

12-14-2013

## **Black-White, Black-Nonblack, and White-Nonwhite Residential Segregation in U.S. Metropolitan and Nonmetropolitan Areas, 1990-2010**

Jed Raney Pressgrove

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Black-white, black-nonblack, and white-nonwhite residential segregation in U.S.  
metropolitan and nonmetropolitan areas, 1990-2010

By

Jed Raney Pressgrove

A Thesis  
Submitted to the Faculty of  
Mississippi State University  
in Partial Fulfillment of the Requirements  
for the Degree of Master of Science  
in Sociology  
in the Department of Sociology

Mississippi State, Mississippi

December 2013

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2013

Black-white, black-nonblack, and white-nonwhite residential segregation in U.S.  
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The goal of this study is to examine racial residential segregation in U.S. metropolitan and nonmetropolitan areas. The study uses 1990-2010 decennial census data to answer a broad theoretical question: is the historical black-white color line being replaced by a black-nonblack or white-nonwhite color line? The results show that black-white segregation is higher than black-nonblack and white-nonwhite segregation in metropolitan areas, nonmetropolitan areas, and the United States as a whole. A multivariate analysis reveals that population size tends to be associated with higher segregation in metropolitan areas and lower segregation in nonmetropolitan areas. As a control variable, diversity seems to play an important role in segregation by U.S. region. The study concludes that further research is needed to examine how the color line might change, especially in nonmetropolitan areas, which experienced rapid minority population growth during the 2000s.

## DEDICATION

I dedicate this thesis to my mother, Debbie Pressgrove.

## ACKNOWLEDGEMENTS

I would like to acknowledge the influence and guidance of my major professor, Dr. Domenico Parisi, who instilled a passion for residential segregation within me and always kept me on the right track, even when I was unsure of how things would work out. I would also like to thank my committee members, Dr. Robert L. Boyd and Dr. Grigoris Argeros, for making me think even harder about my work; this document would have been weaker without their input. Special thanks must go to Dr. Michael Taquino, who assisted me in answering questions related to data and methodology. I must acknowledge Dr. James Unnever, whose explosive teaching style challenged and inspired me every time I was in his classroom. Without Dr. Unnever, I would not have pursued a master's degree in sociology. I would like to thank Ms. Pam Linley and Ms. Jan Wells in the Department of Sociology for their help, as well as Mr. James Nail for taking great care to ensure this document is in the correct format. Last but not least, I would like to express my deepest gratitude to my family, Lacey Pressgrove and Delia Lochala. They were patient when I had things to do that did not involve them. This work is proof that I am a better man with their support and love.

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## CHAPTER I

### INTRODUCTION

The goal of this study is to examine differences in patterns of racial residential segregation between metropolitan and nonmetropolitan areas in the United States. Specifically, the study examines how black-white residential segregation might differ between metropolitan and nonmetropolitan areas. Going by historical trends, the general expectation is that black-white residential segregation should be high in both metropolitan and nonmetropolitan areas, though recent studies show more severe black-white segregation in nonmetropolitan areas, which could be due to historical conditions, the more disadvantaged status of nonmetropolitan minority groups compared to metropolitan minority groups, and lagging positive racial attitudes in nonmetropolitan areas (Allen and Turner 2011; Lichter et al. 2007a). To account for the rapid increase of immigrants from Latin America and Asia in metropolitan and nonmetropolitan areas, the study also examines differential patterns of (a) black-nonblack segregation and (b) white-nonwhite segregation. The objective here is to indicate whether the dominant historic pattern of black-white segregation will be replaced by a black-nonblack pattern or white-nonwhite pattern in an increasingly diverse country (Gans 1999; Lee and Bean 2007). A dominant black-nonblack pattern of residential segregation would suggest that minority groups like Hispanics and Asians are either integrating into the white mainstream or maintaining their own distinct communities and therefore distancing themselves from

blacks. This scenario stresses the idea of black exceptionalism, which, in its strictest form, states that “[b]lacks cannot become nonblack” (Parisi, Lichter, and Taquino 2011:3). In contrast, a dominant white-nonwhite pattern of residential segregation might suggest that any minority group might face the same residential barriers as their black counterparts. This scenario stresses the idea of white dominance and privilege in a tri-racial order of whites, honorary whites, and a collective black (Bonilla-Silva 2004).

For many decades in the United States, residential segregation was mainly perceived as an issue between whites and blacks, once the two largest racial groups in the country. After the turn of the 20th century, W.E.B. Du Bois (1997 [1903]) described the social and physical barriers between blacks and whites as a “color line.” Eventually, the U.S. government realized the negative ramifications of its white favoritism and attempted to repair the racial divide it helped create and grow with court decisions and legislation. The problem of residential segregation was addressed specifically with the Fair Housing Act of 1968 – or at least, that is what many had hoped. Many sociological articles after the Fair Housing Act showed that residential segregation was alive and, with the increase of Hispanic and Asian immigration due to the Immigration and Nationality Act of 1965, becoming more complex (Alba et al. 1999; Charles 2003; Massey and Denton 1988a; Schneider and Phelan 1993). However, it was not until Massey and Denton’s (1993) *American Apartheid* that residential segregation received another strong look from the public as a major force in social inequality.

Most sociological attention to residential segregation, including Massey and Denton (1993), has analyzed the problem as an urban (metropolitan) phenomenon. This is true for three reasons. First, given that census tracts have been used as proxies for

metropolitan neighborhoods for decades, it is easier to compute and compare residential segregation scores in metropolitan areas. Second, most people in the United States live in metropolitan areas. Third, for quite some time, the most significant population growth occurred in metropolitan areas, resulting in consistent patterns of black-white segregation. Specifically, many blacks left the South between 1915 and 1970 to Northern cities for better opportunities in a demographic event known as the Great Migration. This massive migration of blacks to metropolitan areas created discontent among many whites, who attempted to keep blacks out of their neighborhoods with various forms of discrimination, including firebombing and restrictive covenants (Farley and Frey 1994). After World War II, whites left central cities en masse and established suburban communities that developed new strategies (e.g., real estate and labor market discrimination) that largely kept blacks in segregated central city neighborhoods. Much has been written about the evolving ability of blacks to suburbanize (i.e., to move to a suburban area) and how this dynamic continues to change residential patterns in metropolitan areas – sometimes for the better, sometimes for the worse (Alba et al. 1999; Alba and Logan 1993; Farley 1970; Frey 1985, 2001; Guest 1978; Logan and Alba 1993; Logan, Alba, and Leung 1996; Logan, Stults, and Farley 2004; Marshall 1979; Massey and Denton 1988a; Pattillo 2005; Schneider and Phelan 1993).

However, some scholars suggest that the conventional notion of a black-white divide is outdated in today's multiracial society (Alba and Nee 2003; Gans 1999; Huntington 2004; Lee and Bean 2007). To be sure, the continued growth of Hispanic and Asian populations in metropolitan areas is changing the contour of racial and ethnic boundaries (Alba 1999). Some argue that the color line will shift to black-nonblack (Gans

2005), while others argue that it will shift to a tri-racial order that privileges whites above others (Bonilla-Silva 2004). More recently, the changing color line has become not only a metropolitan issue but also a nonmetropolitan issue, where many Hispanics are moving to new destinations in small towns to live and work (Lichter 2012). At this time, it is unclear how various racial residential segregation patterns are similar or different in metropolitan and nonmetropolitan America – a limitation that is addressed in this study.

As important as metropolitan studies are, sociologists have often overlooked race relations in nonmetropolitan settings. Snipp (1996) provides a compelling example: “While the 1960s were a period of racial turmoil for the rest of the United States, judging from the contents of *Rural Sociology*, rural America was a remarkably placid and pastoral place” (138). Literature on residential segregation in nonmetropolitan areas was limited to small portions of case studies before Hwang and Murdock (1983) used Census block data to analyze segregation in nonmetropolitan Texas. The 1980s and 1990s offered a few more studies addressing nonmetropolitan residential segregation (Aiken 1987, 1990; Cromartie and Beale 1996; Lichter, Fuguitt, and Heaton 1985; Lichter and Heaton 1986; Massey and Hajnal 1995; Murdock, Hwang, and Hoque 1994; Snipp 1996).

Population trends clearly call for more attention to residential segregation in nonmetropolitan areas. During the 1970s, black and white populations in nonmetropolitan areas tended to grow in different types of places (Lichter et al. 1985). Wahl and Gunkel (2007) indicate that push and pull factors have drawn black migrants back to the nonmetropolitan South for four decades. Hispanic immigration has spread beyond the traditional metropolitan destinations; in fact, Hispanics were the fastest growing nonmetropolitan group between 1980 and 2000 (Kandel and Cromartie 2004), and they

grew even faster in nonmetropolitan areas during the 2000s (Lichter 2012). The nonmetropolitan Hispanic population is now almost as large as the nonmetropolitan black population. At the same time, record Hispanic immigration should not overshadow the presence of other nonblack minority groups, such as Asians and American Indians, in nonmetropolitan areas.

Perhaps the most important reason to study nonmetropolitan residential segregation is to examine how race relations and locational returns differ between nonmetropolitan and metropolitan areas. Research by Snipp (1996) indicates that minority groups in nonmetropolitan America face institutional and socioeconomic barriers that differ from those in metropolitan settings. For example, while a poor minority in a big city can save money by using public transportation, he or she would have to maintain a car in sparsely populated nonmetropolitan areas. Whereas racial groups tend to be segregated by neighborhoods in metropolitan areas, they can be segregated by entire towns in nonmetropolitan areas (Aiken 1987; Cromartie and Beale 1996; Massey and Hajnal 1995). Other research has suggested that factors like homeownership may have more of an impact on residential segregation in nonmetropolitan settings for blacks (Wahl and Gunkel 2007) and Hispanics (Wahl, Breckenridge, and Gunkel 2007). Lichter (2012) indicates that new nonmetropolitan Hispanic destinations have less poverty and crime than established metropolitan Hispanic destinations. A study by Johnson et al. (2004) showcases significant black disenfranchisement in a small North Carolina town that would be difficult to hide in the political spotlight of a big city.

Studies that compare the residential segregation scores of metropolitan and nonmetropolitan areas have multiplied over the last few years (Allen and Turner 2011; Lichter et al. 2007a, 2010; Parisi et al. 2011; Wahl et al. 2007; Wahl and Gunkel 2007). Such comparisons provide sociologists with a broad picture of race relations in the United States. However, given that Census data for 2010 have only recently become available, there has been little research identifying the most current trends. The intention of this study is to fill this gap in the literature and provide a broad description of how race relations might differ in metropolitan and nonmetropolitan areas. Specifically, this study will examine black-white, black-nonblack, and white-nonwhite patterns of racial residential segregation in metropolitan and nonmetropolitan areas from 1990 to 2010.

Data for the study will come from the last three U.S. decennial censuses: 1990, 2000, and 2010. Metropolitan and nonmetropolitan areas will be the basic geographic units for the analysis. The index of dissimilarity ( $D$ ) using block data will be used to measure segregation levels across geographic settings. The analytical strategy will be to first provide a simple descriptive comparison of indexes of dissimilarity between metropolitan and nonmetropolitan areas. Next, the study will fit various regression models of black-white, black-nonblack, and white-nonwhite segregation and of 1990-2010 change in black-white, black-nonblack, and white-nonwhite segregation to determine the extent to which other ecological factors contributed to levels and change in segregation in metropolitan and nonmetropolitan areas. Based on previous ecological research (Farley and Frey 1994; Iceland 2004; Logan et al. 2004), the study identifies various control variables such as population size, functional specialization, income, racial diversity, and region.

## CHAPTER II

### THEORY

This chapter reviews the theoretical literature that is relevant to the goal of the study. The chapter begins with the definition of racial residential segregation and its multiple dimensions. Next, it presents a description of the relationship between residential segregation and race relations in the United States. This section also includes an overview of the black-nonblack divide and black exceptionalism in the United States; an explanation of the multiculturalism perspective; and a description of a potential tri-racial order. The chapter then outlines the two main theoretical models of residential segregation: spatial assimilation (including segmented assimilation) and place stratification. In the description of the place stratification model, an emphasis is placed on structural discrimination, urban processes (e.g., invasion-succession), and residential preferences. The chapter ends with a summary of the findings and their implications for the research design of this study.

#### **Definition and Dimensions of Racial Residential Segregation**

Racial residential segregation is typically referred to as the distribution of racial groups across neighborhoods within a central city or metropolitan area. Racial groups can be segregated on five distinct but related dimensions: (1) centralization, (2)

concentration, (3) clustering, (4) exposure, and, last but not least, (5) evenness (Massey and Denton 1988b).

Centralization indicates the degree to which members of a racial group are located near the center or central city of a metropolitan area. Specifically, centralization measures how much a racial group is “spatially distributed close to, or far away from, the central business district” (Massey and Denton 1993:75). The centralization index essentially compares the residential area a racial group occupies near the central business district with the total amount of land area around the district. This procedure results in a number that conventionally ranges between -1 and +1, with negative scores indicating that racial group members tend to live near the central business district and positive scores indicating that racial group members tend to live in areas away from the district (Iceland, Weinberg, and Steinmetz 2002).

Concentration indicates whether a racial group is densely packed into a smaller area or spread throughout the larger geographic unit, such as a metropolitan area (Massey and Denton 1988b). The dimension measures how much space a racial group occupies in comparison to the space that another racial group occupies in an environment.

Concentration is an important dimension of segregation because it can reveal whether a racial group is confined to the resources/opportunities of a very small area (Iceland et al. 2002).

Clustering refers to whether a racial group forms “one large contiguous enclave or [is] scattered about in checkerboard fashion” (Massey and Denton 1993:74). Clustering differs from concentration in that it describes whether, for example, black households in a metropolitan area are all spatially connected or spaced out; in contrast, concentration

would describe whether all blacks within a metropolitan area are concentrated in a few densely packed neighborhoods or spread out across more space. In more technical terms, clustering is a weighted average of the distance that tends to separate individuals within Group A and of the distance that tends to separate individuals of Group A from Group B (Iceland et al. 2002).

Exposure involves how much probable contact one racial group will have with another based on the comingling of their residential patterns in neighborhoods or places. Specifically, exposure measures whether people tend to live among members of their own racial group, thus gauging “the potential for interracial contact” within a neighborhood or place (Massey and Denton 1993:65). It is also important to note that exposure is influenced by the size of each racial population within the larger geographic unit. A minority group, for example, may not be especially segregated on any other dimension of segregation, but if the proportion of the minority group is very large within the overall geographic area (i.e., the city), the group may not have a high likelihood of being exposed to members of the majority group. Conversely, a minority group that makes up a small proportion of the overall city population has a greater likelihood of having contact with the majority population, regardless of the level of evenness between the two groups (Iceland et al. 2002). Exposure index scores can vary from 0 to 100, with larger values indicating a greater probability of exposure to a reference group (e.g., whites). The isolation index is the opposite of the exposure index. Isolation index scores indicate the percentage of households in a neighborhood that are part of the same racial group. In this case, a score closer to 100 means that almost everyone in the neighborhood

is in the same racial group. Scores of 70 or more on the isolation index are considered very high (Charles 2003).

Evenness refers to the equal or unequal distribution of racial groups across the neighborhoods of an metropolitan area (Massey and Denton 1988b). In statistical terms, evenness detects the overrepresentation or underrepresentation of different racial groups within a geographic space (Iceland et al. 2002). Due to its widespread usage and ease of interpretation, evenness is often considered the most important dimension of racial residential segregation. The standard measure of evenness is the index of dissimilarity. The index of dissimilarity defines evenness “with respect to the racial composition of the city as a whole” (Massey and Denton 1993:20). In other words, if we were interested in measuring the evenness of Chicago, we would have to know the overall racial distribution of the city. If the city as a whole is 50 percent black and 50 percent white, each neighborhood within the city must have the same distribution of blacks and whites in order for there to be complete evenness in the area of study. Thus, a score from the index of dissimilarity indicates “the percentage of blacks who would have to move to create an ‘even’ residential pattern—one where every neighborhood replicates the racial composition of the city” (Massey and Denton 1993:20). For example, if a 50/50 black-white city has a dissimilarity index score of 20 in regard to black segregation, 20 percent of blacks who live in neighborhoods with an above-average proportion of blacks would have to move to neighborhoods with a below-average proportion of blacks to achieve residential evenness across the entire city (Taeuber and Taeuber 1965). Massey and Denton (1988b) indicate that dissimilarity scores are low, moderate, and high if they fall into the 0-30, 30-60, and 60-100 ranges, respectively.

Scholars present different but equally helpful views on how these five dimensions are related. Massey, Rothwell, and Domina (2009) indicate that the first three dimensions (centralization, concentration, and clustering) examine the layout of a geographic space as inhabited by a specific racial group. They suggest that the fourth and fifth dimensions (exposure and evenness) essentially describe the potential for shared space between different racial groups. In another study, Johnson, Poulsen, and Forrest (2007) perform a series of analyses to determine how the five dimensions identified by Massey and Denton (1988b) are related. Their results lead them to condense the five dimensions into two “superdimensions” of residential segregation: (1) location (centralization and concentration), or the extent to which a racial group resides in dense inner-city neighborhoods; and (2) separateness (clustering, exposure, and evenness), or the extent to which different racial groups are separated across a given area (Johnson et al. 2007:497-98).

A racial group may be more segregated based on one dimension of segregation and less segregated based on another (Massey and Denton 1988a; Johnson et al. 2007). However, high segregation on only one dimension is still substantial, as any dimension reduces access to resources and opportunities. According to Massey and Denton (1989), if a racial group is considered highly segregated on four of the five traditional dimensions, the group is hypersegregated. Massey and Denton (1993) show that hypersegregation intensifies the potential negative effects of residential segregation, especially the concentration of metropolitan poverty and other social problems.

A major limitation of these measures is that they can gauge segregation between two groups at the most (e.g., black vs. white, Hispanic vs. white, etc.). In a multiracial

society, a two-group approach oversimplifies the complex dynamics of multi-group relations. Therefore, more recent studies have used the multi-race information theory index (H) to capture multi-group segregation (Fischer 2003; Iceland 2004). Others, however, have indicated that to account fully for multi-group dynamics, each group should be examined in its own right and in relation to one another – white versus black, black versus Hispanic, and so on (Fong and Shibuya 2005; Logan et al. 2004; Parisi et al. 2011).

Traditionally, the unit of analysis in the residential segregation literature is the neighborhood, commonly captured with the use of census tract boundaries. The increased racial differentiation within census tracts has shifted the focus onto sub-tract units (census block groups and census blocks) as the most appropriate units of analysis to highlight patterns of segregation (Lichter et al. 2007a; Parisi et al. 2011). Using neighborhoods as the units of analysis, patterns of segregation were originally assessed within specific cities. With the extensive suburbanization that occurred between 1945 and 1970, patterns of segregation began to be assessed across the entire metropolitan region using Standard Metropolitan Areas. The assumption was that the housing market operates similarly in central cities and suburban areas. Other studies, however, indicated there is a discontinuity between city boundaries and suburban boundaries, emphasizing the importance of distinguishing between populations within central cities and suburban places (Alba and Logan 1991; Alba, Logan, and Stults 2000; Guest 1978; Logan and Stearns 1981; Logan et al. 1996; Schneider and Phelan 1993). More recent studies have also suggested that the suburban population should be distinguished between those falling within suburban place boundaries and those falling on the fringe of places outside

jurisdictional boundaries (Gordon 2004; Lichter 2007b). Because segregation between neighborhoods within a place contributes to the total segregation of the place and segregation between places contributes to the total segregation of the metropolitan area within which they are located, a multi-scale approach is required to account for the contribution of each level of geography to the total segregation (Fischer et al. 2004; Parisi et al. 2011).

### **Residential Segregation and Race Relations**

Residential segregation is a prominent indicator of social standing and, as such, reflects life chances and access to economic opportunities and public and private goods. Research indicates that residential location can impact factors such as quality of housing, access to good schools, safety, transportation, exposure to poverty and crime, mortality, and amenities (Akins 2007; Charles 2003; Iceland and Wilkes 2006; LaVeist 2003; Logan and Alba 1993). Residential segregation has been recognized as the key factor to certain aspects of racial inequality and disadvantage. Massey and Denton's (1993) groundbreaking *American Apartheid: Segregation and the Making of the Underclass* argues that segregation is the structure that intensified the urban black poverty caused by economic dislocations identified by Wilson (1987). In a recent study on neighborhood crime, Peterson and Krivo (2010:26) call residential segregation the "lynchpin that connects the overall racial order with dramatic racial and ethnic differentials in violent and property crime across communities." One's residence can make or break one's ability to succeed, and segregation is the structure that highly influences the probability of residing in a given area.

