobility, more so in the Black sample then the white sample. Having children continues to decrease the odds of moving for both samples—by 70% and 69%, respectively, the odds of mobility for the childless. Again, the effects of age, owning the home and duration in the residence on the likelihood of residential mobility are higher for the Black sample then the white sample. The proportion of rooms to household residences becomes significant in these race-specific full models, with increased persons per room increasing the likelihood of residential mobility. The white sample is the only sample for which the index of dissimilarity significantly predicts the likelihood of residential mobility. The -0.008 coefficient indicates that residential segregation is an impediment to residential mobility for whites, while there is no significant relationship for Blacks. Literature supports findings that segregation is a barrier to residential mobility for racial minorities, but this finding that whites who live in more segregated metropolitan areas are less likely to move is less clearly supported.

In order to further explore the relationship between residential mobility and residential segregation, Model 3 was analyzed using each of the above-mentioned measures for segregation. Comparing each of these models to the model without a segregation measure, the best measures for segregation for this analysis were determined. Table 6 details these findings. The measures for dissimilarity reflect the data in Model 3 in Table 5. For the full model, all of the other measures reflect a

significant relationship between segregation and the likelihood of residential mobility, with the white/Black exposure model representing the best model. For the white sample, the white/white isolation index appears to best capture residential segregation. Interpreting the best measure for the Black sample is difficult because of its small sample size. Thus, the better fit models appear not to yield a significant relationship, while the best measures for the full model and white sample were also highly significant. Clearly, measuring this relationship between residential segregation and residential mobility may be greatly impacted by the measure chosen.

Finally, South and Deane found that residential mobility differentials by race increased with the inclusion of metropolitan area factors. This analysis, however, yields nearly identical results between Models 2 and 3. According to these findings, these metropolitan area characteristics have no effect on the mobility differences by race.

Hierarchical Generalized Liner Models (HGLM)

The research questions posed suggest the need for a multilevel approach to analysis. This is reported next where I estimate the effects of individual, household and neighborhood on residential mobility within each metropolitan area as well as estimate the effects of metropolitan area characteristic on residential mobility. The data structure limits this multilevel analysis to two levels, because neighborhood is not specified as a separate measurable unit of analysis. I utilize Hierarchical Generalized Linear Modeling (HGLM) because of the nonlinear nature of the dichotomous outcome variable. Hierarchical modeling uniquely allows for the

estimation of (1) variation in the predicted outcome that can be attributed to group level variables—known as the unconditional model, (2) the effects of individual-level characteristics on the predicted outcome within each group—the level 1 model, and (3) the independent effects of group level characteristics on the predicted outcome—the intercept and slopes as outcomes model.

The unconditional model is typically specified in HLM to determine whether the outcome varies across groups. The measure is used to determine if multilevel analysis is appropriate for the given data. Multilevel analysis is called for only when there is variation in the outcome across groups, in this case metropolitan areas. If there is not variation across groups, the logistic regression analysis presented is sufficient. However, due to the unique nature of a binary outcome in multilevel analysis, the traditional unconditional model will not yield fruitful results. Essentially, the mean and variance of a binomial variable are interdependent. Thus, calculating the variance in a dichotomous outcome is not meaningful as with a continuous variable. While there are complex methods for assessing the variance in Bernoulli—binomial outcome data, visually inspecting the outcome data can also be appropriate to determine whether to proceed with multilevel analysis. The point estimates for the aggregated outcome variable, the proportion of householders who moved between the 2001 and 2003 AHS administrations, are visually inspected and graphed and appropriate to proceed with HGLM.

The first model is the conditional model at the individual level. All individual level variables are included in this model. The second model, the intercepts and slopes as outcomes model, combines individual and structural level variables to

model the intercept and the relationships with residential mobility that vary across metropolitan areas. This model was determined through an iterative process of identifying individual level relationships that varied across metropolitan areas, and identifying the metropolitan area characteristics that predicted those varying relationships.

Model 4, the HGLM individual level model, is identical to Model 2 in the logistic regression. It includes all of the individual, household and neighborhood measures. Data limitations allowed only for the distinction of the 2 level model between these characteristics and the metropolitan area. Table 7 details the results of this model, including reliabilities for variables with error terms allowed to vary, log odds and odds ratios.

Reliability in HLM measures how much the group mean for a variable varies across groups, where 1 estimates substantial variation in group means across groups and as the estimate gets small it is based more on the grand population mean then the group-specific mean. In this case, a high reliability estimate would reflect substantial variation in mean home ownership, for example, across metropolitan areas.

I have allowed the error term to vary for the race and age of the householder, children in the household, widowhood, less than high school education, family income, home ownership, home rating, and duration in the residence. After several iterations, I decided on this model that reflected variables both of substantive interest and statistical significance. A reliability estimate is calculated for these variables and the intercept. The reliability estimate for the intercept is 0.524, and the reliabilities for the slopes estimated are: race (0.081), age (0.129), children (0.122), widowed

(0.138), less than high school education (0.140), family income (0.078), home ownership (0.166), rating of home (0.161), duration in residence (0.127), and perceived crime (0.730). Typically, reliabilities greater than 0.5 are acceptable for the intercept, while reliabilities for slopes should be at least 0.1. Also, of the random effects measured, there is apparently little significant variation on these measures between metropolitan areas. Using the standard of 0.10 for significance, the only individual level characteristics that vary significantly between metropolitan areas are being widowed, having less than a high school degree and owning your home.

The fixed effects table reflects findings similar to those in Model 3 of the logistic regression models. All of the individual level variables have similar significance and direction in this individual-level conditional model except, race and duration in residence. In this model, while predicting the likelihood of deceased mobility for Blacks, the relationship is not statistically significant. Thus, the racial differences found in the logistic model are not found in this conditional model using HGLM.

The combined model of individual and metropolitan area variables, referred to as the intercept and slopes-as-outcomes model in HLM, is presented in Table 8. While this model again identifies the relationship between the individual level predictors and the outcome variable, it also allows for interpretation of metropolitan area traits that further explain the relationship between individual predictors and residential mobility. Again, constructing this model took numerous iterations of various combinations of statistically significant and substantively relevant variables. The model is parallel-modeled on the intercept and three slopes—rating of home,

income, and home ownership—including the aggregates of all individual level variables, as well as the metropolitan area variables. The metropolitan area variables included in the modeling are: (1) percent vacant housing units, (2) median rent, (3) median home value, and (4) the index of dissimilarity. Central to the current research, I tested for a contextual effect of MSA racial composition on the likelihood of residential mobility, and this relationship was consistently not statistically significant. Individual level predictors that have significant relationships to residential mobility are: age, having children, being widowed, duration in your home, and perceived crime. These relationships remained similar in significance and direction to the logistic regression models and the conditional HGLM model.

Focusing next on the random effects, controlling for everything else in the model, the overall rating of the home, income, homeownership vary across metropolitan areas. Of the variables used to model the slopes of random effects, at the intercept, aggregated homeownership, metropolitan area median rent and metropolitan area median home value were significant. *Thus, householders in metropolitan areas with higher home ownership and higher home values have a reduced likelihood of residential mobility. On the other hand, living in a metropolitan area with higher rents, increases the likelihood of residential mobility.*

The next slope that was measured is the relationship between rating of the home and residential mobility. The intercept of this slope represents the average relationship between the rating of your home and residential mobility across metropolitan areas, where higher ratings decreases your likelihood of moving. Residential segregation was the only metropolitan area characteristic found to

significantly effect this relationship. The negative effect of the dissimilarity index indicates, in metropolitan areas with higher residential segregation, those who rate their homes highly are less likely to move than those who do not. *Segregation serves to further discourage householders who like their homes from moving, holding all other factors constant.*

For the slope of the relationship between having less than a high school diploma and residential mobility, the significant measure for homeownership indicates that owning a home increases your likelihood to move when you have less than a high school education. Interestingly, less than high school education is predicted to decrease residential mobility, but homeownership improves the likelihood of moving. *While those with less human capital are less able to leave their environments, this finding supports the assertion that home ownership increases your ability to move.*

Finally, given the strong relationship of homeownership to residential mobility, and finding that homeownership varies across metropolitan areas, I expected to find significant effects of the metropolitan area characteristics on the slope for home ownership. While none of the predictors in this model were significantly related to the slope of homeownership and residential mobility, the intercept remained strongly inverse, indicating that *homeownership significantly decreases residential mobility. Homeownership in both this and the previous logistic regression models has proven to be one of the most significant predictors of residential mobility, or lack of it.*

Chapter 7: Summary and Discussion

In summary, this research focused on the residential mobility of African Americans and white Americans, explicitly differences because of their unique historical backgrounds as well as differences in their individual characteristics and relationships with structural constraints. This research found that while African Americans experience higher residential mobility, after controlling for individual and structural factors, being Black actually continues to decrease the likelihood of residential mobility. This finding supports South and Deane (1993). However, in comparing the findings across time, race currently has less of a suppression effect on residential mobility.

Central to the findings of this analysis is the changing effect of metropolitan area characteristics on residential mobility. Both the logistic regression and multilevel analyses suggest that metropolitan area effects previously found to contribute to racial differences in residential mobility no longer do so. Economic factors, such as median rent and home value in metropolitan areas, seem to better explain racial differences in residential mobility. South and Deane previously found measures of racial concentration and residential segregation had the larger effect. Thus, arguments based on racial preference or racial discrimination may be less relevant then economic conditions in metropolitan areas which affect residential mobility. However, economic conditions, especially the concentration of poverty, are often correlated with race (Massey and Denton 1993, Wilson 1987).

Also, the changing demographics of urban areas may contribute to the loss of significance for racial concentration and residential segregation in determining

residential mobility. One must consider that metropolitan areas are becoming increasingly multiracial (Frey 2003, Iceland 2004). While the focus of this research is intentionally to trace changes in residential mobility among African Americans, further analysis that extends beyond the Black-white dichotomy is also needed. The Asian and Hispanic populations in the United States are growing rapidly, and immigration is rapidly changing the demographics of metropolitan areas (Frey 2003, Iceland 2004, Logan 2001a). For instance, the difference in the residential mobility patterns of Hispanics and Asians is reflected by residential segregation—isolation and exposure measures—that is dissimilar to that experienced by African Americans (Charles 2003). The measurement and analysis of the effect of this growing diversity is a challenge of current and future research.