Park (1926) and Taeuber and Taeuber (1965) helped establish the idea that physical distance can act as a measure of social distance. More specifically, racial residential segregation can be used to gauge the integration of cultural and social differences between racial groups, where high levels of segregation are indicative of high cultural and social distance between groups (Iceland and Wilkes 2006). In studies of racial residential segregation, social distance between groups is reflected in unequal population distribution across socially meaningful spatial units (i.e., neighborhoods) in a geographic area. The degree to which groups are physically separated or integrated by neighborhoods can reflect the progress, or lack thereof, of society in terms of race relations (Charles 2003; Farley et al. 1978; Massey and Denton 1993).

Residential segregation can be seen as a means by which those at the top of the social order preserve their privileged status from those in subordinate positions. As Logan and Alba (1993) indicate, location “is a much-valued and guarded resource” (p. 243). Traditionally, studies of residential segregation have identified whites as the dominant racial group in this social order, with blacks, Hispanics, and Asians occupying subordinate positions. This idea is reflected in how sociologists measure residential segregation between racial groups (Charles 2003). Segregation research questions are usually “How segregated are blacks from whites? How segregated are Hispanics from whites? How segregated are Asians from whites?” rather than “How segregated are blacks from Hispanics?” or “How segregated are Hispanics from Asians?” (Parisi et al. 2011). The emphasis on minority segregation from whites suggests that whites live in neighborhoods and places that have, on average, more resources than black, Hispanic, and Asian neighborhoods and places. Research on neighborhood resources has backed up

this suggestion (Logan and Alba 1993; Alba et al. 2000), thus producing the concept of a white-nonwhite model of locational advantage.

Under conventional notions of racial relations framed along the white-nonwhite model of locational advantage, blacks are placed at the bottom of the social order, as they have been the most segregated minority group in recent U.S. history (Charles 2003; Taeuber and Taeuber 1965). Several explanations have been offered for the greater segregation of blacks compared to other racial groups like Hispanics and Asians. The most common explanation focuses on prejudice, antipathy, and racism against people with darker skin (Gans 2005). Another explanation focuses on the unique history of blacks compared to other minority groups. Unlike the case for most immigrant groups in the United States, black immigration was mostly involuntary, and they have been the largest minority group throughout the majority of U.S. history. Moreover, blacks and the issue of slavery were involved in “critical points of dispute at the three most crucial moments in the nation building of the United States: the writing of the Declaration of Independence and the Constitution, and the outbreak of the Civil War” (Sears and Salavei 2006:898). Although Hispanics and Asians have been involved in political controversies throughout American history (e.g., Mexican-U.S. War and Japanese American internment during World War II), the well-known historical controversies involving blacks more clearly point to the construction of the American nation and its social order. From a discriminatory perspective, the lowly status of blacks was firmly established with the historical legacy of slavery and Jim Crow laws. For example, the mere association between blacks and labor led to Chinese laborers being labeled black during the Jim Crow era (Alba and Nee 2003:44). Other explanations for the relatively disadvantaged

status of blacks are more class-related, as blacks are often associated with undesirable aspects of American society, such as welfare dependency, persistent poverty, and out-of-wedlock childbearing, all factors that might characterize the so-called American underclass (Massey and Denton 1993). This explanation is commonly known as the stereotype perspective (Ellen 2000).

The U.S. government has played a large role in creating a social order where blacks are considered lower than every other racial group. Slavery and the denial of human rights to blacks are the most obvious historical examples (Gans 2005). A less cited example is the one-drop rule, which was adopted by many states in the early 20th century. The one-drop rule officially classified any individual with one drop of black blood as black (Sears and Savalei 2006). Despite being taken off the books, the one-drop rule has been culturally reproduced (Lee and Bean 2010). As a result, multiracial children with one black parent have been found to be less able to identify as “white” than multiracial children with one Hispanic or one Asian parent. The government’s influence on the social order of racial groups lives on in subtle ways (Bonilla-Silva 2004; Lee and Bean 2007).

The stigma attached to blacks as a group is reflected in a social order that privileges the idea of being “white.” The first wave (1820-1890: mainly Irish, German, and English) and second wave (1870-1924: mainly Italian, Polish, and Russian/Polish Jews) of early European immigrants learned that it was advantageous in America to undergo a process of “whitening,” that is, becoming more like the white middle class and distancing themselves from blacks. Ethnic groups like the Irish and Italians – now considered “white” – were considered “black” or “nonwhite” in the early 20th century

before they improved their socioeconomic status and engaged in racial violence and discriminatory practices against blacks (Alba 1990; Gans 2005). Language also played a major role. Massey and Denton (1993:29) indicate that blacks during this time “frequently said that the first English word an immigrant learned was ‘nigger.’”

Beforehand, these immigrants were called various slurs by native whites (Gans 2005).

However, some scholars suggest that the conventional notion of blacks being at the bottom of the social order could become outdated in today’s multiracial society (Alba and Nee 2003; Gans 1999; Huntington 2004; Lee and Bean 2007). To be sure, the continued growth of Hispanic and Asian populations is changing the contour of racial and ethnic boundaries (Alba 1999). How such changes will transform the racial structure and, therefore, the meaning of “being black” in American society remains the object of a debate divided among three views.

### **Black-Nonblack Divide: Black Exceptionalism**

One side of the debate states that “white” and “black” will continue to be the primary markers of racial classification and that Hispanic and Asian immigrants, like the early European immigrants, will join the dominant racial group, whites, an amalgamation of many European groups (Gans 2005). Because the rapid population growth of Hispanics and Asians might threaten the status of the white majority, the dominant group will likely receive Hispanics and Asians into their residential areas. Moreover, Sears and Savalei (2006:918) find that Hispanics and Asians do not have the same “sense of common fate” that blacks do and thus are more likely to assimilate with whites instead of displaying strong “group consciousness.” Thus, Hispanics and Asians will have the

ability to choose to become “white” or “nonblack” rather than “face the seemingly permanent inferiority that goes with being black” (Gans 1999:375).

Immigrants groups can become nonblack by virtue of improving their socioeconomic conditions along with making a conscious effort to distance themselves from blacks (Loewen 1971; Zhou 2004). Becoming nonblack, therefore, implies that new minority groups would accept rather than challenge the privileged position of being “white” by adopting mainstream white culture (or Anglo-American culture, as it was established by Anglo-Saxons), which is “that part of the society *within* which racial and ethnic origins have at most minor impacts on life chances or opportunities” (Alba and Nee 2003:12). Within this racial order, the organization and reorganization of racial and ethnic boundaries will continue to follow a pattern of “black exceptionalism,” a discriminatory assimilation process in which immigrant groups gain social, economic, and cultural advantages by widening their distance, both socially and physically, from blacks and others with darker skin (e.g., Puerto Ricans and some Southeast Asians) (Gans 2005). By becoming more integrated into the white American mainstream, Asians and Hispanics will redraw America’s color line, replacing the white-nonwhite racial order with a black-nonblack racial order, where less affluent groups will fall within a “new black” category that will be characterized as an “undeserving race” (Gans 1999:373). In its strictest terms, black exceptionalism posits that “[b]lacks cannot become nonblack” (Parisi et al. 2011:3). At a minimum, the black-nonblack model assumes that nonblacks must “be located meaningfully closer to whites than blacks” (Marrow 2009:1039). Research by Massey and Hajnal (1995) and Parisi et al. (2011) shows evidence that residential patterns at multiple levels of geography – whether by state, county,

metropolitan area, city, neighborhood, or place – work together to disenfranchise blacks from mainstream American society and socioeconomic opportunities.

### **Multiculturalism**

On another side of the debate, Alba and Nee (2003) question the notion of black exceptionalism in favor of multiculturalism. Multiculturalism is a successor to pluralism, the idea that groups with different cultural backgrounds enrich society by sharing an equal interest in improving the collective quality of life (e.g., school quality, exposure to crime, and access to employment) in the United States. The multiculturalism view argues that new immigrants may assimilate into the mainstream white culture but maintain sizeable parts of their ethnic and racial identities. Spatial assimilation has been accompanied by “boundary blurring” throughout U.S. history, wherein the mainstream culture is expanded “to include elements of the minority cultures” (Alba and Nee 2003:287). Alba (1999) sums up multiculturalism as the simple idea of recognition – that is, the recognition by the white majority that other ethnic groups have the right to live the way they want to, as long as their lifestyles do not infringe upon the rights of anyone else. Moreover, although Hispanics and Asians have traditionally been more able than blacks to identify as white, Alba and Nee (2003) argue that the continued growth of the black middle class and black-white intermarriage (in many cases, between whites and black immigrants), along with the more prevalent idea of recognizing multiracial backgrounds (e.g., U.S. census allowing individuals to identify as multiple races), could blur “America’s most salient and hitherto indestructible racial divide” (290). Lee and Bean (2010) further argue that the election of U.S. President Barack Obama shortly after the

end of the 20th century sheds a different light on Du Bois' (1977 [1903]) "pessimistic" prediction about black-white relations.

According to Alba (1999:20), multiculturalism "could dissolve the transparency of racial distinctions and thus impact upon the distinctions that set African Americans racially apart." In other words, the cultural standards imposed by the white majority, which would include the racial order, may lose their priority or cease to exist altogether. Alba (1999:3-4) justifies this speculation by providing three major reasons. First, unlike the immigrants of the late 19th and early 20th century, new immigrants do not come from Europe but from Asia, Latin America, and the Caribbean. Most importantly, they are arriving in the United States during a time marked by transnationalism, defined by Massey and Sanchez (2010:10) as "the channeling of one's hopes, dreams, efforts, and earnings into projects in the sending country." Under multiculturalism, new immigrants will not have to identify fully as "black" or "white" but can retain portions of their own identities, as they will be able to maintain, through information technology and modern transportation, relationships with their own countries of origin throughout several generations. Second, contrary to European immigrants, contemporary immigrants are expected to continue to arrive in the United States at a sustained rate for some time (Alba 1999). Thus, in terms of sheer numbers, the majority status of European American whites will be lost, meaning the majority might have to evolve socially and politically based on some of the standards of other racial groups. Sustained immigration will be the engine that maintains and sustains multiculturalism (Alba and Nee 2003). Third, under the current economic environment, many new immigrants, especially those from Latin America, do not have the same opportunities as earlier immigrants for achieving middle

class status in a short period of time (one generation) and, therefore, drastically separate themselves by class from one generation to the next (Alba 1999). The new American mainstream will not be limited to the middle class but will include other classes, such as the working class and less affluent, due to networks of support that new immigrants can find in more established ethnic communities when they first arrive. The connection between new and established immigrants makes the new mainstream an environment that offers opportunities to make assimilation rewarding not only for newcomers but also for their subsequent generations, as it provides opportunities to improve social and material conditions for all. Each of these factors could contribute to the remaking of an ethnocentric American white mainstream into a multicultural society (Alba and Nee 2003).

### **Tri-Racial Order**

Yet another side of the debate calls into question the assumption that Hispanic and Asian immigrants will desire to assimilate or be able to fuse their identities with that of the white mainstream (Bonilla-Silva 2004; Frank, Akresh, and Lu 2010; Kim 2007; Zhou 2004). These scholars suggest that modern racial dynamics cannot be based on the black-white historical experience, as Hispanics and Asians are very diverse immigrant groups. Even though Alba and Nee (2003) insist that assimilation does not entail the loss of one's ethnicity, Zhou (2004) suggests that ethnic identity varies so much within the broader Asian category that many Asian immigrants would have to abandon their ethnicities just to form a proper panethnicity, much less become "white." Frank et al. (2010) indicate that racial identification is influenced by two factors – self-identification of individuals and society's identification system – that do not produce consistent results

for U.S. Hispanic groups. Moreover, the concept of “whitening” assumes that immigrant groups do not experience discrimination, despite the fact that hate crimes against Asians have been on the rise since the 1990s (Kim 2007) and that Hispanic neighborhoods are stereotypically associated with crime (Peterson and Krivo 2010).

Bonilla-Silva (2004:932) provides a detailed tri-racial order “comprised of ‘whites’ at the top, an intermediary group of ‘honorary whites’ ... and a nonwhite group or the ‘collective black’ at the bottom.” He predicts where numerous groups will fit in this racial order. The white group at the top will include native whites, new white immigrants (e.g., Russians), fully assimilated Hispanics (e.g., actor Martin Sheen), some multiracial individuals, and other subgroups. The honorary white group will include many light-skinned Hispanics, several Asian groups like Japanese Americans and Korean Americans, and most multiracial individuals. Finally, the collective black group will include blacks, dark-skinned Hispanics, and a few Asian groups like Vietnamese Americans and Hmong refugees from Southeast Asia.

Given that the tri-racial order is complex, skin color gradations will serve as important markers of stratification, suggesting that individuals within the broad groups, even blacks, can move up or down the racial ladder. Bonilla-Silva (2004) stresses that honorary whites are still secondary and will not always receive fair treatment, even though they will be considered superior to the collective black. For example, recent evidence from interviews with Hispanics and Asians reveal that neither minority group is able to avoid discrimination from the white majority, even those who are well-educated (O’Brien 2008). Thus, honorary whites will merely function as a buffer between the other two groups (much like a large middle class between the rich and the poor), which will

help create a societal ideology that race does not exist or should not be a hindrance to anyone. With this emphasis on the idea that race and racism are things of the past, the tri-racial order will function as a mechanism that upholds white dominance (Bonilla-Silva 2004).

### **Theoretical Models for Racial Residential Segregation**

Sociologists have framed their examination of racial residential segregation patterns with two distinct theoretical models: (1) spatial assimilation and (2) place stratification. Spatial assimilation predicts residential outcomes as a function of socioeconomic status and acculturation, the adoption of the white majority's culture (e.g., English language, proper dress, and work ethic). In contrast, place stratification emphasizes the role of discrimination or prejudice in determining residential outcomes of racial groups. Although the two models may seem to be polar opposites at times, they can be complementary (Charles 2003). For example, one model might be more predictive of outcomes for certain racial groups than the other. Moreover, place stratification does not discount the role of socioeconomic status; it simply points out that discrimination can affect locational returns for minority groups. Even spatial assimilation suggests some discrimination; the fact that minority groups have to jump through hoops to live in certain areas and be accepted by the white majority is not necessarily an ideal picture. Finally, the complementarity of the theories is especially apparent when single studies report evidence supporting both models (Alba and Logan 1993; Iceland and Wilkes 2006; Logan and Alba 1993; Massey and Denton 1987; Tolnay, Crowder, and Adelman 2002).

## **Spatial Assimilation**

The economic, social, and cultural dimensions of the general process of assimilation are best captured by patterns of racial residential segregation, the unequal spatial distribution of groups. In regard to residential mobility, spatial assimilation emphasizes the agency of minority groups, that is, their ability to achieve parity with the majority group by “participating in American culture and advancing in education and class status” (Logan et al. 1996:854). The general idea is that racial minorities in the United States become residentially mobile when they work hard and learn American values – spatial mobility follows social mobility. Once they move to white neighborhoods, they are then able to establish a more permanent bond with the majority group through more frequent exposure (Massey 1985). This theoretical model is mainly based on the social progress and success of European immigrants in the United States during the early 20th century. As Gans (1999) points out, early European immigrant groups were initially perceived as nonwhite or even black (regardless of skin color) by whites, but their progress in residential attainment helped them become part of the white majority.

Early European immigrants first concentrated in cities near central business districts for low-paying jobs in slums (Alba et al. 1999; Logan and Alba 1993). Next, the early immigrants would upgrade to “working-class districts with an ethnic character” (Alba et al. 1999:447) – residencies that were close to industries that had become ethnic niches (i.e., occupations or industries in which a minority group is overrepresented; see Waldinger 1996). Over a couple of generations, the immigrants would learn about American culture and aspire to live in “better” neighborhoods, resource-rich communities

just outside the city in which whites had been settling for years. Eventually, the immigrants achieved better education and income and were able to move into suburban communities occupied by the white majority. This movement into the suburbs, labeled “suburbanization,” was different from the “collective processes behind the development of ethnic enclaves” (Alba et al. 1999:447). Suburbanization required individual aspiration, will, and hard work. In many cases, it was the American Dream for the early European immigrants. They sought to become real Americans. Additionally, whites pressured immigrants to conform to the majority culture as stated by the Anglo-conformity model (Alba and Nee 2003).

The socioeconomic gains that early European immigrants achieved in order to move into more advantaged communities cannot be viewed solely in financial, cultural, and/or human capital terms (Alba and Logan 1993; Alba and Nee 2003). Undoubtedly, income, education, and English language ability all play important roles in spatial assimilation. The crucial point, however, is that immigrants’ various socioeconomic achievements result in an improved “ability to interact socially with members of the majority” (Alba and Logan 1993:1390), thus giving them an advantage over immigrants who are still learning the American way while working in low-wage positions and deciphering the intricacies of English and the U.S. school system. Improved communication with the majority would also presumably make whites more open-minded about other similar immigrant families moving into the neighborhood, as well as more receptive to “elements of minority culture” that can be “fused with mainstream elements to create a composite culture” (Alba and Nee 2003:25). All the same, spatial assimilation states that different levels of residential mobility merely “reflect compositional

differences among groups” (Logan and Alba 1993:244). Once financial, cultural, and human capital differences are controlled, the assumption is that residential differences should, for the most part, cease to be significant. Thus, the model implies that racial residential segregation is temporary and that any member of a minority group has the chance to live in a better place.

Even if a member of a minority group is fluent in English, understands American values, and appears to be an educated citizen, there is still the possibility that he or she cannot move into a better neighborhood due to a lack of income (Iceland and Wilkes 2006). As implied by the “spatial mismatch” concept of Wilson (1987), the cost of commuting to a higher-paying job in a suburban area might discourage or prevent minority groups from attaining the income necessary to move into a better neighborhood. Moreover, money can be saved with public transportation in the city and in inner-city ethnic neighborhoods that are closer to workplaces. Recent research has found that groups with different incomes live in different places to an extent (Iceland and Wilkes 2006). However, spatial assimilation states that once a socially assimilated minority member reaches a certain income level, a higher quality residence should not be far behind. Indeed, socioeconomic status increases the likelihood of living in neighborhoods with more whites for blacks, Hispanics, and Asians (Iceland et al. 2010). Iceland et al. (2010) also finds that minority groups were more segregated from poor whites than nonpoor whites, with the explanation that nonpoor whites do not feel the need to distance themselves from minority groups since nonpoor whites already live in higher quality neighborhoods than poor whites. At the same time, although spatial assimilation hypothesizes that higher socioeconomic status leads to residential attainment in white

neighborhoods, no clear conclusion about causality has been established. It is possible that residence in white neighborhoods itself may increase socioeconomic status by helping minorities gain access to better opportunities for education and employment (South, Crowder, and Chavez 2005a).

Assimilation nevertheless remains the main mechanism by which immigrants enter into mainstream American culture (Gans 2005; Gordon 1964; Alba 1999; Charles 2003). In the words of Park and Burgess (1969:735), assimilation is “a process of interpenetration and fusion in which persons and groups acquire the memories, sentiments, and attitudes of other persons and groups and, by sharing their experience and history, are incorporated with them in a common cultural life.” Through this process, ethnic and racial boundaries gradually disappear as inter-group parity in socioeconomic status (e.g., education and occupational attainment) and cultural expressions are achieved (Alba and Nee 2003; Gans 1992; Gordon 1964; Warner and Srole 1945). Achieving such parity (i.e., acculturation) is a two-way process. A minority group must embrace the culture imposed by the majority group, and the majority group must be willing to accept the minority group culture. Successful negotiations of culture can result in two ways: substitution, wherein “one cultural element [is substituted] for its equivalent” (which tends to emphasize the minority group’s adoption of majority group elements); and addition, wherein a cultural element becomes “what is considered normative behavior within the mainstream” (Alba and Nee 2003:25). Assimilation, therefore, implies a recognition and acceptance of cultural and social differences. Furthermore, neither the dominant nor minority cultures are fixed but constructed and reconstructed over time in a

symmetrical process that operates on each side of the social boundary (Alba and Nee 2003).

### *Segmented Assimilation*

Although some evidence has shown that newer immigrant groups to the United States – Hispanics and Asians – can have similar experiences to the early European immigrants, spatial assimilation does not tell the whole story for modern minority groups (Fong and Shibuya 2005; Iceland 2004; Logan et al. 2004). Alba et al. (1999) observes that suburbanization, a key component of the spatial assimilation model, may not result in increased contact with the white majority. For example, some suburban communities are more industrialized and thus are more prone to becoming ethnic enclaves due to their close proximity to specific occupations. Ethnic suburban enclaves could also result from the fact that some groups are able to suburbanize immediately after arriving in the United States, bypassing the initial steps of the spatial assimilation model (Alba et al. 1995; Alba et al. 1999; Scopilliti and Iceland 2008; Zhou 2004).

Spatial assimilation also does not explain the lower integration of blacks with the white majority (Massey and Denton 1993). Moreover, blacks with higher socioeconomic status remain relatively segregated (Charles 2003; Iceland and Wilkes 2006; Pattillo 2005). As a study on the New York metropolitan area indicated, “residential proximity [of blacks] to whites is determined substantially by race and little affected by other individual characteristics” (Alba and Logan 1993:1422).

The acculturation element of spatial assimilation has been called into question for various reasons. Alba and Nee (2003) point out that the emphasis on the acculturation of immigrant groups in spatial assimilation has been rightly criticized for implying that

white Anglo-American culture is superior to other ethnic cultures. Findings that foreign-born blacks are more advantaged than native-born blacks might reveal less significance in the acculturation variable than is assumed by traditional spatial assimilation theory (Adelman et al. 2001). Hispanics with darker skin, especially Puerto Ricans, have been shown to have less residential mobility than Hispanics with lighter skin (Iceland and Nelson 2008; Massey and Denton 1987; Massey and Denton 1988a). At the same time, acculturation has been shown to be more important for Hispanics than it is for Asians in moving into quality neighborhoods (Alba and Logan 1993; Logan and Alba 1993).

Segmented assimilation was developed to make up for spatial assimilation's limited applicability to new immigrant groups in the United States. As Portes and Zhou (1993:76) suggest, traditional spatial assimilation does not describe the dynamic of "smooth acceptance and traumatic confrontation depending on the characteristics that immigrants and their children bring along and the social context that receives them." Thus, second- and third-generation new immigrants are not necessarily more assimilated than the first generation.

The situation that early European immigrants faced is much different than what new immigrants face for two main reasons (Portes and Zhou 1993). First, the skin color of early European immigrants was more similar to that of American natives (also of European descent), which made assimilation a simpler process of embracing a new culture. The skin color barrier alone makes assimilation much different for blacks, Asians, and mestizos (i.e., multiracial individuals, particularly those of Spanish/Portuguese and American Indian descent), primarily due to negative qualities associated with and discrimination against darker skin (Gans 2005). Second, in the early

20th century, American was the world leader in industrialization, a growing trend that allowed second-generation and third-generation immigrants the opportunity to gain entry-level manufacturing jobs and advance into higher-paying positions. However, since the deindustrialization of the U.S. economy, many high-paying jobs are now in fields that require college degrees, and many of these jobs are already taken by natives. The reality is that new immigrants cannot often succeed in the same way that early European immigrants did (Portes and Zhou 1993).

Immigrant experiences in the United States are shaped by specific vulnerabilities and resources (Portes and Zhou 1993). Vulnerabilities refer to factors that can result in downward assimilation. The first vulnerability has been described already: skin color discrimination. It must be noted, however, that skin color is not a characteristic of a person but rather a “trait belonging to the host society” (Portes and Zhou 1993:83). Many people have not experienced the level of skin color discrimination in their home countries as they do in the United States, where physical differences can be seen as disabilities. The second type of vulnerability is increased exposure to poor native minorities. Established immigrant destinations in central cities mean that many immigrants are more likely to live next to poor blacks, which causes immigrants to be associated with what whites already discriminate against, fair or not. In more extreme cases, second-generation immigrant youth, even those with more affluent parents, might find solace in the counter-cultural crime movement among native young minority groups. The third type of vulnerability is another factor mentioned previously: the reduction and absence of occupational ladders in the host society’s economy. Economic sectors in which many immigrants get jobs, such as manufacturing and services, do not have the same

opportunities for advancement as the jobs of early European immigrants. The narrowing of the middle class, conceptualized as an hourglass economy, compels first-generation immigrant parents to obtain resources to put their children through educational pathways that lead to better opportunities. As Gans (1992:174) indicates, the upward mobility of early European immigrants occurred when “the American economy was growing more or less continuously, especially with the employment of immigrant physical labour,” but Portes and Zhou (1993) argue that the substantial demand for this type of labor is no longer the case. However, Waldinger (1996) shows that various immigrant groups in New York (the most diverse city in the United States) continue to establish ethnic niches as well as compete for occupations that whites and blacks no longer fill, thus “massively expand[ing] their economic base” (82).

Portes and Zhou (1993) identify three types of resources that create uneven opportunities among new immigrant groups. The first type of resource is government programs. Some immigrants are more privileged than others due to government programs that aim to assist political refugees. For example, the relatively high socioeconomic status of Cubans among Hispanic subgroups is partly attributable to the Cuban Loan Program of the Kennedy administration. The second type of resource is cultural capital. That is, some immigrants do not face as much discrimination because of their political or cultural status. Immigrants escaping religious persecution could be one example. Another example is if an immigrant group’s culture is already held in high regard in particular communities (e.g., Irish immigration to Boston in the 1980s). The third type of resource is whatever advantage that can be gained from social networks in ethnic enclaves. Immigrants that move to residences in well-established and prosperous ethnic

communities are more likely to succeed, even without the assistance of acculturation variables in the traditional spatial assimilation model. In strong ethnic communities, everything from schools to labor market requirements can be designed to facilitate co-ethnic success (Portes and Zhou 1993). At the same time, ethnic communities may not benefit many immigrants who are not business owners or entrepreneurs. For example, evidence shows that participation in some ethnic communities do not result in better jobs for immigrant workers, as “[i]mmigrants who depend on kinship or ethnic group assistance in the initial stage of adaptation to a host society may become entangled in a web of obligations that interferes with their rational pursuit of economic opportunities” (Sanders and Nee 1987:764).

Thus, segmented assimilation allows for three possibilities: (1) upward residential mobility in line with the experiences of early European immigrants; (2) downward or stagnant residential mobility due to lack of success in the American socioeconomic system; or (3) upward residential mobility by participating in a community that maintains the cultural values of a given ethnic group (Portes and Zhou 1993; South et al. 2005b). Segmented assimilation posits that Hispanics and Asians are more “racially distinct” than early European immigrants but can “flourish and replenish themselves” because of continuous immigration (South et al. 2005b:499).

Segmented assimilation’s modifications to traditional spatial assimilation were especially necessary in the case of Latin American immigrants, whose experiences in residential mobility can vary widely (Iceland and Nelson 2008; South et al. 2005a). For example, Cubans tend to have higher socioeconomic status than Mexicans and Puerto Ricans and have been suspected of self-segregating at times because they sometimes

appear to have little desire to move into diverse or white communities (Alba and Logan 1993; South et al. 2005b). To be sure, their success in business (particularly in Dade County, Florida) might remove them from the aspirations of early European immigrants. At the same time, Iceland and Nelson (2008) point out that more Cubans than Mexicans and Puerto Ricans selected “white” as their race in the 2000 decennial census. Moreover, South et al. (2005b) find that higher education among Cubans increases their integration into white neighborhoods, which is more in line with the experiences of early European immigrants. They theorize that perhaps education increases the desire to interact with the majority or other groups. Mexican immigrants can vary considerably in their residential mobility; while many advance in American society like early European immigrants, some evidence suggests that Mexicans can be disenfranchised due to lack of documentation, opportunity, or acceptance by the American mainstream (Alba 2006). At the same time, Mexicans seem to be the Hispanic subgroup most likely to follow patterns similar to those of early European immigrants, while all Hispanics seem to be more likely to experience traditional assimilation in terms of residential attainment if they are part of later generations with higher socioeconomic status and acculturation and have lighter skin color (Massey 1979; South et al. 2005b).

The segmented assimilation model also allows for the possibility of downward assimilation for dark-skinned immigrants who, upon facing discrimination from whites, might come to the conclusion that they cannot rise above their current status. Thus, these immigrants may seek refuge with the black urban underclass and never realize their potential (Alba and Nee 2003). This viewpoint could be rightly viewed as condescending toward minority urban black citizens, as most urban people hold jobs and take care of

their families. However, the discrimination component might very well play a role in creating differential outcomes within racial groups. For example, it is possible that darker Hispanics like Puerto Ricans may display “behaviors and attitudes that are similar to inner-city African Americans” that have historically brought about discrimination from whites (South et al. 2005b:514). Another possibility of downward mobility involves economic factors. Some immigrant niches might shrink due to loss of patronage or competition with other ethnic or mainstream businesses (Gans 1992).

In an accelerated path of upward mobility, some Asian immigrants come to the United States highly skilled and educated, translating their socioeconomic success in their respective homelands to “high-paying professional careers and comfortable suburban lives” upon entering the United States (Zhou 2004:31). Li’s (1998) timely case study of the Chinese population in Los Angeles demonstrates how such an ethnic suburban community may arise. Before the 1960s, the Chinese population of Los Angeles was centralized in Chinatown. But as decades passed, Chinese households suburbanized and created what Li calls “ethnoburbs” (e.g., Monterey Park and Rosemead). In contrast to the ethnic enclaves typically described in traditional spatial assimilation, ethnoburbs are full of highly educated individuals who make high income, own businesses, and participate in politics. These communities also have their own patterns of stratification (Wen, Lauderdale, and Kandula 2009).

Alternative upward assimilation is not only possible for Hispanics and Asians but also for blacks (Alba and Nee 2003; Bonilla-Silva 2004). Additionally, scholars have found that returns on socioeconomic status have improved for blacks over time (Adelman

et al. 2001; Farley 1977; Iceland and Wilkes 2006). Clark (2007:309) declares that “[t]here are fewer barriers to Black suburbanization than at any time in the past.”

Lacy (2004) provides a specific theoretical argument for the alternative upward assimilation of blacks. She first observes that the literature largely concludes that being black is automatically a problem and a disadvantage, overlooking the “possibility that there is something enjoyable about being black and participating in a community of blacks” (911). In other words, although blacks may be considered to be at the bottom of the social order, some blacks have developed collective and individual strategies to reject and overcome this label, as in the concept of the Black Metropolis (Gregory 2005). Internal racial identification matters just as much as external racial identification, a point that race and residential segregation scholars overlook far too often (Frank et al. 2010; Lee and Bean 2010).

Lacy (2004) presents a more positive scenario for middle-class suburban blacks with what she terms “strategic assimilation,” which ties into Du Bois’ (1977 [1903]) concept of double consciousness, the idea that blacks must switch between two identities (mainstream American and black American) to function in the United States. In a way, she reconceptualizes Du Bois’ idea as a source of strength for black people. Middle-class suburban blacks may keep their identities as members of the black community as they strive to succeed in white neighborhoods, schools, and workplaces. Lee and Bean (2010) indicate that black communities may frown upon blacks who are not black enough (i.e., those who act too white), though the burden of not acting white is not necessarily faced by successful black adolescents in school (Tyson, Darity, and Castellino 2005). Middle-class blacks benefit from the resources that can be found in black communities and are

trained and prepared as children to go back and forth between the refuge of the black world and the more discriminatory white mainstream world (Feagin 1991). While some may interpret the retention of one's black identity as a weakness, blackness can serve as a source of strength to deal with any adversity that a black individual might face. Like successful Hispanics and Asians who maintain their ethnic identity, middle-class blacks can capitalize on opportunities in the United States without fully assimilating into the white mainstream. Lacy's (2004) qualitative work in the suburbs of Washington, D.C., provides evidence for this strategic assimilation framework. The basic implication of her work is that since the early 20th century, some blacks have gotten better at navigating back and forth between white and black worlds in the United States, thus becoming more likely than other blacks to interact with whites in competitive colleges and labor markets. This observation is true, despite the fact that – or perhaps *because* of the fact that – advantaged blacks “report more discrimination than poor blacks, are less optimistic about racial progress, and are less inclined to believe that whites positively type blacks” (Lacy 2004:915).

Wen et al. (2009) test whether Li's (1998) case study is applicable to different parts of the United States and different racial groups. They find evidence of multiple Asian, Hispanic, and black ethnoburbs. In line with the varied paths that segmented assimilation predicts, different ethnoburbs have different socioeconomic levels, with Asian ethnoburbs having the highest median income, followed by Hispanic and black ethnoburbs. Black ethnoburbs showcase, on average, greater stability and more acculturation than Asian and Hispanic ethnoburbs. Wen et al. (2009) also find support for

traditional spatial assimilation in that higher income and acculturation increase the likelihood of minority groups living with whites.

However, even in studies that recognize the importance of the segmented assimilation model, any findings on new ethnic groups that seem in line with traditional spatial assimilation theory must be interpreted with caution. While Hispanics or Asians may be more likely to identify as white than as blacks, identity is a “dialectical process – one involving both internal and external opinions and processes” (Lee and Bean 2010:123), meaning that spatial assimilation may not reflect the true social distance between new immigrant groups and whites (Bonilla-Silva 2004). That is, residential integration may not even entail “whitening” due to continued discrimination (O’Brien 2008). Some evidence suggests that Hispanics who are more exposed to the United States – as indicated by higher incomes (a signifier of assimilation), children (a signifier of engaging with U.S. institutions like schools), and English proficiency – are more likely to refuse to identify as white (Frank et al. 2010). While Asians are more likely to live near whites than any other minority group, interethnic marriage between Asian subgroups (evidence of racialization) has increased more than Asian-white marriage; not all Asians want to be considered white; and a national survey reveals that Americans do not always think of Asians as the stereotypical “model minority” (Kim 2007). Kim and White (2010) state that “strengthening of identities based on panethnic classifications is an increasingly probable outcome” (1591). Perhaps surprisingly, Asian Indian immigrants in Princeton, New Jersey, were found to identify more with Jews than with blacks, other Asians, or whites, despite the fact that Jews are often considered white (Radford 2008).

Finally, despite their upward socioeconomic mobility, Asians and Hispanics are more likely to be seen as foreign or non-American because they do not come from Europe. In regard to Asian groups, Zhou (2004:36) concludes: “Americans of Asian ancestry still have to constantly prove they are loyal Americans.” The effect of racial appearances is demonstrated by the fact that multiracial Hispanics and Asians are much more able to identify as white when compared to monoracial Hispanics and Asians (Lee and Bean 2010). Moreover, Gans (2005) indicates that the success of immigrants groups might bring about fear or discrimination from the white majority rather than recognition as model American citizens. For example, Japanese-Americans in California have endured racial hardships for generations because of their success in the labor market and schools. At the same time, Indian and Sri Lankan immigrants have rarely dealt with such discrimination, despite being darker than the majority of Asian groups. To be sure, traditional spatial assimilation cannot explain such phenomena, as the theory merely describes how people of European heritage assimilated with other people of European heritage (Lee and Bean 2007).

### **Place Stratification**

In terms of residential attainment, spatial assimilation does not fully explain the continued advantaged position of U.S. whites, the uphill struggle of blacks, or the varied outcomes of new immigrant groups from Latin America and Asia; it merely assumes that whites are the powerful majority because they founded the country and that everyone else must catch up. Segmented assimilation also has limitations, as its multiple pathways for assimilation still focus on economic factors and minority group agency. In contrast, place stratification offers an explanation that directly ties the majority of residential segregation

to “racial prejudice and discrimination that preserve the relative status advantages of whites” (Charles 2003:182). Although racial prejudice and discrimination inspired this theory, scholars have offered other explanations that fit within the place stratification framework, including in-group preferences (wanting to live with one’s own kind) and neighborhood stereotyping (associating minority groups with negative neighborhood qualities, such as crime). Charles (2003), however, holds that all explanations under place stratification involve race and prejudice.

Place stratification theorizes that residential differences reflect a hierarchy of racial groups that is the result of structural inequality, not coincidence (Logan and Alba 1993). Whereas spatial assimilation describes residential segregation as temporary, place stratification argues that segregation will remain as long as dominant groups maintain “mechanisms of both public and private discrimination” (Logan and Alba 1993:244) to protect their advantaged status and resources. While not commenting on discrimination per se, Hawley’s (1986:99) human ecology theory contains an ironic demonstration of this idea: “Segregation of residents by type enables them to protect specific common interests, for example, property values, with a minimum of involvement in the affairs of coresidents.” A group’s position in the racial hierarchy affects potential quality of life, as location influences various factors that can be to the benefit or detriment of families and individuals. Judging by residential outcomes, blacks are at the bottom of the racial hierarchy, with Hispanics and Asians taking intermediate positions below whites (Logan, et al. 1996). On average, blacks are more segregated than Hispanics or Asians from whites (Charles 2003; Logan et al. 2004; Parisi et al. 2011; Taeuber and Taeuber 1965), but place stratification still predicts that acculturation and socioeconomic status will not

place Hispanics and Asians on equal residential ground with the white majority (Iceland and Nelson 2008).

The benefits that socioeconomic status and acculturation bring are not discounted by place stratification. The theory simply argues that the returns on these benefits vary by minority group (Alba and Logan 1993). In cases like pre-Civil Rights central cities (Taeuber and Taeuber 1965), socioeconomic status only offers a “slight” explanation for residential separation of racial groups. This early observation about class and segregation has been corroborated by recent research from Crowder, South, and Chavez (2006) on the impact of wealth on racial differentials in neighborhood mobility. From a place stratification perspective, structural constraints make it more difficult for minority groups to achieve parity with the majority group in residential outcomes. Improvement, or lack thereof, in residence is tied to racial status. For example, while homes of first-time white homebuyers have a median of 642 square feet per occupant, the figure drops for their black and Hispanic counterparts to 527 and 389 square feet per occupant, respectively, which is lower than the figure (545 square feet per occupant) for all low-income first-time homebuyers (Herbert and Belsky 2008a). Structural constraints also heighten the normal cost of improved residential outcomes, even if the minority member has high socioeconomic status and acculturation (Logan and Alba 1993). For example, it has been estimated that every black and Hispanic homebuyer pays a “discrimination tax” of about \$3,000 (Charles 2003:196).

There are two versions of place stratification that address the added costs to the residential mobility of minority groups: a “strong” version and a “weak version (Logan and Alba 1993). In the strong version, the locational return on socioeconomic resources is

substantially lower for minority groups. In the weak version, such return is greater even though more economically advantaged minority group members have poorer locational attainment compared to their white counterparts. In both versions, the cost is ultimately the diminished ability of minority groups to achieve a residential gain that accurately reflects their socioeconomic resources (Logan and Stearns 1981). For example, although a middle-class black suburb might make “residential life a little more comfortable,” middle-class blacks must contend with higher rates of crime, joblessness, poverty, college dropouts, and single-parenting than middle-class whites and some poor whites (Pattillo 2005:323).

### *Structural Discrimination*

Scholars have identified several types of structural discrimination that contribute to the residential segregation of minority groups from whites. Perhaps the most compelling historical example is the systematic residential exclusion of blacks by the U.S. government during the early 20th century, when racial zoning laws prevented blacks from moving into certain places. Even after these laws were struck down by the Supreme Court in 1917, blacks were nonetheless excluded from certain advantaged residential areas by deed restrictions and covenants (Fischer 2008). For example, Farley and Frey (1994) indicate that 80 percent of Chicago’s residential space in the 1940s had covenants that excluded blacks from entry. The residential gap between whites and blacks was made wider by federal laws and programs that provided assistance to already growing suburban communities for whites (Fischer 2008). The government simply did not favor black homeowners. The Home Owners’ Loan Corporation (HOLC), for example, institutionalized the practice of “redlining.” Essentially, the HOLC denied loans to

homeowners if they resided in low-quality neighborhoods. A neighborhood was coded red if it was considered to be of the lowest quality, and any neighborhood near a redlined neighborhood would automatically be considered too high-risk for the HOLC. Virtually every black neighborhoods was coded red. The discriminatory lending system of HOLC was eventually adopted by private banks, which disenfranchised blacks on an even wider scale (Massey and Denton 1993).

After World War II, covenants still prevented blacks and other minority groups, like Asians, from purchasing houses, while banks made loans solely to white suburbanites. Indeed, Taeuber and Taeuber (1965:3) indicated that regardless of the socioeconomic status of blacks, only a “permissive housing market situation” could have led to a decrease in black-white segregation during this period. In addition to housing market discrimination institutionalized by the U.S. government, whites continued to perform individual discriminatory acts such as violence and intimidation that reinforced structural discrimination. As Fischer (2008) notes, the Fair Housing Act of 1968 came after the “physical separation of Blacks from Whites was firmly entrenched in urban space” (477), thus reducing the act’s potential benefits despite good intentions.

Although institutionalized housing discrimination was prohibited with the Fair Housing Act (Fischer 2008), Charles (2003:191) indicates that housing discrimination has only become harder to recognize and identify, even for the victimized minority household, because of subtle prejudice. For example, whites can simply spend more money to live in nearly all-white neighborhoods. Perhaps the most damaging subtle discrimination comes from housing market agencies. In describing modern housing market discrimination against blacks, Massey and Denton (1993:97) provide a

devastating critique: “Instead of being greeted with the derisive rejection ‘no niggers allowed,’ they are met by a realtor with a smiling face who, through a series of ruses, lies, and deceptions, makes it hard for them to learn about, inspect, rent, or purchase homes in white neighborhoods.” To detect such subtle discrimination in the housing market, social scientists have used pairs of housing auditors who pretend to be looking for a place to live. One auditor is white, while the other is usually black or Hispanic. The auditors are carefully trained to identify favorable or unfavorable treatment by real estate agents, as well as more blatant racial steering (Charles 2003).