While metropolitan area differences in residential mobility by race are negligible, this research also finds the need to further investigate racial/ethnic differences at smaller geographic levels. This research was restricted by the data structure of AHS that limits investigation at the neighborhood level, and by AHS's use of exclusively subjective measures for neighborhood effects. However, I found racial differences in the effect of perceived crime on residential mobility in both modeling procedures. In addition, residential segregation indices that more closely measure neighborhood segregation are decreasing less rapidly than the dissimilarity index is, actually increasing in over 30 percent of areas (Iceland 2002). Investigating racial differences at the census tract or other levels smaller than the metropolitan area would likely add unique perspective on residential patterns.

I found significant racial differences in residential mobility after controlling for individual and household characteristics in the logistic regression model, but key characteristics typically associated with residential mobility were not found to be significant. Human capital variables of education and income had mixed effects across the models. While having less than a high school degree slightly decreased the likelihood of residential mobility for the full sample, no other education effects were found. Also, increased income was found to increase the likelihood of moving for whites, but had no significant effect for Blacks. These human capital findings support research that has shown Blacks convert human capital less easily (Logan et al 1996; Massey and Denton 1987; South and Crowder 1997; South and Deane 1993).

Age is clearly an important factor in measuring the life-cycle effects of residential mobility. As expected, residential mobility is suppressed for older individuals. Interestingly, this research found that age suppresses residential mobility more for African Americans than white Americans. Marital status, however, had no effect on residential mobility, except for widowed individuals being significantly more likely to move than married individuals. Having your children in the household suppressed residential mobility, as most previous studies have found. However, Blacks with children were more likely to move than whites with children.

Individual household characteristics were found to highly influence residential mobility in all of the models. While rating your house highly discouraged moving equally for whites and Blacks, living in a MSA with higher residential segregation further decreases you likelihood to move. Also, Blacks experienced more suppressed

residential mobility when they owned their home or lived in their residence for longer periods.

Home ownership, at the individual level, was the most important predictor of decreased residential mobility for both races. The difference in predicted and actual residential mobility between whites and Blacks is likely largely attributed to the differences in home ownership, 71 and 48 percent, respectively, in this sample. While homeownership is increasing nationwide, racial and ethnic minorities continue to face barriers to the housing market (Turner et al. 2002). Further research should focus on home ownership, and the structural level characteristics that encourage and discourage it. The findings here did elucidate this relationship, but future research with additional metropolitan area or neighborhood characteristics could add considerable to our understanding of these important sociological and societal relationships.

Table 1: Residential Segregation 1980-2000

	Dissimilarity	Isolation	Spatial proximity
Index Percent Change	-12.0	-9.9	-4.3
Distribution of percent change across metro areas			
Increase of 5% or more	3	15	9
Increase of 1-4.99%	0	9	25
Change of less than 1%	4	7	23
Decrease of 1-4.99%	11	11	21
Decrease of 5% or more	81	58	22

Source: US Census Bureau, 2002, (Iceland et al 2002)

Table 2: Descriptive Statistics for Full, Race-Sprecific Samples

	Full Sample		Black Sample		White Sample	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Residential mobility (0=no; 1=yes)	0.196	0.397	0.201	0.401	0.183	0.386
Individual Householder Factors						
Race (0=non-Black; 1=Black)	0.144	0.351	1	0	0	0
Race (0=non-White; 1=White)	0.646	0.478	0	0	1	0
Sex (0=male;1=female)	0.435	0.496	0.599	0.490	0.406	0.491
Age	49.014	17.154	48.116	16.246	51.097	17.580
Marital status						
Never married	0.198	0.399	0.286	0.452	0.178	0.382
Married	0.518	0.500	0.332	0.471	0.537	0.499
Divorced/separated	0.173	0.379	0.253	0.435	0.162	0.369
Widowed	0.111	0.314	0.129	0.336	0.124	0.329
Children	0.371	0.483	0.432	0.496	0.302	0.459
Educational attainment						
Less than HS	0.179	0.383	0.249	0.433	0.108	0.310
HS graduate	0.246	0.431	0.281	0.450	0.249	0.432
Some college, no BA	0.270	0.444	0.295	0.456	0.283	0.450
Bachelors degree	0.191	0.393	0.117	0.322	0.224	0.417
More than BA degree	0.114	0.318	0.058	0.234	0.137	0.344
Family income in $1,000s	65.903	87.642	39.740	47.787	76.377	97.881
Household Factors						
Own home (0=no;1=yes)	0.625	0.484	0.481	0.500	0.711	0.453
Duration in residence (in years)	10.939	12.594	10.382	11.987	12.441	13.458
Persons per room	1.084	0.669	1.097	0.617	0.934	0.484
Rating of home (scale: 1-10)	8.048	1.682	7.713	1.940	8.193	1.565
Neighborhood Factors						
Perceived neighborhood crime (0=no;1=yes)	0.202	0.402	0.339	0.474	0.173	0.378
Public transportation satisfactory (0=no;1=yes)	0.805	0.396	0.894	0.308	0.769	0.421
Rating of neighborhood (scale: 1-10)	7.799	1.879	7.199	2.187	7.964	1.753
Metropolitan Area Factors						
Percent Black	0.146	0.081	0.197	0.089	0.142	0.078
Percent Urban	0.919	0.067	0.908	0.069	0.912	0.069
Percent housing units vacant	0.065	0.022	0.067	0.019	0.065	0.022
Median rent	665.990	108.514	650.394	100.224	656.148	107.204
Median value owner-occupied homes in $1,000s	152.451	59.965	140.342	51.005	148.433	57.324
Residential segregation						
Dissimilarity	57.852	10.553	61.703	9.135	58.289	10.536
Isolation--white/white	77.391	11.002	78.714	8.704	79.354	9.813
Isolation--Black/Black	34.013	19.016	44.255	17.596	34.379	18.685
Exposure--white/Black	6.379	3.869	8.546	4.987	6.232	3.674
Exposure--Black/white	43.886	11.749	39.418	9.379	45.077	12.374
Valid N	15815		2281		10216	