Based on the housing auditor method, evidence indicates that white homebuyers are more likely than minority homebuyers to receive follow-up calls and incentives and to hear negative comments about units in integrated neighborhoods (Charles 2003). Several studies since the Fair Housing Act have consistently shown white favoritism. For example, studies of Chicago in the 1980s revealed that whites received financial and housing information at twice the rate offered to blacks (Massey and Denton 1993). Later, studies by the U.S. Department of Housing showed that such discrimination was common in metropolitan areas across the country in the 1970s and 1980s.

A recent study using 2000 Housing Discrimination Study data found that although housing discrimination against blacks had decreased overall since 1989, discrimination against black customers by large housing agencies had actually increased, with mixed results for Hispanic customers in general (Choi, Ondrich, and Yinger 2008). Charles (2003) adds that despite any overall improvement for black customers, blacks were more likely in 2000 than in 1989 to be “steered away from predominately white neighborhoods” (195), while evidence suggests that Hispanics currently experience more

discrimination than blacks when looking for a house. Moreover, Asian customers in Los Angeles experience as much discrimination as black and Hispanic customers, just in different ways (Charles 2003).

In addition to housing agent discrimination, housing industry marketing represents another potential method of racial steering (Massey and Denton 1993), as “black neighborhoods are not advertised as often, have fewer open houses, and are more likely to be represented by firms that are not part of a Multiple Listing Service” (Charles 2003:194). These discriminatory factors not only reduce the residential mobility of minority groups but have perhaps contributed to the low return on investment of homeownership for minority groups. Boehm and Schlottman (2008) are hesitant to cite racial discrimination per se, but they nevertheless indicate that “[t]he largest effect on house value for both high- and low-income households, controlling for as many socioeconomic characteristics as possible, is race” (114).

Other studies have shown evidence of discrimination in the lending market. As Chicago’s black population grew between 1945 and 1966, fewer and fewer parts of the city received life insurance mortgage investments (Massey and Denton 1993). In a more nationally representative study of the 1980s, affluent blacks were less likely than low-income whites to receive loans in 35 metropolitan areas. Charles (2003) further indicates that racial discrimination against minority groups was evident in nearly all aspects of lending during the 1980s, from advertising to the very locations of banks. Like housing market discrimination, lending market discrimination tends to be subtle. At the same time, Massey and Denton (1993) indicate that more blacks than whites anticipate lending

market discrimination, which leads to blacks abandoning “their quest to purchase a home without really trying” (109).

The lending situation changed, however, during the 1990s and early 2000s, when homeownership significantly increased for low-income and minority households due to a combination of “[l]ow downpayment loans, loans to borrowers with tarnished credit histories or thin credit records, lower documentation of income and asset requirements, lower reserve requirements, and products that lowered initial payments at the risk of higher payments later” (Herbert and Belsky 2008b:6). Subprime loans – high-interest loans for those with poor credit histories – particularly made an impact, as they were given disproportionately to minority households.

While the increase in lending to minority groups might have appeared like less racial discrimination in the market, studies suggest that subprime loans represent a form of subtle discrimination (Brescia 2009). Recent lawsuits involving subprime lending are based on the concept of “reverse redlining,” the practice of targeting minority groups for abusive lending. Moreover, increased lending to minorities in the form of subprime loans does not necessarily lead to decreased segregation from whites. Scholars point out that subprime loans tend either to reinforce or produce more residential segregation (Bond and Williams 2007; Peterson and Krivo 2010). Incidentally, the abundance of subprime lending helped create the 2008 U.S. housing crisis, which had a disproportionately negative impact on blacks and Hispanics, even with credit level controlled (Bocian et al. 2011). Bond and Williams (2007:692) warn that “persistent or even increasing levels of segregation may be one of the most important long-term consequences of the current home lending crisis.”

In addition to predatory lending, another recent development in structural discrimination is low-density zoning, which has a significantly strong association with residential segregation (Massey et al. 2009; Rothwell and Massey 2009). Low-density zoning occurs when homeowner individuals and organizations, with the backing of local government, set limits on the amount of development in privileged communities that are already largely white. Rothwell and Massey (2009) suspect that blocking development in metropolitan areas goes directly against the interests of homeowners and businesses, suggesting that more development equals more opportunities for community members to consume, work, and make money (though this may not always be the case). Additionally, anti-density zones require fragmented governmental structures to be implemented. Thus, the scholars conclude that anti-density zoning in metropolitan areas are based on negative racial attitudes of local community stakeholders, i.e., the communities do not want too many blacks, especially those with less money, living among them. Anti-density zoning effectively limits the opportunities of lower-income blacks to find “housing outside of historically segregated neighborhoods” (Rothwell and Massey 2009:782). Zoning has been an effective form of structural discrimination in the post-Civil Rights era. At any point during the 1990s, black-white segregation could be associated with differences in density zoning patterns among metropolitan areas. After controlling for other socioeconomic and geographic factors, Rothwell and Massey (2009:801) find that metropolitan areas with more liberal density development zones “moved more rapidly toward racial integration than their counterparts with strict density limitations.” The scholars conclude that the practice of low-density zoning is so tied to racial discrimination and political exclusion that the federal government should outlaw the

strictest forms of density zoning. Similarly, Light (2008) shows how a combination of governmental enforcement and local efforts in Los Angeles deflected about 1 million poor Hispanic immigrants from the city.

*Urban Processes: Invasion-Succession and Neighborhood Transitions*

The place stratification model has been shown to be valid in the analysis of black-white invasion-succession process during the rapid growth of suburbs after World War II. Essentially, the black big-city population skyrocketed during the 1940s and 1950s as suburbs became popular destinations for whites and largely remained that way, which created a picture described as “chocolate city with vanilla suburbs” (Farley et al. 1978:318-19). How did this distinctive pattern occur? Taeuber and Taeuber (1965) outline a process in which racial transition depends on black and white population growth rates in a given neighborhood. As the growth rate of the black population approaches the growth rate of the white population in a neighborhood, it becomes more likely that the black population will grow even more, triggering a more rapid change in racial composition. On the other hand, a higher growth rate of the white population in a neighborhood entails a decline in the black population, triggering a slower change in racial composition. In cities that have a lot of older housing that costs more to maintain than more attractive new housing in the suburbs, the growth rate of the black population is more likely to outpace the growth rate of the white population, thus causing rapid racial change in city neighborhoods (Taeuber and Taeuber 1965).

When compared to modern interpretations of place stratification, the theoretical specifications of Taeuber and Taeuber (1965) are notably restrained insofar as attributing residential processes to racial discrimination. Although the two scholars admit that white

attitudes toward blacks are important to consider, they criticize perspectives that emphasize “racial attitudes” as exaggerated and oversimplified. As they explain, it is “not inevitable that a neighborhood will rapidly become all-Negro once a few Negroes move in” (Taeuber and Taeuber 1965:21). They point out that recent invasion-succession processes have been highly influenced by the movement of affluent blacks who often have higher socioeconomic status than the affluent whites who move out of city neighborhoods for the suburbs. The affluent black population seeks better nearby neighborhoods, many of which are those that affluent whites leave for better neighborhoods in areas surrounding the city. The “invaded” neighborhoods, furthermore, are not falling apart; years later, Adelman et al. (2001) would also point out that living away from whites does not necessarily mean one resides in a low-quality neighborhood. Therefore, “general processes of urban change as well as the racial attitudes prevalent in the national society” affect racial residential segregation (Taeuber and Taeuber 1965:7). The whites and blacks who have the money to move to better places drive neighborhood change. The implication is that residential segregation, despite its negative social effects, is a profitable business for affluent blacks, affluent whites, and the housing industry.

In the invasion-succession process, a “tipping point” indicates when the proportion of blacks in a neighborhood reaches a height that is intolerable for whites, which accelerates the movement of whites to other neighborhoods. Once the tipping point is reached, the invasion-succession process is considered irreversible (Taeuber and Taeuber 1965). However, one cannot assume that invasion-succession is the sole reason for all-black neighborhoods. For example, unused land in a city can be developed into

housing units that can then be disproportionately bought by blacks. In other cases, black population loss in a neighborhood may not be as fast as white population loss.

Regarding invasion-succession processes that occurred after Taeuber and Taeuber's (1965) analysis, Marshall (1979) explored the following question: what factors influenced whites to move to suburban areas between 1965 and 1970? To illustrate the need for an analysis, the author points out that while whites may be suburbanizing in metropolitan areas with more crime and race riots in the central cities, this fact does not establish a causal relationship. Marshall (1979) admits that a popular notion is that whites move away from central cities because of concentrated blacks in the inner city, but the results of his analysis do not support this explanation. In a sample of 112 metropolitan areas, the study showcased how whites are attracted to suburbs rather than pushed away by the characteristics of central cities. One of the main factors appeared to be the demand for single family homes that was not met in the central cities; Marshall (1979) argues that "attracting new housing to central cities can significantly affect current trends [in black-white segregation]." Moreover, the idea that the growing black population in central cities pushed whites to suburban communities was completely rejected. At the same time, larger black populations were found to be more segregated than smaller black populations. Therefore, the conclusion is that whites did not have to worry about the larger black populations in central cities because they simply did not live near them (Marshall 1979).

Regardless of why whites left central city neighborhoods as the black population grew within those neighborhoods, the invasion/succession process was highly influential in sociology and impacted decades of research. At the same time, the growing diversity in

metropolitan neighborhoods called for a study of new urban processes. Denton and Massey (1991) examined neighborhood processes for neighborhoods with different racial compositions: all white, all black, all Hispanic, all Asian, black and Hispanic, black and Asian, Hispanic and Asian, and black, Hispanic, and Asian. A major finding of the study was that the percentage of all white neighborhoods in the largest U.S. metropolitan areas declined considerably between 1970 and 1980. In short, “all-white neighborhoods had become a thing of the past” (Denton and Massey 1991:46). Furthermore, all neighborhood types tended to become more diverse. However, some neighborhoods containing blacks and another minority group tended to go back toward all-black, suggesting that Hispanics and Asians left black neighborhoods.

Alba et al.’s (1995) analysis of the New York metropolitan region improved Denton and Massey’s (1991) approach by including more types of neighborhoods (e.g., black and white, all minority groups and white, etc.) to gauge how the white population reacts to different contexts. Alba et al. (1995) also examined whether new neighborhood diversity in New York between 1970 and 1990 was due to minority population growth and/or minority population shifts across neighborhoods. First, like Denton and Massey (1991), Alba et al. (1995) found a substantial decline in all-white neighborhoods. Even suburban whites were mainly living in neighborhoods with minority presences. Black-white neighborhoods also declined, but their transitions depended on location type. In central cities, many black-white neighborhoods became all-minority neighborhoods (either all black or black-Hispanic), and in the suburbs, black-white neighborhoods tended to become more diverse. Hispanic-white neighborhoods also declined, but Asian-white neighborhoods increased and were mainly exclusive affluent communities. The

study's major finding, however, is that the most diverse neighborhood types (i.e., Asian-Hispanic-white and Asian-Hispanic-black-white) increased substantially. In fact, Asian-Hispanic-black-white neighborhoods were the dominant neighborhood type in New York by 1990. Concomitant with the growth in diverse neighborhoods was the increase of all-minority neighborhoods – specifically, all-black and black-Hispanic ghetto areas. Although the growth of diverse neighborhoods was both remarkable and unpredictable (many different neighborhood types became Asian-Hispanic-black-white by 1990), blacks tended to be excluded from diverse settings compared to the other three major groups.

Logan and Zhang (2010:1102) present evidence that “the traditional black-white color line is [being] replaced by a more complex array of whites, blacks, Hispanics, and Asians” within certain U.S. metropolitan areas. Their concept of “global neighborhoods” does not fit with traditional racial residential patterns of invasion and succession, though the latter process does play a role in their findings to an extent. They argue that invasion and succession do not typify the most diverse neighborhoods in the country – that is, neighborhoods with whites, blacks, Hispanics, and whites. Such neighborhoods are fueled by immigration and can remain stable if black households move in after Hispanics and Asians. Neighborhoods with all four major racial groups were notably stable over the 1980-2000 period and continue to emerge in metropolitan areas. However, patterns of white flight and avoidance still occur, and they are not only associated with high proportions of blacks but with high proportions of Hispanics and Asians within neighborhoods (Hispanic growth has the most significant association with white flight in the most diverse neighborhoods). Thus, all-minority neighborhoods increased

substantially between 1980 and 2000 as well. Logan and Zhang (2010) show that white population change seems to go in one direction: down. Rarely do whites move to places without other whites. Although the number of all-white neighborhoods declined significantly in the 1980-2000 period, the scholars suggest that if racial diversity continues to grow, whites might increasingly move out of such neighborhoods when a certain threshold of minority groups is reached, suggesting a white-nonwhite divide.

### *Residential Preferences*

In the place stratification framework, not all racial residential segregation can be explained by structural discrimination or urban processes. Residential preferences of groups also play a role in the uneven distribution of racial groups across space (Charles 2003; Farley et al. 1978; Massey and Denton 1993). The traditional place stratification perspective on residential preferences states that whites do not desire to live with an abundance of blacks, which inspires discrimination by the housing and lending markets that restrict blacks from living in integrated neighborhoods or places (Crowder, Pais, and South 2012). Furthermore, if “more than token numbers” of blacks move into a largely white area, whites retain their “relative status advantages” by leaving white areas elsewhere rather than standing their ground (Charles 2003:182). This phenomenon is known as “white flight” (Massey and Denton 1993) and can be formulated as a threat hypothesis: as the minority group population increases in a neighborhood, the majority group feels more threatened or uncomfortable and is thus more likely to flee (Oliver and Wong 2003).

However, Taeuber and Taeuber (1965) are careful not to state that black population growth in a neighborhood causes negative racial attitudes, which can often be

suggested by the threat hypothesis. The scholars instead suggest that existing negative racial attitudes of whites are intensified by black population growth. Similarly, Oliver and Wong (2003) indicate that negative viewpoints of an out-group are not just due to out-group size but “relative economic position, the historical period, and the contextual unit being measured” (579). For example, poor whites in a modern multiracial environment may display more negative racial attitudes than rich whites living in the same environment, but such a difference in racial attitudes between poor and rich whites may not be as wide in an environment that is relatively or mainly white.

On the neighborhood level, Oliver and Wong’s (2003) study of racial attitudes in Atlanta, Boston, and Los Angeles reveals a more complex scenario than what the threat hypothesis suggests. With the exception of Asians, racial groups “who live amongst more of their own racial group hold more negative views of out-groups and perceive more competition from out-groups” (568). For example, whites in mainly white neighborhoods in Atlanta were more likely to hold negative views about other racial groups than were whites in more mixed neighborhoods. This pattern was held consistently by whites, blacks, and Hispanics throughout Oliver and Wong’s (2003) sample. However, the threat hypothesis seemed to be more predictive on the metropolitan level. For example, blacks and whites in the multiracial Los Angeles metropolitan area tended to have stronger feelings about racial competition with Hispanics and Asians than did their black and white counterparts in the less diverse metropolitan areas of Boston and Atlanta.

Other neighborhood preference theories reduce the emphasis on outright racial prejudice and concentrate on other race-related factors. The in-group preference hypothesis states that a significant amount of residential segregation can be attributed to

the ethnic homogeneity thesis, i.e., the desire of all racial groups to live among their own kind. This tendency reveals a “simple, natural ethnocentrism rather than out-group hostility or an effort to preserve relative status advantages” (Charles 2003:182). In the case of continued black-white segregation, the in-group hypothesis would predict that blacks simply prefer to live with other blacks. Evidence does not back up the reasoning of this idea, though (Massey and Denton 1993). In national surveys, blacks are more likely to support integration rather than segregation or a scenario between the two extremes. In 1978, a clear majority of blacks indicated that they would vote for a law to ban housing discrimination in their community. By the middle of the 1990s, 87 percent of Americans embraced the idea of “equal residential rights” (Logan et al. 2004).

Other evidence shows that blacks want the least amount of same-race neighbors when compared to whites, Hispanics, and Asians (Charles 2003; Krysan et al. 2009). Furthermore, many blacks may avoid mostly black neighborhoods due to the association between all-black neighborhoods and poor delivery of public services, such as sanitation and police (Massey and Denton 1993). Although whites were shown to desire same-race neighbors more than any other group (Charles 2003) and have been shown to express more anti-integration sentiments (Massey and Denton 1993), the in-group preference hypothesis does not necessarily explain why whites have continued to live among their own racial group. White attitudes have improved considerably from decade to decade, as the percentage of whites who agree with the idea of keeping blacks out of their neighborhoods dropped from 60 percent in 1960 to 13 percent in 1996 (Logan et al. 2004).

At the same time, opinion surveys about segregation and integration cannot necessarily predict what blacks and white actually desire in a neighborhood in terms of racial composition (Massey and Denton 1993). Moving from abstract opinions on integration to feelings about specific interracial neighborhoods, Farley et al. (1978) use an innovative survey to measure black and white neighborhood preferences in Detroit, Michigan. The survey allows black and white survey respondents to look at drawings of neighborhoods with different proportions of black and white homes. For example, one neighborhood might have all white homes, another might have only one black home, and another might have a 50/50 distribution of white and black homes. The respondents then rank the attractiveness of the neighborhoods and report their willingness to move into such neighborhoods.

Results of Farley et al.'s (1978) study show that blacks were more receptive to integrated neighborhoods than whites. For example, 85 percent of black respondents said a 50/50 black-white neighborhood would be their first or second choice out of the possible hypothetical neighborhoods. Some black respondents also indicated that living in an integrated neighborhood would help them and their children get along better with whites. In contrast, 72 percent of white respondents said a 50/50 black-white neighborhood would make them feel uncomfortable; 25 percent even said a white neighborhood with only one black household would make them feel uncomfortable. One reason white respondents cited for discomfort is property values. They felt that blacks either do not respect property or that the value of their house would drop considerably in a neighborhood with black residents; indeed, Taeuber and Taeuber (1965) had observed that despite whether property values actually go down or not in black neighborhoods,

there is a self-fulfilling prophecy that they will. The most common reason that white respondents cited for discomfort was crime. White respondents reported a belief that crime increases as the black population increases. Recent research by Quillian and Pager (2001; 2010) confirms that whites still associate crime with blacks and overestimate crime risks when the black population is larger in residential areas. Finally, although black respondents in Farley et al.'s (1978) study were open to moving into white neighborhoods with a couple of black households, they were much less willing to move into all-white neighborhoods, with many expressing fear that they would not be accepted in such a neighborhood or, in fewer cases, that they or their property would be burned by whites (Farley et al. 1978). This fear of white hostility has continued to be a factor in black neighborhood preferences (Logan et al. 2004).

Several studies in the 1990s used Farley et al.'s (1978) neighborhood preference methodology to examine neighborhood preferences in three cities (Atlanta, Boston, and Los Angeles) in addition to Detroit (Charles 2003). Hispanics and Asians were included in some of the studies to reflect the growing diversity of American residential areas. In these studies, white respondents showed more favorable attitudes toward neighborhoods with minority households than they had in previous decades. At the same time, their preferences backed up documented patterns of differential residential attainment between minority groups. That is, white respondents indicated more comfort with neighborhoods with Asian households than they did with neighborhoods with Hispanic and black households. Moreover, white respondents' willingness to move into racially integrated neighborhoods never matched their reported comfort level with such neighborhoods. For example, while 60 percent of white respondents expressed that they were comfortable

with a neighborhood that is one-third black, less than half of the respondents were actually willing to reside in such a neighborhood (Charles 2003).

Farley, Fielding, and Krysan (1997), on the other hand, indicate that most white respondents in their study would feel comfortable in a neighborhood that is one-fifth black, suggesting that “if blacks and whites were evenly distributed in most U.S. metropolitan areas, the majority of whites would be comfortable with the racial composition of their neighborhood” (794). Indeed, the “tipping point” associated with white flight in the invasion-succession process is typically set at the point when a neighborhood’s proportion of blacks reaches 20 percent. However, this figure does not represent a universal tolerance of blacks for white households. Rather, different neighborhood preferences of different groups are affected by each other in a dynamic process of segregation or integration (Schelling 1971). The majority of white households in a neighborhood may be quite tolerant of black neighbors (e.g., comfortable with the neighborhood being 40 percent black), but as less tolerant white neighbors – some of which may be intolerant of any black neighborhoods – move out of the neighborhood, the neighborhood’s black percentage increases and begins to approach the black tolerance threshold of the remaining white households. Moreover, benign residential preferences may not necessarily result in integration, even in an environment “in which strongly institutionalized discriminatory practices are absent” (Koeler and Skvoretz 2010). For example, whites and blacks of a given sample may both prefer to live in an integrated neighborhood, but the black population may consider it more important than the white population, which can result in surprisingly divergent neighborhood patterns for both groups.

In neighborhood preferences studies that examine all racial groups, minority groups tend to report a desire for integration as well as a significant presence of same-race neighbors (Charles 2003). Black respondents display the most comfort with integration, regardless of the out-group's racial category, while Hispanics and Asians display more comfort with white neighbors than they do with black neighbors. However, all three minority groups find all-white neighborhoods to be the least attractive. In a study that included hypothetical neighborhoods containing all four major racial groups (Charles 2000), results show that whites desire more same-race neighbors than any other group, while blacks desire the least amount of same-race neighbors. Additionally, across all groups, whites are the most desirable neighbors, and blacks are the least desirable neighbors. Charles (2003) shows evidence that neighborhood preferences are largely driven by racial stereotyping, though the desire to live with same-race neighbors plays a small role.

Krysan et al. (2009) disentangle the reasons why whites desire all-white neighborhoods over mixed and all-black neighborhoods. They find that whites with some in-group tendencies are “no more or less likely to be influenced by a neighborhood's racial composition” (549). The only in-group variable that influenced whites' neighborhood preferences was one that measured how whites felt about whites in comparison to blacks, but that indicator could have reflected out-group hostility as much as it did ethnocentrism. Krysan et al. (2009:550) also contend that other studies might “have overstated blacks' lack of interest in all-black neighborhoods,” though blacks did not seem to desire all-black neighborhoods over mixed neighborhoods or vice versa. The scholars conclude that race matters less for blacks than it does for whites in neighborhood

preferences, a finding that reflects the relative socioeconomic advantages of whites as well as negative racial attitudes of whites.

### **Summary and Implications for the Current Study**

Residential segregation is a major structure of social stratification in the United States, as it influences factors such as concentration of poverty, access to employment and educational opportunities, and other factors that impact quality of life (Logan and Alba 1993; Massey and Denton 1993). Originally, racial residential segregation was conceptualized as a “color line” between whites and blacks by Du Bois (1977 [1903]). However, the concept of a black-white color line is too simplistic and must be reformulated due to consistent and substantial Hispanic and Asian immigration to the United States (Lee and Bean 2010). Broadly, the United States might be divided by a black-nonblack or white-nonwhite color line.

Three broad perspectives provide a picture of a new dominant color line. First, black exceptionalism assumes the black-white color line will be replaced with a black-nonblack divide. This perspective predicts that new immigrant groups such as Hispanics and Asians will maintain physical and social distance from blacks in order to avoid the unfortunate ramifications of being identified or associated with the color black or dark skin in U.S. society (Gans 2005). High segregation of blacks from whites, Hispanics, and Asians support the viability of this perspective (Parisi et al. 2011).

Second, multiculturalism states that cultural distinctions between racial groups has become more acceptable in the United States and will continue to do so (Alba 1999; Alba and Nee 2003). Perhaps this development has led to the rise of global neighborhoods of multiple racial groups, as indicated by Logan and Zhang (2011). On the

other hand, multiculturalism could also point to the solidification of ethnic identities and thus ethnic communities, as outlined by research such as Portes and Zhou (1993) and Wen et al. (2009). Logan and Zhang (2011) also point out that whites tend to leave multiracial neighborhoods rather than move into them. Thus, multiculturalism could predict either lower or higher segregation between racial groups based on how racial identity is maintained or integrated in residential patterns.

Third, the tri-racial order perspective indicates that skin color will become even more important in stratifying groups in the United States (Bonilla-Silva 2004). This view predicts groups will fall into one of three categories: whites, honorary whites, and a collective black. While honorary whites will be considered superior to the collective black in terms of social standing, honorary whites will still face discrimination from the majority group, thus maintaining white privilege and dominance. The tri-racial order may therefore predict growing a black-nonblack divide and/or a growing white-nonwhite divide.

Two theoretical models, spatial assimilation and place stratification, provide reasoning for increasing or decreasing racial residential segregation in the United States (Charles 2003). Spatial assimilation emphasizes the role of socioeconomic and acculturation factors, while place stratification emphasizes the role of prejudice in the form of structural discrimination, neighborhood processes, and residential preferences. These models emphasize variables (e.g., income and racial diversity) that may be associated with residential segregation and change in residential segregation over the decades.

This review of the theoretical literature leads this study to ask two broad research questions:

1. Is the traditionally dominant black-white divide being replaced by a black-nonblack divide or a white-nonwhite divide?
2. What factors are associated with the black-white, black-nonblack, and white-nonwhite divides?

## CHAPTER III

### TRENDS

This chapter reviews trends in racial residential segregation. First, the chapter presents an extensive review of black-white segregation trends in metropolitan areas in order to emphasize the unique position of blacks in the racial order of the United States. Next, the chapter explains why segregation trends in nonmetropolitan areas are relevant to the understanding of race relations. The chapter then reviews research and trends of residential segregation in nonmetropolitan areas. Finally, the chapter presents a series of research questions aimed at important differences between segregation trends in metropolitan and nonmetropolitan areas.

#### **Black Segregation Trends in Metropolitan Areas**

Research on black segregation can be organized within four periods (Farley and Frey 1994; Massey and Denton 1993). The first period concerns residential patterns during the turn of the 20th century. At this time, blacks experienced less segregation from whites than one might have imagined in light of the legacy of slavery, as many metropolitan blacks were descendants of free people of color. All-black neighborhood blocks were not as common as they would become in future decades, and some of the most economically successful blacks even lived with whites in burgeoning neighborhoods. These patterns were observed in Northeastern, Midwestern, and Southern

cities. Despite these patterns, whites wanted to live apart from blacks. This desire led to some Southern cities passing laws to dictate where racial groups could live. Even though the NAACP had success in battling these laws, which the U.S. Supreme Court eventually struck down in 1917, it made no practical difference, as whites continued to devise ways of separating themselves from blacks, setting up a decades-long history of imposed residential segregation (Fischer 2008).

The second period of black segregation coincided with increasing black urbanization during the first few decades of the 20th century when “competition for urban space emerged” (Farley and Frey 1994:24). With the advent of industrialization in America, many blacks in the South began to pursue better opportunities in northern cities. The number of black migrants from the South skyrocketed during World War I when the need for industrial labor increased while European immigration decreased due to the war and restrictive immigration laws passed in 1921 and 1924. Given that European immigrants were the main source of labor for these industrial positions, employers in the North were happy to welcome black migrants into these positions (Massey and Denton 1993). Additionally, black migrants were happy to leave the South not only for work but also for the opportunity to live in places with less racial oppression. The movement of black (and white) migrants into the North came to be known as the Great Migration, a demographic trend that persisted throughout the Great Depression and ended in 1970 (Tolnay et al. 2002).

The continuous stream of blacks to northern cities was received by northern whites with “increasing hostility and considerable alarm” (Massey and Denton 1993:29), creating a strong disaffection toward blacks and a desire to maintain physical distance

from them. For example, in 1910, the average dissimilarity score for seven northern cities was 59, a 13-point increase from 46 in 1860. Furthermore, between 1890 and 1930, the average black isolation score increased from 6.7 to 29.9 for 18 northern cities (Massey and Denton 1993). The discontent of northern whites with blacks translated into the institutionalization of discriminatory practices, ranging from active violence to restrictive covenants that prevented the inclusion of blacks into white neighborhoods. This created a system of segregation that confined blacks, especially those from the South, in the least desirable residential areas of the city. Moreover, the discrepancy in neighborhood quality between whites and blacks was clearly linked to race, not class (Tolnay et al. 2002). Middle-class and affluent blacks faced residential difficulties similar to working-class and poor black migrants from the South. As Massey and Denton (1993:30) indicate, “[i]n white eyes, black people belonged in black neighborhoods no matter their social or economic standing.”

By 1920, blacks were more segregated from whites than most immigrant groups (Tolnay et al. 2002). Two decades later, black-white segregation would reach astronomical levels. In 1940, the average dissimilarity index score for northern cities was 89 at the city block level (Taeuber and Taeuber 1965). Converting these block data to ward data reveals that “by 1940 at least 70% of northern black city dwellers would have had to move to achieve an even residential configuration in northern cities (compared with a figure of only 46% in 1860)” (Massey and Denton 1993:31). Black isolation levels also rose considerably. The most extreme case was Chicago: from 1910 to 1940, Chicago’s isolation index for blacks increased from 5 to 70 percent. Other cities like Cleveland and New York showed increases of 8 to 51 percent and 7 to 42 percent,

respectively. After the United States entered World War II, the strong desire of whites to be physically separated from blacks was clearly expressed in a survey conducted by the National Opinion Research Center. In this study, 84 percent of the 3,600 respondents indicated that blacks should live in separate sections of towns and cities (Farley and Frey 1994).

The third period of black segregation coincides with the movement of whites from central cities to their surrounding areas, commonly known as suburban rings. By the end of World War II, the majority of the northern white population left most central cities, making “northern ghettos the homogeneously black communities they are today” (Massey and Denton 1993:43). This process of suburbanization was fueled by the economic expansion that accelerated with the end of World War II, the expansion of housing construction in the suburban ring, and the improvement of transportation (Massey 1985). While suburbanization provided opportunities for whites to seek new and improved residences, it also provided new opportunities for whites to further separate themselves from blacks, whose migration to northern cities picked up substantial steam at the beginning of World War II and onward (Massey and Denton 1993). As Taeuber and Taeuber (1965) and Massey and Denton (1993) show with block data, black-white segregation increased, on average, in cities between 1940 and 1950 for all regions, with many of Taeuber and Taeuber’s (1965) sample of 100 cities exceeding scores of 90 on the dissimilarity index.

Another indication that the residential color line was becoming even more demarcated was the typical process of invasion/succession in neighborhood racial change (Taeuber and Taeuber 1965). As whites vacated neighborhoods in the city, blacks began

to fill empty houses. The visible presence of blacks in the city pushed the remaining white residents out until city neighborhoods became virtually all black, giving rise to the expansion of the inner-city ghetto. Whites engaged in several practices to ensure that a system of segregation was in place, including housing market discrimination by real estate agents and lending institutions and sporadic acts of violence. Municipalities in the suburban area also became collective actors to keep blacks out of their communities by hiring only whites in their schools and other public service employment (Farley and Frey 1994). As the suburban areas became whiter and the central cities blacker, by 1960 the American metropolitan landscape took the proverbial form of the white doughnut around the black hole (Fischer et al. 2004). Although black-white segregation in most northern cities experienced declines between 1950 and 1960, the dissimilarity scores rarely dropped below 70 in block data analyses (Massey and Denton 1993; Taeuber and Taeuber 1965). Moreover, southern cities experienced substantial increases in black-white segregation during the 1950s.

Despite the fact that whites suburbanized more than blacks before World War II and in the 1950s, Farley (1970) points out that blacks have always had communities in suburban areas. In northern and western cities, these black suburban communities grew at a “correspondingly rapid rate” in comparison to their white counterparts (Farley 1970:514). In the early 20th century before the Great Migration, suburban areas in the South once held many rural places, where blacks made up about one-third of the residents. Southern cities also had lower segregation rates than their northern counterparts during this time (Massey and Denton 1993). Eventually, southern cities and their suburbs experienced growth, with the white population displacing or outpacing the black

population in suburbia, thus increasing residential segregation in Southern suburbs (Farley 1970).

The black suburbanization rate actually exceeded the white suburbanization rate in the North and West during the 1960s, but the overall metropolitan black population grew faster in central cities than in the suburbs. Additionally, the increased suburbanization of blacks had a caveat; three types of areas typified the suburban destinations of blacks during the 1960s: “older suburbs which are experiencing population succession, new developments designed for Negro occupancy, and some impoverished suburban enclaves” (Farley 1970:512). This study also indicated that blacks with higher incomes were more likely to suburbanize, though the overall black population in central cities was more educated and of higher socioeconomic status than the overall black population in suburban areas. Thus, residential segregation between blacks and whites remained prevalent in metropolitan areas despite increased black suburbanization. This observation echoed the warning of the Kerner Commission’s report on civil disorders in 1968 that stated the United States is moving toward two metropolitan societies: an advantaged white society in the suburbs and a disadvantaged black society in central cities (Farley 1977).

Although black-white segregation declined during the 1960s, average dissimilarity scores for cities still exceeded 80 at the block level, while isolation index scores for blacks in 1970 were twice as high as they were in 1930 (Massey and Denton 1993). While Farley (1970) pointed out that black suburbanization could eventually result in a significant change in metropolitan residential segregation, the current picture at the time did not look promising: “the residential segregation patterns of central cities are

reappearing within the suburbs” (527). Guest (1978) reiterated this assessment of suburban residential segregation: “The few Invasion-Succession suburbs more closely approximate the character of central city communities” (205). Using census tract data, Massey (1979) showed that blacks remained highly segregated in the 29 largest U.S. urbanized areas after the 1960s. In this study, suburban black-white segregation in 1970 reached an average of 75.4 on the index of dissimilarity, only 5.4 points lower than the average segregation of central cities. Finally, Farley’s (1977) analysis of social class and racial segregation in 1970 showed that blacks and whites with similar education, income, and occupations were highly segregated in both central cities and suburban rings. Black-white segregation could not be predicted by class differences.

The fourth period of black segregation started with the challenge to end segregation and continues to this day. During the 1960s, three groundbreaking pieces of legislation were signed into law to end institutionalized racial discrimination in the United States. The first piece of legislation was the Civil Rights Act of 1964. This act sought to end discrimination in public accommodations, schools, federal funding, and employment. The second piece of legislation was the Voting Rights Act of 1965, which sought to end systemic political exclusion of black voters. The third piece was the Fair Housing Act of 1968. This law is perhaps the most important institutional change aimed at narrowing the residential disparity between racial groups (Farley and Frey 1994). The act banned racial discrimination in the sale and rental of housing and was strengthened by subsequent court decisions. The outcomes of these institutional changes were assumed to be the emergence of the black middle class and the increased willingness of whites to accept blacks in their communities, workplaces, media, and public lives (Farley 1977;

Massey and Denton 1987). Perhaps most substantially, the majority of whites had abandoned the belief that blacks of the same social status should not be allowed to integrate with whites residentially (Massey and Denton 1987).

Massey and Denton (1993) indicate that the situation for decreased black-white segregation was hopeful not only because of Civil Rights legislation and improved white racial attitudes but also because of migration patterns and suburbanization trends in the 1970s. The Great Migration of blacks to northern cities ended in 1970. For the first time in the 20th century, the South experienced an increase in black migrants. This reversal of black migration patterns “eliminated a key supply-side factor that had contributed to ghetto formation and white racial hostility [in northern cities] for a hundred years” (Massey and Denton 1993:60).

During the 1970s, blacks suburbanized at a greater rate than they had in the 1960s (Frey 1985; Massey 1988a). Likening recent black suburbanization to patterns of white suburbanization during the 1950s, Frey (1985) shows that blacks of various geographic and educational backgrounds moved to suburban destinations much more frequently in 1975-1980 than they had in 1970-1975 and 1965-1970. Out of the 59 Standard Metropolitan Statistical Areas examined by Massey and Denton (1988a), only 11 had decreases in black suburbanization. In all but seven of the SMSAs, suburbanization was associated with lower black-white segregation at the census tract level (average score of 57 on the dissimilarity index). Black suburbanization increased during the 1970s for all four major regions of the United States, especially in the West.

Yet Massey and Denton (1988a) and others did not interpret the increased black suburbanization trends of the 1970s positively for various reasons. First, approximately

40 percent of the suburban areas in Massey and Denton's (1988a) study had high segregation levels, and most scores in suburban areas were on the high end of the moderate range. Moreover, the lowest segregation scores tended to occur in suburbs with relatively few blacks. Second, in a few SMSAs, black-white segregation was greater in the suburbs in comparison to central cities. Third, while several southern and border-state areas had lower suburban black-white segregation than might be expected given their large black populations, the integration in these areas could have been due to "encroachment of white suburban development into rural black areas rather than from the movement of urban blacks into white suburbs" (Massey and Denton 1988a:606). Fourth, while the black population in suburban areas grew faster than the black population in central cities, research indicated that blacks usually moved to suburbs that were spatially close to central cities, as opposed to whites who tended to move farther into the suburban reaches. These differences in suburban location between blacks and whites were linked to the invasion-succession process (Schneider and Phelan 1993). Fifth, the suburbs that blacks tended to move to during the 1970s were described as less advantaged by some scholars. With community resources (as measured by household median income) as the prime indicator of socioeconomic advantage, Logan and Alba's (1993) study of New York City's metropolitan area in 1980 concluded that blacks tended to reside in disadvantaged suburbs. Even when individual factors like household income, education, and homeownership were controlled, blacks were not able to suburbanize to places with higher community median income as frequently as their white counterparts. For example, affluent blacks tended to live in segregated suburban areas, and if they did live in more racially diverse areas, those communities tended to have lower median income.

Furthermore, Alba, Logan, and Bellair (1994) found that suburban crime differentially affected racial groups within a 1980 sample of suburbs in New Jersey. Regardless of whether they had high incomes or owned homes, blacks lived in poorer, more populous, and more segregated suburban areas with higher rates of crime.

Lastly, in predicting minority exposure to whites, typically the smaller the minority population, the higher the probability that members of the minority population will have contact with whites. However, suburban blacks were shown to have much lower probabilities of contact with whites in comparison to their Hispanic and Asian counterparts. The disparity between blacks and other minority groups in probability of exposure to whites held for entire metropolitan areas as well. Black suburbanization during the 1970s did not seem to increase the likelihood of contact or residential integration with whites (Massey and Denton 1987).

Logan and Schneider (1984:887) indicate that blacks during the 1970s mainly had access to “suburbs which have the weakest tax base and highest current tax rates and which may have the most difficulty providing municipal services at acceptable tax rates.” Typically, white suburbs remained closed off to blacks while black suburban areas continued to experience change. Logan and Schneider (1984) also find patterns that suggest invasion-succession processes in the suburbs, echoing Guest’s (1978) analysis of 1960s suburban black-white segregation. The data of this study do not give any clear evidence that black suburbanization during the 1970s reduced black-white segregation overall.

Although these studies tend to look at the glass as half empty, especially in regard to black suburbanization, Massey and Denton’s (1993) data still show that black-white

segregation, as well as black isolation, declined in almost every one of the 30 largest U.S. metropolitan areas during the 1970s. Farley and Frey (1994) further point out that declines in black-white segregation occurred in the majority of the 318 metropolitan areas in the United States. On average, black-white segregation, though still high overall, declined more during the 1970s than Hispanic-white or Asian-white segregation (Massey and Denton 1987).

However, any optimism was muted by the level of hypersegregation of blacks from whites, which was unique among minority groups (Massey and Denton 1989). In 16 U.S. metropolitan areas during the 1970s, blacks were highly segregated (values above 60) on four or all of the five dimensions of segregation. The average values for the 16 metropolitan areas follow: evenness (82), isolation (71), clustering (58), centralization (88), and concentration (83). More than one-third of America's black population during the 1970s lived in these hypersegregated areas (Massey and Denton 1993).

Black-white segregation experienced another decline during the 1980s (Farley and Frey 1994; Massey and Denton 1993). Using census tract data, Massey and Denton (1993) showed a decrease in black-white segregation for both northern and southern metropolitan areas with the largest black populations, with the former having a slightly larger decrease than the latter on the index of dissimilarity (2.3 vs. 1.8). Southern metropolitan areas remained less segregated overall with an average dissimilarity score of 66.5, which was still a high degree of segregation. Using block group data to examine a wider range of metropolitan areas (232 in total), Farley and Frey (1994:30) found a "pervasive pattern of modest declines" in black-white segregation, with the average dissimilarity score dropping from 69 to 65. The scholars also noted that the number of

metropolitan areas with moderate black-white dissimilarity scores (less than 55) increased from 29 in 1980 to 68 in 1990. Additionally, declines in black-white segregation during the 1980s were not limited to metropolitan areas with smaller black populations, as was the case during the 1970s. However, like Massey and Denton (1987), Farley and Frey (1994) were most hopeful about residential segregation patterns in developing metropolitan areas of the West and the South. Using census tract data to examine 331 metropolitan areas, Logan et al. (2001) show a modest decrease in black-white segregation during the 1980s similar to that of Farley and Frey (1994). However, the overall average black-white dissimilarity score was higher than the one observed by Farley and Frey (1994), dropping from 73.8 in 1980 to 68.8 in 1990 (Logan 2001). Unfortunately, blacks still experienced hypersegregation during the 1980s; in fact, there were more cases of black-white hypersegregation in the 1980s than in the 1970s. Metropolitan areas showing hypersegregation of blacks from whites nearly doubled by 1990, from 16 to 29 (Denton 1994).