Sources: American Housing Survey 2001 & 2003, U.S. Census 2000, and Lewis Mumford Center

Table 3: Model 1-- Logistic Regression Analysis of Residential Mobility by Race

	b	Standard Error	Odds Ratio	Standard Error	p
Race (0=white; 1=Black)	0.038	0.057	1.039	0.059	0.503
Intercept	-1.417***	0.022	---	---	
Model X^2	0.450		0.450		
Log likelihood	-7826.9		-7826.9		
N	15815		15815		

Sources: American Housing Survey 2001 & 2003

Table 4: Model 2-- Logistic Regression of Residential Mobility Individual and Household Factors by Race

	Full Model			Black Sample			White Sample		
	b	Standard Error	Odds Ratio	b	Standard Error	Odds Ratio	b	Standard Error	Odds Ratio
Individual Householder Factors									
Race (0=white; 1=Black)	-.246***	0.064	0.782***	---	---	---	---	---	---
Sex (0=male;1=female)	0.024	0.048	1.024	0.113	0.132	1.119	0.002	0.061	1.002
Age	-.032***	0.002	0.968***	-0.037***	0.006	0.964***	-0.031***	0.003	0.970***
Marital status									
Never married	-0.091	0.065	0.913	-0.000	0.174	1.000	-0.108	0.087	0.898
Married	---	---	---	---	---	---	---	---	---
Divorced/separated	0.116	0.067	1.123	0.097	0.182	1.101	0.161	0.086	1.175
Widowed	0.598***	0.104	1.819***	.637*	0.285	1.884*	0.698***	0.125	2.009***
Children in household	-0.335***	0.057	0.715***	-0.322*	0.149	0.725*	-0.365***	0.076	.694***
Educational attainment									
Less than HS	-0.140*	0.070	.869*	0.148	0.165	1.159	-0.074	0.108	0.929
HS graduate	---	---	---	---	---	---	---	---	---
Some college, no BA	0.015	0.062	1.015	-0.025	0.153	0.975	0.016	0.078	1.017
Bachelors degree	-0.081	0.070	0.922	-0.169	0.213	0.844	-0.065	0.085	0.937
More than BA degree	-0.149	0.087	0.862	0.026	0.306	1.027	-0.186	0.105	0.830
Household Factors									
Family income									
in $1000s	0.001**	0.000	1.001**	0.002	0.002	1.002	0.001**	0.000	1.001**
Owns home	-1.323***	0.056	0.266***	-1.410***	0.174	0.244***	-1.304***	0.071	.271***
Duration in residence	-0.034***	0.003	0.967***	-0.064***	0.011	0.938***	-0.025***	0.004	.975***
Persons per room	-0.005	0.038	0.995	0.086	0.106	1.090	0.132*	0.067	1.141*
Rating of house	-0113***	0.013	.893***	-0.119***	0.029	0.887***	-0.135***	0.018	.874***
Intercept	1.9612***	0.161		1.806***	0.421		1.918***	0.218	
Model X^2	2727.85***			480.92***			1688.58***		
Log likelihood	-6462.2			-904.8			-4009.3		
N	15815			2281			10216		

***p < 0.001, ** p < 0.01, *p < 0.05
Sources: American Housing Survey 2001 & 2003, U.S. Census 2000, and Lewis Mumford Center

Table 5: Model 3-- Logistic Regression of Residential Mobility Individual, Household, Neighborhood and MSA Factors by Race