The increased suburbanization of blacks during the 1980s has different interpretations. In 1980, about 10 percent of the suburban areas in Schneider and Phelan's (1993) sample contained no blacks or a very small number of blacks who were not reported by the Census. By 1990 census data showed that almost all of the suburban areas in their sample contained some blacks, which implies that black suburbanization mainly affected those suburban populations with fewer blacks in 1980. Furthermore, Schneider and Phelan (1993) identified a trend in 1980s black suburbanization similar to that of the 1970s: blacks tended to move to suburban neighborhoods near central cities. These areas also showcased low levels of median income, along with a weaker negative relationship

between black suburbanites and “public goods and services” (Schneider and Phelan 1993:276). Although these suburban communities were superior to the central cities that blacks moved away from, they paled in comparison to other suburban communities. Overall, suburbs that were already open to black settlement tended to be the suburban areas with higher black population growth, leading Schneider and Phelan (1993) to conclude that evenness in black-white residential distribution within the suburbs was “a distant goal” (278).

But Farley and Frey (1994) interpreted black suburbanization in the 1980s in a more positive way. For instance, they noted that the number of middle-class blacks grew quickly in the 1980s (the “Reagan Years”), implying that this trend should inspire more blacks to look for better housing in the suburbs. If many middle-class blacks moved to suburban areas, perhaps black suburban communities with high socioeconomic levels could appear. The idea was that older metropolitan areas where residential segregation has traditionally been high may not change any time soon, leaving newer metropolitan areas with new suburban housing as an opportunity for a growing middle class of blacks (Farley and Frey 1994). Later research would lend evidence to this idea about regional differences in black suburban representation. Between 1990 and 2000, black presence was more prominent in the suburb areas of the South, but there were not as many black suburbanites in other regions (Frey 2001).

The 1990s brought another decline in black-white segregation, though smaller than the decline of the 1980s. With census tract data, Logan et al. (2004) showed a 3.7 point decline in the index of dissimilarity during the 1990s, slightly lower than the 4-point decline during the 1980s. Of the 255 metropolitan areas that were analyzed, only 15

showed increases in black-white segregation. This study also indicated an average dissimilarity score of 65.2 for black-white segregation. Iceland et al. (2002) found similar numbers with their census tract data, with an average dissimilarity score of 64 for 220 metropolitan areas, an approximately 4-point decline (compared to a 5-point decline for the 1980s). Additionally, black-white segregation declined on all five traditional dimensions of residential segregation. In a study using block data, Lichter et al. (2007) show a slightly larger decline in black-white metropolitan segregation at approximately 5 points. Moreover, their study also shows a slightly higher average dissimilarity score at 67.8 (weighted by minority population size). Lastly, Wilkes and Iceland (2004) indicated that black-white hypersegregation had declined to an extent in the 1990s. Using the same techniques as Denton (1994), they found that the number of hypersegregated metropolitan areas decreased from 29 to 23, though nine of the original 29 areas were no longer hypersegregated (three areas became hypersegregated over the 1990s).

Research examining 2000s trends in black-white segregation is relatively scarce due to the fact that data from the 2010 Census have only recently been made available. However, two studies offer vastly different interpretations of the residential segregation of blacks. Glaeser and Vigdor (2012) show significant progress in segregation between black and nonblack groups in the last few decades, with the average black-nonblack dissimilarity value dropping from about 80 in 1970 to about 55 in 2010. The study further points out that most neighborhoods in metropolitan American now have black residents. The scholars speculate the decline of black-nonblack segregation is mostly due to black suburbanization and the expansion of lending to minority households.

Another study focuses directly on black-white segregation rather than black-nonblack segregation over the 2000s. Logan and Stults (2011) temper any optimism by revealing that black-white segregation is still very high in many of the U.S. metropolitan areas with the largest black populations. For example, black-white segregation in New York was 79.1 in 2010. The average dissimilarity score for the 50 metropolitan areas with the largest black populations dropped from 64 in 2000 to 59 in 2010. While this decline is about as large as declines in the 1980s and 1990s, the scholars expected a larger decrease. While Glaeser and Vigdor (2012) and Logan and Stults (2011) provide some reasons for the trends they report, the explanations are largely speculative and exploratory, as their studies do not account for ecological factors or provide any compelling evidence.

### **The Importance of Nonmetropolitan Studies**

As the previous discussions demonstrate, the literature on racial residential segregation in nonmetropolitan settings is extensive, containing many different viewpoints and methods of measuring the physical separation of racial groups. In contrast, the literature on racial residential segregation in nonmetropolitan settings was for many decades limited to “small parts of case study descriptions of rural stratification systems” (Hwang and Murdock 1983:607). Before the reasons for this discrepancy are explored, it is important to define nonmetropolitan in the context of racial residential segregation. In the literature (e.g., Massey and Denton 1993), “urban” is often used synonymously with the census-defined “metropolitan statistical area,” i.e., any area that contains a city with at least 50,000 population (surrounding counties, such as those that contain suburbs, may be included in this area) (U.S. Census Bureau 2010). Given that the urban literature largely focuses on these areas, “nonmetropolitan” is understood to be any

area that does not fit the metropolitan statistical area definition of the U.S. Census Bureau. “Nonmetropolitan area” may refer to “micropolitan statistical areas,” i.e., any area that contains a city with a population of 10,000 or more but less than 50,000. The term may also refer to small towns and unincorporated areas. Furthermore, studies of nonmetropolitan segregation often use “nonmetropolitan” and “rural” interchangeably (Allen and Turner 2011; Hwang and Murdock 1983; Lichter et al. 2007). It should be noted, however, that the Census defines “urban clusters” as an area that has at least 2,500 population but less than 50,000, which would fall under a nonmetropolitan setting (U.S. Census Bureau 2010). For the sake of clarity, this study uses metropolitan and nonmetropolitan as its main terms for geographic differences.

Three reasons help explain why nonmetropolitan residential segregation has received limited attention. First, comparable aggregate data for nonmetropolitan areas have only been available for little more than 30 years. The 1980 Census was the first decennial census to offer block residential data by racial group for places in nonmetropolitan areas (Aiken 1987; Hwang and Murdock 1983). Thus, our understanding of racial residential segregation in nonmetropolitan America is relatively limited compared to the research on metropolitan residential segregation, for which census data have been available for several decades before 1980. Moreover, residential data on geographic units in nonmetropolitan areas have not been analyzed that often since 1980, meaning that scholars have not fully explored available information on nonmetropolitan residential segregation. Second, most people in the United States live in metropolitan areas; thus, it is not surprising that bigger places with more people might garner more interest from social scientists. Third, for decades the most significant

population growth occurred in metropolitan areas, creating rapid changes in neighborhood racial composition that sociologists could readily examine. The Great Migration, for example, is largely associated with invasion-succession patterns in metropolitan neighborhoods. Rapid population growth of racial groups often leads to rapid residential segregation/integration, thus attracting considerable (and well-deserved) scientific attention.

But economic factors and population patterns that changed the racial landscape of northern cities since the Great Migration have significantly impacted the residential distribution of racial groups in nonmetropolitan settings as well. Although the residential segregation literature is full of references to the Great Migration's impact on black populations in the North, less has been said about blacks who stayed in the nonmetropolitan South. Wahl and Gunkel (2007:511) indicate that many nonmetropolitan blacks "are long-time residents, descendants of those who were too poor to join the Great Migration." An appreciable number of these descendants reside in the Black Belt, a collection of counties across southern states (e.g., Louisiana, Mississippi, Alabama, Georgia) that made up the center of the plantation economy. After World War II, the mechanization of farming was both a cause of blacks migrating to the North and a major disadvantage for blacks who stayed in the South, as advancements in machinery substantially decreased employment opportunities in agriculture, a main source of work for nonmetropolitan blacks who lived on farms (Aiken 1987; Albrecht, Albrecht, and Murguia 2005). As a result of the mechanization of farming, the black farm population went from representing 70 percent of nonmetropolitan blacks in 1940 to less than 3 percent of nonmetropolitan blacks in 1980 (Aiken 1985).

As the agricultural economy transformed in many areas of the South, blacks who had worked and lived on farms found new homes on the boundaries of small towns. These homes were built by either blacks themselves or by the federal government. In some cases, the transition to new housing was an improvement for nonmetropolitan blacks, as many of them were “able to make quantum leaps from tenant shacks without plumbing to new dwellings with modern conveniences” (Aiken 1985:396). At the same time, many blacks still lived in substandard housing units, and high poverty rates persisted among the nonmetropolitan black population. The extreme poverty of areas like the Black Belt inspired the well-known War on Poverty from the federal government in the 1960s (Aiken 1987). Despite the government’s efforts, more than 40 percent of black households still lived in poverty in some of the most impoverished counties of the South in 1979 (Aiken 1985).

Regional shifts in population demand that scholars pay more attention to residential patterns in nonmetropolitan areas and how they may reflect or differ from residential patterns in metropolitan areas. After the Great Migration unofficially ended in 1970, nonmetropolitan areas started to experience a population turnaround. The population story for blacks had been exodus: the nonmetropolitan South only accounted for 17 percent of all U.S. blacks in 1970, down from 70 percent in 1910. However, Lichter et al. (1985) indicate even though black population grew at a higher rate in metropolitan areas, the nonmetropolitan black population increased during the 1970s for the first time since the Great Migration. Both blacks and whites concentrated in adjacent and nonadjacent nonmetropolitan places, though blacks tended to concentrate in larger nonmetropolitan places, whereas whites tended to concentrate in more remote areas. This

finding leads Lichter et al. (1985) to question whether white flight also occurs in nonmetropolitan areas and to call for broader research on nonmetropolitan residential segregation.

Lichter and Heaton (1986) indicated that racial composition changes in nonmetropolitan places were minimal between 1950 and 1980 because of one population trend offsetting another (e.g., Great Migration vs. white urban-rural deconcentration). The South accounted for 70 percent of all U.S. blacks in 1950, but this figure dropped to approximately 50 percent by 1980, with a significant decline in the nonmetropolitan black population. However, percent black increased in urban areas (municipalities) of the nonmetropolitan South, similar to metropolitan patterns of percent black in central cities. Many southern counties during the 1970s experienced increases in percent black (i.e., the relative size of the black population). Percent black increases in the nonmetropolitan South happened for different reasons throughout the study period. During the 1950s, percent black increased the most in counties with both declining black and white populations. By the 1970s, the majority (about 80 percent) of percent black increases occurred in counties with growing black and white populations. The same could be said for percent white increases in nonmetropolitan Southern counties. These new trends were driven by white urban-rural deconcentration and black movement to nonmetropolitan municipalities. Lichter and Heaton (1986) concluded that racial composition in the nonmetropolitan South seemed to be more stable than racial composition in metropolitan areas.

Other research showed a more dynamic picture of racial composition in nonmetropolitan areas. Focusing on former plantation regions throughout the

nonmetropolitan South, Cromartie and Beale (1996) indicate that blacks and whites were increasingly living in different types of places in nonmetropolitan America between 1970 and 1990. Even though the nonmetropolitan black population was fairly stable from a total population standpoint (from 38 percent of total population in 1970 to 36 percent in 1990), racial population shifts within the Plantation South (i.e., nonmetropolitan counties that are 20 percent black) were significant. While blacks moved into more towns, whites moved to places outside of towns. In the countryside outside municipalities, the white population grew while the black population shrank. In towns with less than 1,000, black population decline and white population decline canceled each other out, but in towns with more than 1,000 in population, blacks grew while whites declined in population. Majority black nonmetropolitan municipalities increased from 261 in 1970 to 458 in 1990. These municipalities were also more likely to have an increase in percent black. Cromartie and Beale (1996) thus compared population patterns in the Plantation South to white flight identified in the metropolitan literature. Indeed, Massey and Hajnal (1995) point out that some municipalities in nonmetropolitan America became predominantly black between 1950 and 1990. In 1950, only two U.S. municipalities were more than half black. This number increased to 40 in 1990. Whites and blacks were segregated not only by neighborhoods, as the metropolitan literature overwhelmingly emphasizes, but also by entire small towns in the post-Civil Rights era (Massey and Hajnal 1995).

Wahl and Gunkel (2007) indicate that while the racial apartheid in the Old South drove blacks to northern cities during the Great Migration, blacks have been returning to the South for four decades due to a variety of push and pull factors. As a push factor, the high segregation of northern cities could have played a part in return migration of the

black population. Other factors associated with big cities, such as crime, also influenced return migration. The South also offers pull factors. Manufacturing and other industries have grown in nonmetropolitan areas, presenting better employment opportunities for many blacks. In addition, cultural heritage and family roots have attracted black migrants to the South.

Hispanic immigration has also impacted the racial composition of the South, especially in recent decades. The nonmetropolitan Hispanic population doubled between 1980 and 2000 and was the fastest growing nonmetropolitan racial group during the period (Kandel and Cromartie 2004). Hispanics made up a small percentage of the 2000 U.S. nonmetropolitan population (5.5 percent), but they were responsible for a sizeable percentage of nonmetropolitan growth during the 1990s (25 percent). Even more notable, more than 100 nonmetropolitan counties would have suffered population loss without Hispanic immigration. Hispanics spread to new areas in the Northeast, Midwest, and South. By 2000, half of the nonmetropolitan Hispanic population lived outside the Southwest, the traditional focal point of Hispanic immigration. Many new Hispanic destinations were unprepared for foreign-born residents, particularly those with poor English and low education. Nonetheless, Hispanic growth in these places outpaced Hispanic growth in nonmetropolitan places in the Southwest. The 149 nonmetropolitan counties that experienced a 150 percent increase in Hispanic growth tell this story succinctly (Kandel and Cromartie 2004).

Kandel and Cromartie (2004) share three factors that explain nonmetropolitan Hispanic growth. First, old metropolitan hot spots for Hispanic growth, like Los Angeles, have crowded labor markets and/or stagnant economies, which forced some Hispanics to

look for work in new locations. Second, the expansion of border control in the United States has made immigration a more costly endeavor, thereby encouraging immigrants to stay in the United States longer and bring their families (Massey and Sanchez 2010). In the past, immigrants would go back and forth between countries more often, leaving their families in the country of origin. Census data also show that Hispanics in high-growth nonmetropolitan counties are more likely than whites to be married with children (Kandel and Cromartie 2004). Third, certain industries, like meat and poultry processing and construction, have been on the rise in nonmetropolitan locations. Nonmetropolitan labor markets demand many low-skill workers, many of whom are Hispanic immigrants. Even though the jobs in these industries do not require high education, they are good-paying and stable jobs that increase the likelihood of settlement. Wahl et al. (2007) further note that “rural industrialization” has driven much of Hispanic migration to micropolitan areas. Their example of Lexington, Nebraska, illustrates the point well: a large meatpacking plant opened in the small town in 1990. A decade later, the Hispanic population in Lexington had increased from 329 to 5,121, making the town a majority-minority place.

Lichter (2012) indicates that Hispanics accounted for even more nonmetropolitan growth during the 2000s (56 percent) than they did during the 1990s (25 percent). The nonmetropolitan Hispanic population is now almost as large as the nonmetropolitan black population. These population trends have a “potentially large urbanizing effect on rural America” (Lichter 2012:7). At the same time, Hispanic growth in nonmetropolitan areas is not evenly spread; for example, 8 percent of nonmetropolitan counties in the Midwest experienced 50 percent of the Midwest’s total Hispanic growth. This concentration of

growth is further illustrated by the fact that more Hispanic migrants are moving from nonmetropolitan to metro areas than vice versa. However, new immigrants from Mexico and other Central and South American countries are increasingly moving to nonmetropolitan communities. Growth is also occurring due to fertility; as Lichter (2012) states, many Hispanic destinations in nonmetropolitan areas are growing from the bottom up. Even though new immigrants have lower education and acculturation, new Hispanic destinations have lower poverty rates than established Hispanic places, most likely due to labor market factors outlined by Kandel and Cromartie (2004). There is also less crime in new Hispanic destinations, which may represent another significant pull factor to nonmetropolitan locations for immigrants. Nonmetropolitan America has always been home to many minority groups, and the new growth of immigrants in nonmetropolitan America “provides a natural laboratory for better understanding the implications of racial change and diversity” (Lichter 2012:5). Despite this great opportunity for understanding, big cities with multiracial populations have received most of the attention.

The literature also indicates that nonmetropolitan minority groups may be more or uniquely disadvantaged compared to their metropolitan counterparts. Although Snipp (1996) acknowledges the rich heritage of nonmetropolitan black communities, he also states that there is a division between the black middle class (largely metropolitan) and nonmetropolitan blacks due to uneven economic development in the nonmetropolitan South. Nonmetropolitan blacks did not experience the same benefits as nonmetropolitan whites with the “southern economic boom of the 1970s and 1980s” (Snipp 1996:131). Slack and Jensen (2002) use Current Population Survey data from 1968 to 1998 to examine nonmetropolitan underemployment (i.e., discouraged workers, the unemployed,

involuntary part-time workers, and the working poor) among racial groups. They find that across the United States blacks “are plagued by considerably higher underemployment rates than their white counterparts” (219). However, underemployment is more rampant in nonmetropolitan areas, with nonmetropolitan blacks facing more underemployment than their metropolitan counterparts. Stable and sufficient employment is more important in nonmetropolitan areas because “reliance on earnings as a source of family income is especially great” (Slack and Jensen 2002:212). Employment by itself may not be enough to stay out of poverty in nonmetropolitan areas. This concept implies that even employed nonmetropolitan minorities could be especially disadvantaged, as nonmetropolitan blacks in 1998 had a poverty rate of 32.4 percent, compared to a central city black poverty rate of 27.8 percent. Employment in nonmetropolitan areas is especially challenging in isolated places with no economic diversification. In addition, nonmetropolitan areas have lost many manufacturing plants to other countries. A member of a minority group may face any or all of these factors as well as discrimination in nonmetropolitan areas (Slack and Jensen 2002).

Nonmetropolitan poverty may not have the same obvious negative appearance as metropolitan poverty. Aiken’s (1990) study of the Mississippi Delta indicates that nonmetropolitan ghettos in the Delta are less conspicuous than metropolitan ghettos. While it is easier to spot concentrated poverty in isolated black metropolitan neighborhoods, the Delta’s poverty is spread out over an entire region. In addition, some impoverished black towns look anything but disadvantaged with “new subdivisions and apartment complexes,” resembling a “prosperous agricultural town or a metropolitan suburban community in an idyllic agrarian setting” (Aiken 1990:242). Cromartie and

Beale (1996) argues that not all nonmetropolitan places with larger black populations should be called ghettos. Some municipalities with growing black populations in their sample of Plantation South metropolitan areas had total population gains and healthy economies. Indeed, queuing theory indicates that minority concentrations can result in minorities getting good jobs based on the minority group's sheer numbers (Albrecht et al. 2005). Fossett and Seibert (1997) also indicates that the positive relationship between percent minority and racial inequality in nonmetropolitan areas had weakened over the decades.

However, Albrecht et al. (2005) found that that minorities fare better in white dominant (66 percent white) counties than they do in minority dominant (50 percent minority) and minority prominent (33 percent minority) counties in nonmetropolitan areas. Even with control variables, minorities in white dominant counties have better education, employment, and income. Whites also fare better in counties with fewer minorities, having more education and income and less poverty. When education and employment are included as independent variables, minorities and whites still have higher income and less poverty in counties with fewer minorities. As the minority population grows smaller, the disadvantages for minorities and whites decrease, all factors controlled. These findings point toward competition between races and possible discrimination against minorities. More minorities in a place does not automatically mean more poverty; lack of opportunity and discrimination have played major historical roles in disadvantaged minority communities. Nonmetropolitan areas are also more spread out than metropolitan areas and typically have fewer economic opportunities and lack public transportation. This geographic difference raises concerns about the concentration of

minorities in nonmetropolitan areas, as they may deal with more isolation and lack of opportunity along with potential discrimination (Albrecht et al. 2005).

### **Black Segregation in Nonmetropolitan Areas**

During the 1980s, the literature on racial residential segregation in nonmetropolitan areas tended to be limited to studies of a single state or a region within a state. These early studies cannot be interpreted as detailed or accurate descriptions of metropolitan residential segregation throughout the United States. At the same time, they provide important early theoretical ideas as well as accounts of similarities and differences between metropolitan and nonmetropolitan areas in regard to racial residential segregation.

Hwang and Murdock (1983) was one of the first studies to use Census data to examine racial residential segregation in nonmetropolitan areas. The scholars theorized that patterns of segregation in nonmetropolitan cities would follow the structure of one of two nonmetropolitan ecosystems. The first type of ecosystem is based on a traditional community structure model. This model predicts that nonmetropolitan areas tend to be highly stratified by social and economic factors because of lags in population, technology, and sustenance in comparison to metropolitan areas. Thus, this kind of ecosystem predicts that “residential segregation in nonmetropolitan places should be high relative to that in metro areas, systematically related to proximity from the metropolitan central city, and markedly affected by social and economic differentials” (Hwang and Murdock 1983:609). On the other hand, a second type of ecosystem predicts that nonmetropolitan segregation patterns should mirror metropolitan patterns due to urbanization or decentralization processes, such as invasion and succession. The scholars

intended to help determine which type of ecosystem is most dominant in nonmetropolitan areas.

Hwang and Murdock's (1983) study was limited to 1980 segregation scores in nonmetropolitan and metropolitan cities in Texas. The study found that mean segregation scores were highest in nonmetropolitan nonadjacent counties, followed by nonmetropolitan adjacent counties, central cities, and metropolitan suburbs. However, these differences were not statistically significant, with the exception of metropolitan suburbs. With control variables, segregation in nonmetropolitan areas was found to be significantly higher than segregation in central cities, with levels of black-white segregation in nonmetropolitan cities being 23 percent higher than those for central cities. Population growth was associated with lower segregation in nonmetropolitan areas, leading the scholars to state that "rapid population change should lead to a changing ecosystem structure, to a disruption of existing structural relationships, and, thus, to reductions in the higher levels of residential segregation usually associated with more fixed or stable ecosystems" (Hwang and Murdock 1983:616). In other words, smaller populations reinforce the rigid structure of traditional nonmetropolitan ecosystems, leading to more segregation. The scholars concluded that population growth may be the key to lower segregation in nonmetropolitan areas.

Murdock et al. (1994) continued Hwang and Murdock's (1983) work on residential segregation in Texas by examining segregation scores in nonmetropolitan and metropolitan cities in 1980 and 1990. This study also emphasized the importance of population growth as a predictor of lower segregation. The scholars found that in 1990 nonmetropolitan segregation levels were significantly higher than metropolitan

segregation levels. Furthermore, the further a nonmetropolitan place was from a metropolitan area, the more it tended to be segregated, with nonmetropolitan places nonadjacent to metropolitan areas showing an average dissimilarity score of 65.8. The study also found that declines in segregation were greater for nonmetropolitan areas over the 1980s, with growing areas in nonmetropolitan and metropolitan areas experiencing greater declines in segregation. However, when controlling for other factors, these declines only remained significant for black-white segregation; Hispanic-white segregation did not decline more in growing places than it did in declining places. Black-Hispanic segregation increased over the 1980s, except in growing metropolitan places. The study concluded that “it is the patterns of population change rather inherently more inflexible social structures in nonmetro areas that explain differentials in segregation between metro and nonmetro areas” (Murdock et al. 1994:251). The scholars also admitted that their study was not representative of all cities in Texas, much less the nation.

Aiken (1990) provided a detailed view of residential segregation in the Yazoo Delta of Mississippi. He illustrated how population change caused the region to become more segregated than it was in the 1950s, before the Civil Rights Movement. Much like the metropolitan literature that describes many central cities as undesirable locations and their surrounding suburbs as beacons of socioeconomic opportunity, old studies of segregation in the Mississippi Delta point out the massive discrepancy in residential quality between the white and black sections of a municipality. These sections were often demarcated by railroads, businesses, streams, or a well-known street. Aiken (1990) indicated that areas began to develop in some Mississippi Delta towns wherein blacks

started to encroach upon white territory. As more whites left the traditional white residential area, panic ensued and more “For Sale” signs went up. Retail trade deteriorated in these places and reoriented itself toward low-income blacks. Interestingly, federal housing did not play a strong role in this transition from white to black municipal territory, but it nevertheless tended to be concentrated in older black residential areas. Thus, federal housing and white flight contributed to segregation in the Yazoo Delta, with some towns showcasing complete segregation of blacks and whites (Aiken 1990).

Cromartie and Beale (1996) indicated that black-white dissimilarity, on average, tripled in the Plantation South between 1980 and 1990. Cromartie and Beale (1996) attributed this increase to increased white flight in the 1980s and overall population decline. They argued that Aiken’s (1990) findings in the Mississippi Delta are applicable to other areas in the Plantation South as far as the emergence of black ghettos is concerned.

Aside from white flight, the literature has also acknowledged municipal underbounding as a potential mechanism that increases or maintains black-white segregation in nonmetropolitan settings. Aiken (1987) provides legal and demographic evidence of such racial exclusion in the municipalities of the Yazoo Delta in Mississippi. The study indicates that while most metropolitan blacks live in central cities, many nonmetropolitan blacks in the Yazoo Delta live in fringe areas that surround municipalities. These black fringe communities are often expanded by federal housing. Some black fringe populations in the Delta outnumber municipality populations and thus desire improved public services from and political representation in their respective municipalities. However, Aiken (1987) explains that the aspirations of black fringe

populations are marginalized by municipal underbounding, wherein predominantly white municipalities fail to annex black fringe populations due to fear of diluting white voting power. Annexation documents clearly show that the 12 Delta municipalities in Aiken's (1987) study have been far more likely to annex white populations than black populations, with some municipalities, such as Indianola, facing legal action due to obvious discrimination in annexation patterns. The abundance of federal housing in black fringe communities is also influenced by political concerns in white municipalities. Although municipalities must extend water and sewer lines to these new housing units, the construction of "housing projects in the fringe rather than within the corporate limits is a compromise" for municipalities wanting to preserve white dominance in local politics (Aiken 1987:573). Furthermore, federal agencies that sponsor public housing are not concerned with the political or spatial ramifications of the concentration of public housing units in black fringe communities, provided that the communities have access to municipal services.

Aiken (1987) stated that the prevalent municipal underbounding in the Yazoo Delta can be generalized to other Southern municipalities. This idea has received some support. Johnson et al. (2004) show how institutional discrimination in Mebane, North Carolina, has prevented blacks from electing officials, denied proper and safe sewer services to the black populace, and planned a limited-access highway through two black communities that would destroy homes and local institutions. The majority of blacks live outside the city limits in Mebane, with some black neighborhoods separated from the white population by a single street. While blacks in Mebane are under the jurisdiction of the municipality, their communities have not been annexed, though white areas have been

annexed. In addition, black citizens have been silenced during public hearings involving annexation in Mebane.

Like Aiken (1987), Johnson et al. (2004) indicate that this sort of discrimination is unique to nonmetropolitan areas, speculating that municipal underbounding could be happening in thousands of small towns in the United States. The speculation from these scholars led Lichter et al. (2007b) to use a more extensive data set to examine the prevalence of municipal underbounding (racial exclusion via annexation) in the South. The initial analysis of the study found that small Southern towns were almost equally likely to annex white and black fringe populations. A closer look at key variables revealed more mixed findings. Municipalities with large black fringe populations were the least likely to annex populations, but the lack of socioeconomic control variables prevented the study from stating this was due to racial exclusion. The study also found that municipalities with larger white populations were significantly less likely to annex black fringe populations. In fact, most predominately white municipalities have largely white fringes. While the study provides some evidence of potential discrimination, Lichter et al. (2007b) state that municipal underbounding may not be as widespread as suggested by Aiken (1987) and Johnson et al. (2004).

Arguably, nonmetropolitan residential segregation did not receive the attention it deserved until the late 2000s. Lichter et al. (2007a) was the first study to document national trends of black-white, Hispanic-white, and American Indian-white segregation in both metropolitan and nonmetropolitan America. The study argues that just because segregation declines at one spatial level does not mean it has not been offset by increases at another spatial level. The study also argues for the use of blocks as opposed to census

tracts, as the former are more suitable for detecting fine-grained patterns of segregation in places that census tracts may conceal.

Lichter et al. (2007a) found that blacks in nonmetropolitan small towns were more segregated from whites than were other minority groups during the 1990s, similar to the patterns found in the literature on metropolitan areas. Small-town black-white segregation was also higher than metropolitan black-white segregation. However, black-white and Hispanic-white segregation declined in small towns just as they did in metropolitan areas. At the same time, more than 75 percent of small towns had high black-white segregation, compared to just more than half of metropolitan places. Additionally, small towns with high Hispanic-white segregation declined from about one-third to 14 percent between 1990 and 2000. The study also found that population size is positively associated with black-white segregation in small towns (in contrast to Hwang and Murdock 1983 and Murdock et al. 1994), in addition to black population share and minority share in the suburban ring. These results mirrored the results of the metropolitan study by Logan et al. (2004).

Unlike Lichter et al. (2007a), Wahl and Gunkel (2007) use census tract data to examine black-white segregation in southern micropolitan areas with at least 5,000 black residents. The study distinguishes between Black Belt and non-Black Belt areas. Following Iceland and Wilkes (2006), the scholars examine segregation patterns between blacks of all classes and whites, blacks and whites of similar classes, and blacks of particular classes and all other blacks. They first find that micropolitan blacks in the South have higher rates of poverty and lower education attainment than metropolitan blacks in the South and North. At first glance, these factors seemingly indicate that

segregation would be higher in southern micropolitan areas. However, micropolitan blacks in the South have higher rates of homeownership than their metropolitan counterparts in the South and North. In contrast to highly segregated metropolitan blacks, micropolitan blacks in the South are only moderately segregated from whites, with average scores resembling those of Asian-white patterns in metropolitan areas. Yet Wahl and Gunkel (2007) also find that education and income do not translate into spatial assimilation for micropolitan blacks in the South; poverty and homeownership, however, have significant positive and negative relationships with segregation, respectively. At the same time, the most advantaged blacks are more likely to live by other blacks and by whites of lower status rather than whites of equal status, a finding in line with work done by Pattillo (2005). Wahl and Gunkel (2007) suggest a “floor effect” could explain why socioeconomic status did not play a more significant role in black-white integration. That is, segregation can only decrease so much (to a “floor”) before a tipping point is reached (Taeuber and Taeuber 1965). Wahl and Gunkel (2007) also find that percent black does not have much of an effect on segregation, as Black Belt and non-Black Belt tracts have very similar segregation levels. Finally, the scholars admit a limitation of their utilization of census tracts: blocks or block groups may be more suitable than tracts in defining boundaries of micropolitan “neighborhoods.”

Allen and Turner (2011) examine segregation in U.S. counties with block data from 2000 and, like other studies, find that blacks and whites are more segregated than Hispanics and whites. Segregation is lower in the West and South, though regional differences are not substantial. Nonmetropolitan counties, on average, have higher segregation than metropolitan counties, with the South having the largest disparity

between the two. The study also finds that black socioeconomic status tends to reduce segregation more in the South than in any other region. In line with the findings of Murdock et al. (1994), Allen and Turner (2011) indicate that population size and percent black are negatively correlated with segregation in the South (though percent black has a positive relationship with segregation in other regions). Certain patterns of segregation found in this study would have been masked if census tracts had been used.

### **Summary and Research Questions**

The most obvious and powerful example of residential segregation's impact on U.S. race relations is the historical black-white divide in metropolitan areas, which started to develop in the early 20th century and intensified after World War II (Massey and Denton 1993). However, trend studies show that black-white segregation has declined over the last few decades. Nonetheless, the black-white divide is the most dominant segregation pattern between a minority group and the white majority in America, trumping Hispanic-white and Asian-white segregation in terms of severity (Logan and Stearns 2011).

Metropolitan studies dominate the segregation literature, but a series of studies from the last three decades has emphasized another key element in U.S. race relations: residential segregation in nonmetropolitan areas. This emerging literature finds similar – and perhaps even greater – disenfranchisement of blacks in terms of residential attainment (Aiken 1990; Lichter et al. 2007). More recently, this literature has recognized the growth and importance of other minority groups in nonmetropolitan settings – the Hispanic population in particular (Lichter 2012).

Black-white segregation has been compared in metropolitan and nonmetropolitan areas (Allen and Turner 2011; Lichter et al. 2007), though the most recent trends in the 2000s have not been compared. Moreover, black-nonblack and white-nonwhite segregation patterns have received very little attention in terms of comparisons between metropolitan and nonmetropolitan areas. Thus, this study asks the following research questions:

1. How do black-white segregation patterns compare for metropolitan and nonmetropolitan areas in 1990, 2000, and 2010?
2. What factors are associated with black-white segregation patterns in metropolitan and nonmetropolitan areas in 2010?
3. How do black-nonblack segregation patterns compare for metropolitan and nonmetropolitan areas in 1990, 2000, and 2010?
4. What factors are associated with black-nonblack segregation patterns in metropolitan and nonmetropolitan areas in 2010?
5. How do white-nonwhite segregation patterns compare for metropolitan and nonmetropolitan areas in 1990, 2000, and 2010?
6. What factors are associated with white-nonwhite segregation patterns in metropolitan and nonmetropolitan areas in 2010?

## CHAPTER IV

### METHODS: DATA, MEASURES, AND ANALYTICAL STRATEGY

This chapter first provides a description of the data that will be used in this study. Next, it presents a description of the index that will be used to measure racial residential segregation. The chapter then presents a list of independent variables that will be used in the multivariate analysis. Finally, the chapter provides the analytical strategy that will be used to address the main objective of this study.

#### **Data Description**

Data for the analysis will come from the last three U.S. decennial censuses: 1990, 2000, and 2010. The major geographic units will be metropolitan and nonmetropolitan areas. In this study, metropolitan and nonmetropolitan areas will be used as areas that best approximate labor and housing markets. To ensure comparability over time, the study will use constant 2009 metropolitan and nonmetropolitan areas, as defined by the Office of Management and Budget, for the 1990-2010 period (U.S. Census Bureau 2013).

The study will use blocks as the accounting unit of segregation within metropolitan and nonmetropolitan areas. Census blocks are the smallest geographical units from the decennial census for which race data are available. Traditionally, the census tract has been the most widely used unit to compute segregation scores in the residential segregation literature. The reason for this widespread usage is that census

tracts are viewed as proxies of metropolitan neighborhoods. However, Lichter et al. (2007a:568) claim that using census tract data to measure nonmetropolitan segregation, especially segregation in small towns, is “neither feasible nor defensible.” The scholars provide three reasons for this strong statement. First, in the conceptual view, tracts are thought to delineate fields of social interaction between racial groups. While tracts might very well approximate such fields in a central city or suburban area with multiple neighborhoods, business districts, schools, and parks, many nonmetropolitan areas have very limited options in this regard. For example, everyone in a small town might use the same school because it is the only school in town. Second, related to the first point, many nonmetropolitan towns are only made up of a few census tracts. Thus, tracts do not allow one to capture the separation of racial groups in nonmetropolitan areas that are not densely populated. Third, census tracts are not necessarily accurate representations of neighborhoods and can also conceal segregation patterns within neighborhoods. Indeed, Allen and Turner (2011) indicate that tracts can contain multiple small ethnic neighborhoods. In nonmetropolitan areas, this limitation could especially result in downwardly biased scores of residential segregation, as “[nonmetropolitan] areas of even a few square miles can hide separate black and white settlements” (Allen and Turner 2011:7).

## **Measures**

### **Dependent Variable: Residential Segregation**

The spatial separation of racial groups within metropolitan and nonmetropolitan areas will be gauged using the index of dissimilarity ( $D$ ). As previously discussed, the index of dissimilarity is the standard measure of racial residential segregation. Numerous

important studies of segregation trends, from Taeuber and Taeuber (1965) to Massey and Denton (1993) to Logan et al. (2004), emphasize the use of the index as a broad indicator of segregation as well as a tool for comparisons with other studies. Therefore, this study will only use  $D$  for interpretative purposes, as the intention here is to provide a broad description of various segregation trends and to compare these findings with previous research.

The index of dissimilarity for black-white segregation,  $D_t$ , is defined as:

$$D_t = 1/2 \sum_{i=1}^k |b_{it} - w_{it}| \quad (1)$$

where  $b_{it}$  and  $w_{it}$  are the respective percentages of the black population and whites residing in census block  $i$  at time  $t$ . This index is based on pair-wise comparisons and, after being multiplied by 100, varies from 0 (no black–white segregation) to 100 (complete segregation).  $D$  indicates the percentage of blacks (or whites) that would have to move to other blocks in order to achieve parity between blacks and whites in their percentage distributions across all blocks in either a metropolitan or nonmetropolitan area. The same index will be calculated to gauge black-nonblack and white-nonwhite segregation in metropolitan and nonmetropolitan areas.

This study asks a number of empirical research questions that are driven by a larger conceptual question: is the traditional black-white divide being replaced by a black-nonblack or white-nonwhite divide? Theoretical perspectives such as black exceptionalism, the tri-racial order, and perhaps even multiculturalism raise this question. One may question why this study does not also examine other patterns of segregation, such as Hispanic-white, black-Hispanic, and Asian-white, as in Parisi et al. (2011). After

all, as Lee and Bean (2010) indicate, the United States potentially has multiple color lines and not one dominant pattern. Huntington (2004), for example, argues that there will be a larger divide between Hispanics and whites in the United States. Although this study does not discount the value of such discussions, the intention here is to look more broadly at racial residential segregation in both metropolitan and nonmetropolitan areas. As such, it would be counterintuitive, for example, to examine Hispanic-white segregation over Asian-white segregation. The relatively low number of Asians in many nonmetropolitan areas would either force the study to focus more on Hispanic segregation or severely limit the sample size of geographic areas, which would not serve the broad conceptual question driving this research. Thus, for the purposes of this study, it is most appropriate to combine minority groups in nonblack or nonwhite categories to address the idea of a dominant color line in both metropolitan and nonmetropolitan America.

## **Independent Variables**

### *Diversity*

Diversity will be defined in two ways: (1) specific racial group composition as the percentage of the total population of a metropolitan or nonmetropolitan area and (2) overall racial diversity, measured using the entropy index. The entropy index will be calculated using a three-group composition (i.e., white, black, and others) to account for differences in racial composition between metropolitan and nonmetropolitan areas. The “others” category will account for all nonblack or nonwhite minority groups in each area. The entropy index is defined as follows:

$$E = \sum_{r=1}^n p_r \ln\left(\frac{1}{p_r}\right) \quad (2)$$

where  $p_r$  refers to racial group  $r$ 's proportion of the population in a geographic unit, and  $n$  indicates the number of groups under consideration (in this case, three). The maximum value of  $E$  (the natural log of  $n$ ) occurs only when all groups are of equal size. Since there is no fixed upper bound, a population consisting of more equal-sized groups will produce a higher  $E$  score than one consisting of fewer equal-sized groups. An  $E$  of 0 (complete homogeneity) means that the population comprises a single group. Dividing  $E$  by its maximum value standardizes it to a 0-1 range. The scores will be multiplied by 100 so that 0 equals the lowest level of diversity and 100 the highest.

Farley and Frey (1994) show that metropolitan areas with larger “other races” populations (i.e., larger shares of Hispanics and Asians) were associated with less black-white segregation. Subsequently, Frey and Farley (1996) offer the “buffer” hypothesis in regard to the effect of racial diversity on black-white residential segregation. The buffer hypothesis suggests that a significant population of Hispanics and/or Asians can decrease the likelihood of white flight by providing a buffer that reduces whites’ perception of threat from blacks in neighborhoods. Frey and Farley (1996) find that most declines in black segregation during the 1980s were occurring in multiethnic metropolitan areas—particularly in western and “new southern” multiethnic metropolitan areas, which do not have the same history of black-white antagonism as do northeastern, midwestern, and southern areas. Thus, the buffering theory suggests that other minority populations like Hispanics and Asians change the real estate market mentality of black vs. white. Farley and Frey (1996) then emphasize the idea that first-generation immigrants push second-

and third-generation citizens to more integrated areas, thus opening the door to higher-status communities for blacks. Their data further show that immigration has a negative effect on black segregation, and in general, black segregation declined the most in multiethnic and white-Latino areas. Higher Latino population growth, in relation to black population growth, lead to less black segregation. Conversely, Latino segregation was higher in multiethnic and white-Latino areas and was negatively affected by Asian population growth. Asian segregation, on the other hand, decreased with higher Latino population growth.

Logan et al. (2004) show that metropolitan areas with larger proportions of blacks in 1980 had slower decreases in segregation by 2000, though higher black population growth over the period was not significantly related to segregation. The very opposite was true for Asians and Hispanics; proportions of each group in 1980 did not affect their segregation from whites by 2000, but growth of Asians and Hispanics had a strong, significant effect on increasing Asian-white and Hispanic-white segregation, respectively.

Iceland (2004) also finds evidence of a buffer effect between 1980 and 2000, with black segregation from other groups decreasing in racially diverse metropolitan areas. At the same time, white segregation from minority groups increased in these areas. Metropolitan areas with the highest percentages of minorities had the highest segregation. The decline in black-nonblack and white-nonwhite segregation during the period was mainly due to declines in segregation among whites and blacks. Immigration seemed to be a key variable in explaining segregation, suggesting that Hispanic and Asian immigration can lead to ethnic enclaves that further segregate groups.