	Full Model			Black Sample			White Sample		
	b	Standard Error	Odds Ratio	b	Standard Error	Odds Ratio	b	Standard Error	Odds Ratio
Individual Householder Factors									
Race (0=white; 1=Black)	-0.245***	0.068	0.783***	---	---	---	---	---	---
Sex (0=male;1=female)	0.044	0.048	1.045	0.132	0.136	1.141	0.016	0.061	1.016
Age	-0.032***	0.002	0.969***	-0.035***	0.006	0.966***	-0.031***	0.003	0.970***
Marital status									
Never married	-0.063	0.065	0.939	0.087	0.178	1.091	-0.085	0.088	0.918
Married	---	---	---	---	---	---	---	---	---
Divorced/separated	0.120	0.067	1.128	0.135	0.187	1.144	0.165	0.086	1.180
Widowed	0.598***	0.105	1.818***	0.738*	0.290	2.091*	0.695***	0.126	2.004***
Children in household	-0.335***	0.057	0.715***	-0.353*	0.152	0.702*	-0.370***	0.077	0.691***
Educational attainment									
Less than HS	-0.147*	0.071	0.863*	0.123	0.169	1.131	-0.068	0.108	0.935
HS graduate	---	---	---	---	---	---	---	---	---
Some college, no BA	-0.002	0.062	1.002	-0.057	0.156	0.944	-0.002	0.079	0.998
Bachelors degree	-0.063	0.070	0.939	-0.111	0.218	0.895	-0.064	0.085	0.938
More than BA degree	-0.141	0.088	0.869	-0.021	0.314	0.979	-0.184	0.106	0.832
Household Factors									
Family income									
in $1000s	0.001***	0.000	1.001***	0.003	0.002	1.003	0.001**	0.000	1.001**
Owns home	-1.383***	0.058	0.251***	-1.456***	0.178	0.233***	-1.340***	0.073	0.262***
Duration in residence	-0.030***	0.003	0.970***	-0.055***	0.012	0.946***	-.023***	0.004	0.977***
Persons per room	0.040	0.039	1.041	0.221*	0.109	1.247*	0.161*	0.068	1.175*
Rating of house	-0.105***	0.016	0.901***	-0.116**	0.036	0.891**	-0.116***	0.022	0.891***

Table 5 (cont'd): Model 3-- Logistic Regression of Residential Mobility Individual, Household, Neighborhood and MSA Factors by Race

	Full Model			Black Sample			White Sample		
	b	Standard Error	Odds Ratio	b	Standard Error	Odds Ratio	b	Standard Error	Odds Ratio
Neighborhood Factors									
Perceived neighborhood crime (0=no;1=yes)	-0.121*	0.059	0.886*	0.046	0.141	1.047	-0.167*	0.077	.846*
Public transportation satisfactory (0=no;1=yes)	-0.086	0.062	0.917	-0.268	0.199	0.765	-0.060	0.075	0.942
Rating of neighborhood (scale: 1-10)	-0.020	0.015	0.980	-0.077	0.035	0.993	-0.036	0.020	0.965
Metropolitan Area Factors									
Percent Black	-0.824*	0.375	0.439*	-1.173	0.750	0.310	-0.707	0.486	0.493
Percent Urban	-2.468***	0.435	0.085***	-3.926***	1.109	0.020***	-1.308*	0.558	0.270*
Percent housing units vacant	-1.468	1.281	0.230	-5.606	3.927	0.004	-1.518	1.605	0.219
Median rent	0.004***	0.001	1.004****	0.004**	0.001	1.004**	0.003***	0.001	1.003***
Median value owner-occupied homes in $1,000s	-0.008***	0.001	0.992***	-0.013***	0.003	0.987***	-0.007***	0.001	0.993***
Residential segregation Dissimilarity	-0.005	0.003	0.995	-0.009	0.007	0.991	-0.008*	0.004	0.992*
Intercept	3.461***	0.410		5.475***	0.510		2.748***	0.519	
Model X^2	2855.42***			536.41***			1741.29***		
Log likelihood	-6399.44			-877.085			-3982.99		
N	15815			2281			10216		

***p < 0.001, ** p < 0.01, *p < 0.05

Sources: American Housing Survey 2001 & 2003, U.S. Census 2000, and Lewis Mumford Center

Table 6: Comparison of Residential Segregation Measures in the Logistic Regression Analysis of Model 3

	Full Model				Black Sample				White Sample			
	b	Standard Error	Odds Ratio	BIC	b	Standard Error	Odds Ratio	BIC	b	Standard Error	Odds Ratio	BIC
Residential Segregation												
Dissimilarity	-0.005	0.003	0.995	6.166++	-0.009	0.007	0.991	6.311++	-0.008*	0.004	0.992*	4.892+
Isolation--white/white	-0.008***	0.002	0.992***	2.186+	-0.012	0.008	0.988	5.505+	-0.016***	0.003	0.985***	11.960+++
Isolation--Black/Black	0.006*	0.002	1.006*	4.123+	0.004	1.018	1.004	7.382++	0.002	0.003	1.002	8.691++
Exposure--white/Black	0.058***	0.013	1.06***	11.425+++	0.073**	0.029	1.08**	1.350	0.052**	0.017	1.053**	0.506
Exposure--Black/white	-0.008**	0.003	0.992**	0.260	-0.009	0.009	0.991	6.768++	-0.010**	0.003	0.990**	0.177

+ Positive support for current model
++ Strong support for current model
+++ Very strong support for current model

***p < 0.001, ** p < 0.001, *p < 0.05
Sources: American Housing Survey 2001 & 2003, U.S. Census 2000, and Lewis Mumford Center

Table 7: Model 4--Hierarchical Generalized Linear Model, Conditional at Level 1

	λ	Log-odds	SE	Odds Ratio
Intercept	0.524	-1.433	0.049	0.239***
Race (0=white; 1=Black)	0.081	-0.109	0.064	0.897^{+}
Sex (0=male;1=female)		0.052	0.042	1.053
Age	0.129	-0.029	0.002	0.972***
Marital status				
Never married		-0.004	0.058	0.996
Married		---	---	---
Divorced/separated		0.100	0.058	1.105^{+}
Widowed	0.137	0.473	0.100	1.605***
Children in household	0.122	-0.329	0.058	0.719***
Educational attainment				
Less than HS	0.140	-0.169	0.070	0.844*
HS graduate		---	---	---
Some college, no BA		-0.014	0.052	0.986
Bachelors degree		-0.040	0.059	0.960
More than BA degree		-0.088	0.072	0.915
Family income in $1000s	0.078	0.001	0.000	1.001^{+}
Owns home	0.166	-1.432	0.063	0.239***
Duration in residence	0.127	-'0.002	0.003	0.998
Persons per room		0.089	0.035	1.093*
Rating of house	0.161	-0.078	0.017	0.925***
Perceived neighborhood crime (0=no;1=yes)	0.073	-0.067	0.055	0.935
Public transportation satisfactory (0=no;1=yes)		-0.066	0.052	0.936
Rating of neighborhood (scale: 1-10)		-0.024	0.013	0.977^{+}

Random Effect		VAR	SD
Intercept		0.155	0.394***
Race (0=white; 1=Black)		0.045	0.212
Age		0	0.008
Marital status--Widowed		0.441	0.195
Education--Less than HS		0.291	0.085*
Children in household		0.207	0.043
Family income in $1000s		0.001	0
Owns home		0.286	0.082^{+}
Duration in residence		0.015	0
Rating of house		0.005	0.068
Perceived crime		0.168	0.028

***p < 0.001, ** p < 0.001, *p < 0.05. $^{+}$p <0.10

Sources: American Housing Survey 2001 & 2003, U.S. Census 2000, & Lewis Mumford Cer

Table 8: Model 5--Hierarchical Generalized Linear Model, Intercept & Slopes as Outcomes

	λ	Log-odds	SE	Odds Ratio
Intercept	0.247			
Intercept		-1.722	0.046	0.179***
Race (0=white; 1=Black)		0.078	0.401	1.081
Owns home		-1.595	0.512	0.203**
Rating of house		-0.115	0.185	0.891
% vacant housing units		-2.973	1.777	0.051+
Median rent		0.002	0.001	1.002**
Median home value		-0.006	0.002	0.994***
Segregation--dissimilarity		-0.005	0.004	0.995
Race (0=white; 1=Black)				
Intercept		-1.189	0.102	0.828+
Race (0=white; 1=Black)		-0.428	0.667	0.652
Owns home		-1.005	1.117	0.366+
Rating of house		-0.118	0.463	0.888
% vacant housing units		-5.453	4.194	0.004
Median rent		0	0.001	1
Median home value		-0.006	0.003	0.994+
Segregation--dissimilarity		-0.004	0.008	0.996
Sex (0=male;1=female)		0.049	0.047	1.050
Age		-0.031	0.002	0.970***
Marital status				
Never married		-0.057	0.064	0.944
Married		---	---	---
Divorced/separated		0.109	0.066	1.115+
Widowed		0.551	0.100	1.735***
Children in household		-0.324	0.056	0.723***
Educational attainment				
Less than HS				
Intercept		-0.126	0.09	0.882
Race (0=white; 1=Black)		-0.409	0.729	0.664
Owns home		1.826	0.914	6.208*
Rating of house		0.239	0.373	1.27
% vacant housing units		1.714	3.438	5.549
Median rent		-0.001	0.001	0.999
Median home value		0.004	0.003	1.004
Segregation--dissimilarity		0.011	0.007	1.011
HS graduate		---	---	---
Some college, no BA		-0.008	0.061	0.992
Bachelors degree		-0.041	0.069	0.960
More than BA degree		-0.112	0.086	0.894

Table 8 (cont'd): Model 5--Hierarchical Generalized Linear Model, Intercept & Slopes as Outcomes

	λ	Log-odds	SE	Odds Ratio
Family income in $1000s	0.112			
Intercept		0	0.001	1
Race (0=white; 1=Black)		0	0.004	1
Owns home		0.002	0.006	1.002
Rating of house		0	0.002	1
% vacant housing units		-0.005	0.021	0.995
Median rent		0	0.000	1
Median home value		0	0.000	1
Segregation--dissimilarity		0	0.000	1
Owns home	0.148			
Intercept		-1.591	0.084	0.204***
Race (0=white; 1=Black)		-0.755	0.68	0.47
Owns home		0.742	0.966	2.099
Rating of house		0.338	0.347	1.402
% vacant housing units		-0.535	3.261	0.586
Median rent		0.001	0.001	1.001
Median home value		0	0.003	1
Segregation--dissimilarity		0.012	0.007	1.012
Duration in residence		-0.26	0.003	0.974***
Persons per room		0.065	0.038	1.067^{+}
Rating of house	0.107			
Intercept		-0.088	0.022	0.916***
Race (0=white; 1=Black)		0.261	0.174	1.298
Owns home		0.128	0.222	1.136
Rating of house		-0.055	0.087	0.947
% vacant housing units		-0.456	0.833	0.634
Median rent		0	0	1
Median home value		0	0.001	1
Segregation--dissimilarity		-0.006	0.002	0.994**
Perceived neighborhood crime (0=no;1=yes)		-0.120	0.057	0.887*
Public transportation satisfactory (0=no;1=yes)		-0.082	0.061	0.922
Rating of neighborhood (scale: 1-10)		-0.021	0.015	0.979

Random Effect	VAR	SD
Intercept	0.039	0.197***
Family income in $1000s	0	0.001**
Owns home	0.071	0.267
Rating of house	0.003	0.055

***p < 0.001, ** p < 0.01, *p < 0.05. $^{+}$p <0.10

Sources: American Housing Survey 2001 & 2003, U.S. Census 2000, & Lewis Mumford Cer

Bibliography

Alba, Richard D. and John R. Logan. 1991. "Variations on Two Themes: Racial and Ethnic Patterns in the Attainment of Suburban Residences." *Demography* 28: 431-453.

Bobo, Lawrence and Vincent Hutchings. 1996. "Perceptions of Racial Group Competition: Extending Blumer's Theory of Group Position to a Multiractial Social Context." *American Sociological Review* 61: 951-972.

Bobo, Lawrence and Camille Zubrinsky. 1996. "Attitudes Toward Residential Integration: Perceived Status Differences, Mere In-Group Preference, or Racial Prejudice?" *Social Forces* 74(3): 883-909.

Charles, Camille. 2003. "The Dynamics of Racial Residential Segregation." *Annual Review of Sociology* 29(1): 167-207.

Clark, William A.V. 1991. "Residential Preferences and Neighborhood Racial Segregation." *Demography* 28(1): 1-19.

Crowder, Kyle D., Stewart E. Tolnay, Robert M. Adelman. 2001. "Intermetropolitan Migration and Locational Improvement for African American Males, 1970-1990." *Social Science Research* 30(3): 449-472.

Darden, Joe T. 1990. "Differential Access to Housing in the Suburbs." *Journal of Black Studies* 21(1): 15-22.

Denton, Nancy A. and Douglas S. Massey. 1991. "Patterns of Neighborhood Transition in a Multiethnic World: U.S. Metropolitan Areas, 1970-1980." *Demography* 28(1): 41-63.

Emerson, Michael O., George Yancy, and Karen J. Chai. 2001. "Does Race Matter in Residential Segregation? Exploring Preferences of White Americans." *American Sociological Review*. 66(6): 922-935.

Falk, William W., Larry L. Hunt, and Matthew O. Hunt. "Coming 'Home'?: The Return Migration of African Americans to the 'New South.'" *In publication*.

Farley, Reynolds and William H. Frey. 1994. "Changes in the Segregation of Whites from Blacks During the 1980s: Small Steps Toward a More Integrated Society." *American Sociological Review* 59(1): 23-45.

Frey, William H. 1985. "Mover Destination Selectivity and the Changing Suburbanization of Metropolitan Whites and Blacks." *Demography* 22: 223-43.

-----. 2003. “Metropolitan Magnets for International and Domestic Migrants.” *Living Cities Census Series*. Washington, DC: The Brookings Institution.

-----. 2004. “The New Great Migration: Black Americans’ Return to the South, 1965-2000.” *Living Cities Census Series*. Washington, DC: The Brookings Institution.

Frey, William H. and Kao-Lee Liaw. 2005. “Interstate Migration of Hispanics, Asians and Blacks: Cultural Constraints and Middle Class Flight.” *Living Cities Census Series*. Washington, DC: The Brookings Institution.

Fuguitt, Glenn, John Fulton and Calvin Beale. 2001. “The Shifting Pattern of Black Migration from and into the Nonmetropolitan South, 1965-95.” Economic Research Service, U.S. Department of Agriculture. *Rural Development Research* Report No. 93.

Iceland, John, Cicely Sharpe, and Erika Steinmetz. 2005. “Class Differences in African American Residential Patterns in U.S. Metropolitan Areas: 1990-2000.” *Social Science Research* 34, 1: 252-266.

Iceland, John, Daniel H. Weinberg, and Erika Steinmetz, U.S. Census Bureau, Series ENSR-3, *Racial and Ethnic Residential Segregation in the United States: 1980-2000*, U.S. Government Printing Office, Washington, DC, 2002.

Iceland, John. 2003. “Class Differences in African American Residential Patterns in U.S. Metropolitan Areas: 1990-2000.” In press. Copy dated September 11, 2003.

Iceland, John. 2004. “Beyond Black and White: Residential Segregation in Multiethnic America.” Social Science Research

Johnson, James H. Jr. and Curtis C. Roseman. 1990. “Increasing Black Outmigration from Los Angeles: The Role of Household Dynamics and Kinship Systems.” *Annals of the Association of the American Geographers* 80(2): 205-222.

Hrysan, Maria and Reynolds Farley. 2002. “The Residential Preferences of Blacks: Do They Explain Persistent Segregation?” *Social Forces* 80: 937-980.

Lee, Everett S. 1966. “A Theory of Migration.” *Demography* 3(1): 47-57.

Logan, John R. 2001a. *Ethnic Diversity Grows, Neighborhood Integration Lags Behind*. Lewis Mumford Center for Comparative Urban and Regional Research. University of Albany, SUNY. http://mumford.albany.edu/census/WholePop/WPreport/MumfordReport.pdf

Logan, John R. 2001b. *The New Ethnic Enclaves in America's Suburbs*. Lewis Mumford Center for Comparative Urban and Regional Research. University of Albany, SUNY. http://mumford.albany.edu/census/suburban/SuburbanReport/SubReport.pdf

Logan, John R. Richard D. Alba, Tom Mcnulty, and Brian Fisher. 1996. "Making a Place in the Metropolis: Locational Attainment in Cities and Suburbs." *Demography*. 33(4): 443-453.

Logan, John R. and L. B. Stearns. 1981. "Suburban Racial Segregation as a Non-Ecological Process." *Social Forces* 60: 61-73.

Long, Larry. 1988. *Migration and Residential Mobility in the United States*. Russell Sage Foundation: New York.

Long, Larry. H. and K. Hansen. 1977. "Selectivity of Black return migration to the South." *Rural Sociology* 42: 317-31.

Massey, Douglas S. 1990. "Social Structure, Household Strategies, and the Cumulative Causation of Migration." *Population Index* 56: 3-26.

Massey, D. S., Arango, J., Hugo, G., Kouaouci, A., Pellegrino, A., and Taylor, J.E. 1993. "Theories of international migration: A review and appraisal." *Population and Development Review* 19(3): 431-466.

-----. 1994. "An evaluation of international migration theory: The North American case." *Population and Development Review* 20(4): 699-751.

Massey, Douglas S. and Nancy A. Denton. 1987. "Trends in the Residential Segregation of Blacks, Hispanics and Asians." *American Sociological Review* 52:802-25.

-----. 1993. *American Apartheid: Segregation and the Making of the Underclass*. Cambridge: Harvard University Press.

Massey, Douglas S., Andrew Gross, and Kumiko Shibuya. 1994. "Migration, Segregation, and the Geographic Concentration of Poverty." *American Sociological Review* 59: 425-45.

O'Connor, Alice; Chris Tilly and Lawrence Bobo. 2001. *Inequality: Evidence from Four Cities*. New York: Russell Sage.

Pattillo-McCoy, Mary. 2000. "The Limits of Out-Migration for the Black Middle Class." *Journal of Urban Affairs* 22(3): 225-241.

Price-Spratlen, Townsand. 1998. “Between Depression and Prosperity? Changes in the Community Context of Historical African American Migration.” *Social Forces* 77(2): 515-539.

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

Ritchey, P. Neal. 1976. “Explanations of Migration.” *Annual Review of Sociology* 2: 363-404.

Ross, Stephen L. and Margery Austin Turner. 2005. "Housing Discrimination in Metropolitan America: Explaining Changes between 1989 and 2000." *Social Problems* 52, 2: 152-180.

Sandefur, Gary D. and Jeon, Jiwon. 1991. “Migration, Race and Ethnicity, 1960-1980.” *International Migration Review* 25(2): 392-407.

South, Scott J. and Kyle D. Crowder. 1997a. “Residential Mobility between Cities and Suburbs: Race, Suburbanization, and Back-to-the-City Moves.” *Demography* 34:525-38.

-----. 1997b. “Escaping Distressed Neighborhoods: Individual, Community, and Metropolitan Influences.” *American Journal of Sociology* 102:1040-84.

-----. 1998. “Leaving the ‘Hood: Residential Mobility between Black, White and Integrated Neighborhoods.” *American Sociological Review* 63(1): 17-26.

South, Scott J. and Glenn D. Deane. 1993. “Race and Residential Mobility: Individual Determinants and Structural Constraints.” *Social Forces* 72(1): 147-167.

Spain, D. and Larry H. Long 1981. “Black movers to the Suburbs: Are They Moving to Predominantly White Neighborhoods? *Spatial Demographic Analysis*, CDS-80-4. Washington: U.S. Department of Commerce.

Stapleton, C. M. 1980. “Reformulation of the Family Life-Cycle Concept: Implications for Residential Mobility. *Environment and Planning* A 12: 1103-18.

Taeuber, Karl E. and Alma F. Taeuber. 1965. “The Changing Character of Negro Migration.” *American Journal of Sociology* 70: 429-441.

Tolnay, Stewart E. 1997. “The Great Migration and Changes in the Northern Black Family.” *Social Forces* 75(4): 1213-1238.

Tolnay, Stewart E. 1998. “Educational Selection in the Migration of Southern Blacks, 1880-1990.” *Social Forces* 77(2): 487-514.

Turner, Margery Austin; Ross, Stephen L.; Glaster, George C.; Yinger, John. 2002. *Discrimination in Metropolitan Housing Markets: National Results from Phase I HDS 2000—Final Report*. Washington, D.C.: The Urban Institute.

U.S. Census Bureau, Current Housing Reports, Series H150/01, *American Housing Survey for the United States: 2001*. U.S. Government Printing Office, Washington, DC, 2002.

Wilson, Franklin D. 1988. "Aspects of Migration in an Advanced Industrial Society." *American Sociological Review* 53(1): 113-126.

Wilson, William. 1987. *The Truly Disadvantaged: the Inner City, the Underclass and Public Policy*. Chicago: University of Chicago Press.