### *Population Size*

Population size will be measured as the natural log of the population of a metropolitan or nonmetropolitan area. Farley and Frey (1994) and Logan et al. (2004) both find that population size is significantly related to higher residential segregation. Iceland (2004) also shows that segregation rates are higher in metropolitan areas with larger populations. Lichter et al. (2007a) find that population size is positively related to nonmetropolitan residential segregation.

### *Income Ratio*

Income will be defined as the median household income by racial group. The closer a minority group's income is to whites' income, the less segregated the two groups tend to be. Farley and Frey (1994) find a small but significant negative effect of black-white mean income ratio on segregation. Logan et al. (2004) show the same relationship with median income ratios between blacks and whites. Clark (2007) cites socioeconomic status as the variable that explains neighborhood patterns. With higher income levels, blacks are more likely to stay in white suburban neighborhoods. Clark's (2007) analysis shows that blacks in the suburbs have a median income of about \$32,000 median income (compared to \$24,000 for blacks in central cities). Another finding is that despite the increasing number of suburbanized blacks, a small number of suburban neighborhoods are majority black, which demonstrates the integration of higher-income blacks. Additionally, research shows that wealth can positively impact black households and families in terms of neighborhood attainment (Crowder et al. 2006).

### *Racial Population Growth Rate, 1990-2010*

This study will include a racial population growth rate variable. For black-white segregation, the variable will be black growth minus white growth to examine how black growth equal to or greater than white growth is related to segregation. For black-nonblack segregation, the variable will be black growth minus nonblack growth to examine how black growth equal to or greater than nonblack growth is related to segregation. For white-nonwhite segregation, the variable will be white growth minus nonwhite growth to examine how white growth equal to or greater than nonwhite growth is related to segregation.

Studies have found that growth rates of racial groups can have different relationships with segregation. For example, using block group data, Farley and Frey (1994) indicated that black growth greater than white growth was not significantly related to black-white segregation during the 1980s. On the other hand, Iceland's (2004) tract-level study showed a positive relationship between greater black growth and segregation during the 1980s.

### *Functional Specialization*

Functional specialization will be defined as the percentage of individuals that make up the manufacturing, government, education, and military sectors of metropolitan or nonmetropolitan areas (see Iceland and Sharp 2013 for a similar approach). While the manufacturing, government, and military percentages will reflect individual employment, the education percentage will reflect the college-age population (ages 18-24). Differences in economic bases, or functional specialization, between areas can affect racial residential segregation for three reasons (Farley and Frey 1994; Logan et al. 2004). First, the type of

residential units available can be directly affected by the prevailing economic base of the community. Second, different functional specializations entail different socioeconomic characteristics of the population. Finally, open housing laws can have different impacts based on differences in population and housing characteristics. The relationships between functional specializations and residential segregation are briefly described below.

### *Manufacturing Communities*

Lichter et al. (2007) found that manufacturing communities in small towns are less segregated than communities without a functional specialization in small towns.

### *Government Communities*

Communities with higher concentrations of local, state, and federal government tend to be among the least segregated. Many of these communities are state capitals. Therefore, perhaps fair housing laws tend to be more rigorously enforced in government communities. Farley and Frey (1994) seemed to find more moderate segregation in government communities than did Logan et al. (2004), but this discrepancy could be due to improvements in the enforcement of fair housing laws over time. Another possibility is that individual states could have passed stricter housing laws between the studies of Farley and Frey (1994) and Logan et al. (2004). Boyd (1994) indicates that government/public sector jobs traditionally provide better opportunities to blacks in terms of employment and advancement into the middle class, thus providing a way for blacks to afford residence in more integrated communities.

### *Education Communities*

More educated communities not only tend to be more tolerant of all races but may also actively promote integration. Farley and Frey (1994:35) found “unusually low” segregation scores in Southern university communities. Logan et al. (2004) found that university communities have a negative effect on residential segregation, though the effect was not significant.

### *Military Communities*

Both Farley and Frey (1994) and Logan et al. (2004) found that military communities have the lowest overall segregation scores when compared to other functional specialization communities. Military communities can assign households to integrated areas on base or integrated off-base apartment complexes, thus nullifying the effects of structural discrimination, neighborhood preferences, and socioeconomic differences. Additionally, Moskos and Butler (1996) indicate that blacks and whites in the Army and on military bases show more positive attitudes about integration and make more of an effort to integrate than do blacks and whites in civilian life. Farley and Frey (1994) also find that military communities were the only type of functional specialization that had a significantly large effect on change in black-white segregation during the 1980s. Logan et al. (2004) also indicate that black-white segregation tended to drop between 1980 and 2000 in military communities.

### *New Housing Construction*

New housing construction will be measured as the percentage of housing built between 1990 and 2010 (i.e., percent housing change). In contrast to Taeuber and

Taeuber's (1965) observation that new construction in the suburbs played a role in creating mid-20th century black-white segregation, new housing units well after the Civil Rights movement tend to be less segregated than old housing units (Farley and Frey 1994). This difference is due to legislation in the late 1960s that made housing discrimination illegal. New housing construction is also tied to segregation differences between regions, as many southern and western metropolitan areas have had most of their housing units built after the Fair Housing Act of 1968. Farley and Frey's (1994) analysis shows that out of all metropolitan areas with substantial new housing construction during the 1980s, only six had dissimilarity scores higher than 75, but all six areas were retirement communities in Florida. New housing was also found to be significantly related to segregation declines, suggesting that new housing construction might encourage residential mobility. Logan et al. (2004) also find lower segregation in metropolitan areas with new housing construction.

### *Suburbanization*

For metropolitan areas, suburbanization will be defined as the percentage of the total population living outside the central city in suburban areas. The general expectation is that suburbanization should be associated with a lower level of segregation between minority groups and whites. When Massey and Denton (1988a:601) investigated the importance of suburbanization as a "key step in the process of spatial assimilation," they discovered that the average level of segregation fell for blacks who suburbanized. Other studies, however, suggest that there is no agreement among researchers about whether suburbanization reduces minority segregation from whites (Logan et al. 2004). In nonmetropolitan areas, the concentration of blacks within municipalities is expected to be

associated with higher levels of segregation from whites based on prior research (Aiken 1990; Cromartie and Beale 1996). Nonmetropolitan areas outside municipalities can be compared to suburban areas of metropolitan areas.

### *Regional Location*

Regional location (or region) will be operationalized as a set of dummy variables classifying metropolitan or nonmetropolitan areas as falling within the census-defined West, Midwest, Northeast, or South regions. Scholars have continued to use region as an independent variable in ecological models (Iceland, Sharp, and Timberlake 2013). Different racial residential segregation scores in the West, South, Midwest, and Northeast are partly due to historical factors involving local government. During the late 1800s, states in the Midwest and Northeast gave significant independent power to their towns and cities, which lead to the development of many suburban areas with their own laws and public institutions like schools. As the Great Migration of Southern blacks took place, whites began to move to midwestern and northeastern suburbs that “either had histories of animosity toward blacks or that had developed strategies indicating that their neighborhoods, parks, and schools were for whites only” (Farley and Frey 1994:35).

In contrast, local authority in the South has traditionally been given to county governments that can be taken over by the state. For this reason, southern states do not have as many suburban areas as midwestern and northeastern states. Additionally, school districts in the South were drawn to follow desegregation mandates from the federal government. Other movements in the South encouraged integration of racial groups. Thus, southern whites have not had the historical and political background that allows for the continued residential exclusion of blacks (Farley and Frey 1994). Unlike midwestern

and northeastern cities, southern and new western cities have been able to annex fringe territories for tax revenue. Annexation is associated with less residential segregation in metropolitan settings. Finally, many southern and western metropolitan areas came into being during the “automobile era,” which allowed for wider dispersal of residential areas than in older northern and midwestern metropolitan areas.

Overall, Farley and Frey (1994) show that western metropolitan areas were the least segregated among all regions; only four of the western metropolitan areas in their study had segregation scores that exceeded 65. In contrast, four dozen of the midwestern metropolitan areas in the same study had segregation scores above 65. Logan et al. (2004) indicate that midwestern and northeastern cities are significantly more segregated than southern cities, with western cities, again, showing the least amount of segregation. However, the relationship between region and segregation is insignificant in regard to Asian-white segregation in Logan et al.’s (2004) study. In an analysis that measured the segregation of each major racial group from all other groups (e.g., blacks vs. all other races, whites vs. all other races, etc.), Iceland (2004) finds that segregation is highest in all cases in the Northeast or Midwest, with the South showing the lowest segregation for Asians and Hispanics and the West showing the lowest segregation for whites and blacks.

### **Analytical Strategy**

The analysis will begin with a description of patterns of black-white, black-nonblack, and white-nonwhite racial residential segregation in U.S. metropolitan and nonmetropolitan areas for the 1990-2010 period. The study will provide unweighted and weighted scores of *D*. Black-white and black-nonblack scores will be weighted by the size of the black population, which will give greater weight to places with larger black

populations. Weighted segregation scores indicate the average segregation of all blacks rather than of metropolitan and nonmetropolitan areas. Appropriately, white-nonwhite scores will be weighted by the size of the white population. The study will then fit ordinary least squares (OLS) regression models of black-white, black-nonblack, and white-nonwhite segregation to determine how and the extent to which ecological factors are related to levels of segregation in metropolitan and nonmetropolitan areas. The data in these models will be weighted in the same way that the average dissimilarity scores are weighted, that is, black-white and black-nonblack models will be weighted by the black population and white-nonwhite models by the white population.

### **OLS Regression**

The regression models in this study are based on this equation:

$$Y = \alpha + B_1X_1 + B_2X_2 + B_kX_k \quad (3)$$

Here, the dependent variable ( $Y$ ) is a linear function of the independent variable ( $X$ ) with slope ( $B$ ) and  $Y$ -intercept ( $\alpha$ ). OLS regression is the appropriate statistical tool for this study because dissimilarity is a ratio-scale variable and the independent variables are measured on either ratio or ordinal (dummy variables) scales. OLS regression is useful for analyzing linear relationships between such variables. OLS rests on three assumptions: (1) the conditional distribution of  $Y$  is normal; (2) homoscedasticity, which means the distribution of  $Y$  has the same standard deviation regardless of the values of the independent variables; and (3) observations on  $Y$  are independent. Variance inflation factor (VIF) values will be used to examine any potential multicollinearity issues with the independent variables. VIF values that exceed 10 are commonly considered to indicate a

multicollinearity issue (Belsley, Kuh, and Welsch 1980) (see Appendix A for VIF values).

## CHAPTER V

### RESULTS

This chapter presents the results of the analysis in two sections. The first section contains average scores (means) of black-white, black-nonblack, and white-nonwhite residential segregation patterns from 1990 to 2010 for metropolitan areas, nonmetropolitan areas, and the United States as a whole. This section presents unweighted numbers and numbers weighted by the black (or white) population. The second section presents the results of a multivariate analysis examining factors associated with black-white, black-nonblack, and white-nonwhite residential segregation in 2010 for metropolitan and nonmetropolitan areas.

#### **Black-White, Black-Nonblack, and White-Nonwhite Segregation, 1990-2010**

The first goal is to examine if the traditionally dominant black-white color line, as represented by segregation patterns, has changed in recent decades. The analysis will begin with the unweighted numbers shown in Table 1. The average dissimilarity index for black-white segregation in 2010 across the United States is 72. This finding means that 72 percent of blacks or whites would have to move to other blocks where they are underrepresented to achieve an even distribution (complete integration) throughout the United States. A dissimilarity index of 72 is considered high, but as indicated in other research (Logan and Stults 2011), the results show a decline in total U.S. black-white

segregation. Black-white dissimilarity indices were 79 and 75 in 1990 and 2000, respectively, indicating a 7-point decline between 1990 and 2010.

Table 1 Average Segregation in Metro and Nonmetro Areas, 1990-2010

	<u>Black-White</u>		<u>Black-Nonblack</u>		<u>White-Nonwhite</u>	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
1990						
All	78.80	77.22	77.93	75.06	69.22	66.93
Metro	74.31	77.28	72.98	74.95	63.98	66.31
Nonmetro	80.51	76.65	79.82	76.09	71.22	72.80
2000						
All	75.00	73.97	73.50	70.44	64.52	63.81
Metro	70.89	74.20	68.55	70.43	60.49	63.47
Nonmetro	76.57	71.80	75.38	70.59	66.05	67.06
2010						
All	72.27	70.77	70.27	65.98	60.94	59.90
Metro	67.39	70.94	64.12	65.82	56.37	59.51
Nonmetro	74.12	69.11	72.61	67.47	62.67	63.55

How do trends in black-white segregation compare for metropolitan and nonmetropolitan areas? Table 1 shows a moderately higher average dissimilarity index in 2010 for nonmetropolitan areas (74) compared to the average for metropolitan areas (67). As Hwang and Murdock (1983) theorized, higher black-white segregation patterns in nonmetropolitan areas could be due to the rigid structure of smaller nonmetropolitan areas that can only be overcome by urbanization or population growth (a hypothesis that will be reviewed in the multivariate analysis). Like the total United States, both metropolitan and nonmetropolitan areas experienced declines in black-white segregation. In metropolitan areas, the dissimilarity index was 74 in 1990 and 71 in 2000. In nonmetropolitan areas, the index was 81 in 1990 and 77 in 2000. Thus, total,

metropolitan, and nonmetropolitan black-white dissimilarity all declined, on average, by seven points from 1990 to 2010.

The weighted dissimilarity scores of black-white segregation in Table 1 are slightly different than the unweighted scores. The weighted scores are weighted by the black population, which means that they reflect the average segregation of blacks rather than the average black-white segregation within geographic units. For the entire United States, the weighted average black-white dissimilarity index in 2010 is slightly lower at 71 compared to the unweighted score of 72. The weighted scores also reveal a slightly lower decline from 1990 to 2010 (6 points) compared to the decline for the unweighted scores (7 points). Interestingly, the weighted figures show a reversal in the comparison of dissimilarity scores for metropolitan and nonmetropolitan areas. The weighted average dissimilarity index in 2010 for metropolitan areas (71) is slightly higher than the score for nonmetropolitan areas (69). Metropolitan and nonmetropolitan areas both had a weighted average score of 77 in 1990. These scores also show that the decline in the average segregation of blacks was greater in nonmetropolitan areas (8 points) than in metropolitan areas (6 points) over the last two decades.

Next, Table 1 shows national scores of black-nonblack segregation. For the whole country in 2010, the unweighted average black-nonblack dissimilarity score was 70, which is slightly lower than the black-white score (72). Similar to the case for black-white segregation, the country also experienced a decline in black-other segregation. Average indices for 1990 and 2000 were 78 and 74, respectively, indicating that black-other segregation declined, on average, by 8 points between 1990 and 2010.

How do trends in black-nonblack segregation compare for metropolitan and nonmetropolitan areas? Table 1 shows a higher average black-nonblack dissimilarity index in 2010 in nonmetropolitan areas (73) than in metropolitan areas (64). The unweighted metropolitan-nonmetropolitan difference (9 points) in black-nonblack segregation in 2010 is greater than the unweighted metropolitan-nonmetropolitan difference (7 points) in black-white segregation, which suggests that nonmetropolitan minority groups tend to live farther away from blacks than do metropolitan minority groups. At the same time, black-nonblack segregation is lower than black-white segregation in both metropolitan and nonmetropolitan areas, indicating that the traditional color line remains the most salient. Like black-white segregation, black-nonblack segregation has declined in both nonmetropolitan and metropolitan areas. In nonmetropolitan areas, the unweighted average black-nonblack score was 80 in 1990, 75 in 2000, and 73 in 2010. In metropolitan areas, the score was 73 in 1990, 69 in 2000, and 64 in 2010.

The weighted average scores of black-nonblack segregation tell a slightly different story. For the entire United States, the weighted average black-nonblack dissimilarity index in 2010 is lower at 66 compared to the unweighted score of 70. Interestingly, the weighted black-nonblack nonmetropolitan score (67) is moderately lower than the unweighted black-nonblack nonmetropolitan score (73). On the other hand, the weighted black-nonblack metropolitan score (66) is slightly higher than the unweighted black-nonblack metropolitan score (64). In all cases, the weighted average black-nonblack segregation indices declined between 1990 and 2010 by 9 points – a

slightly larger decline than the weighted average black-white segregation indices for the same period.

Finally, Table 1 shows national scores of white-nonwhite segregation. For all of the United States in 2010, the unweighted average white-nonwhite dissimilarity score was 61. This figure is notably lower than the unweighted black-white (72) and black-nonblack (70) scores, suggesting that (a) nonblack minority groups tend to live closer to whites than they do to blacks and (b) nonblack minority groups live closer to whites than do blacks. Like the black-white and black-nonblack scores, the white-nonwhite scores declined between 1990 and 2010. Specifically, the white-nonwhite scores were 69 in 1990, 65 in 2000, and 61 in 2010.

How do trends in white-nonwhite segregation compare for metropolitan and nonmetropolitan areas? Table 1 shows a higher average white-nonwhite dissimilarity index in 2010 in nonmetropolitan areas (63) than in metropolitan areas (56), suggesting that nonmetropolitan minority groups are more segregated from whites than are their metropolitan counterparts. The white-nonwhite color line also appears to be the least salient in both nonmetropolitan and metropolitan areas, which suggests that nonblack minority groups are moving closer to whites and perhaps maintaining physical distance from blacks. The unweighted white-nonwhite nonmetropolitan index is 63, which is at least 10 points lower than either the unweighted black-nonblack (73) or black-white (74) nonmetropolitan indices. Similarly, the unweighted white-nonwhite index for metropolitan areas (56) is lower than the unweighted black-nonblack (64) or black-white (67) indices for metropolitan areas. It is perhaps notable that the unweighted average white-nonwhite index for metropolitan areas is the only score in Table 1 that shows a

moderate level of segregation as defined by Massey and Denton (1993). Still, a score of 56 suggests that more than half of the white or nonwhite population would have to other blocks to achieve an even distribution; in this respect, the level of segregation does not seem so moderate. The unweighted metropolitan and nonmetropolitan scores also indicate declines in segregation. Specifically, the white-nonwhite dissimilarity index declined by 8 points from 1990 to 2010 in both nonmetropolitan and metropolitan areas.

Table 1 shows a similar set of trends when the white-nonwhite dissimilarity indices are weighted by the white population, which reflects the average segregation of whites from minority groups. According to the weighted scores, white-nonwhite segregation in the United States was 60 in 2010, which is only one point lower than the unweighted white-nonwhite score (61). When weighted, white-nonwhite segregation is higher in both nonmetropolitan areas (64 vs. 63) and metropolitan areas (60 vs. 56). Declines in weighted white-nonwhite dissimilarity between 1990 and 2010 were similar to declines in the unweighted white-nonwhite indices for the United States, metropolitan areas, and nonmetropolitan areas. Lastly, across all weighted indices, the white-nonwhite scores were lower than the black-nonblack and black-white scores for all categories, suggesting that whites, on average, do not experience as much segregation from other groups compared to blacks.

### **Multivariate Analysis**

Descriptive statistics for the independent variables are shown in Table 2. The analysis examines 275 metropolitan areas and 722 nonmetropolitan areas. In the sample, metropolitan areas have an average total population of approximately 852,000, while nonmetropolitan areas have an average total population of approximately 30,000. Both

metropolitan and nonmetropolitan areas have populations that are 71 percent white. The remaining metropolitan population is 13 percent black, 10 percent Hispanic, and 3 percent Asian. The remaining nonmetropolitan population is 18 percent black, 11 percent Hispanic, and 1 percent Asian. The diversity index, on average, is 53 in metropolitan areas and 44 in nonmetropolitan areas, indicating more diversity in the former.

Table 2 Descriptive Statistics for Metro and Nonmetro Areas, 2010

Variable	Metro		Nonmetro	
	Mean	SD	Mean	SD
Population Size				
Population	851,921	1,822,366	30,268	23,759
Diversity				
Percent White	70.94	14.84	71.08	18.50
Percent Black	13.63	10.63	18.15	18.29
Percent Hispanic	10.40	11.81	7.68	11.27
Percent Asian	2.59	2.72	0.58	0.60
Percent Foreign-Born	7.31	6.07	3.34	3.71
Entropy Index	52.60	16.25	43.66	16.83
Metro/Nonmetro Population				
Suburbanized Residents	59.45	17.25	-	-
Percent Black in Central City	59.06	24.95	-	-
Percent Black in Municipalities	-	-	63.03	27.70
Population Growth				
White Growth Rate, 1990-2010	10.20	22.19	1.93	19.40
Black Growth Rate, 1990-2010	60.61	127.31	300.62	2,194.66
Median Income				
White Household Income	65,065	11,919	52,881	8,243
Black Household Income	40,306	11,688	31,770	12,302
Functional Specialization				
Percent Manufacturing	11.79	-	14.44	-
Percent Government	5.23	-	6.54	-
Percent Military	0.91	-	0.32	-
Percent Education	41.38	-	27.31	-
Region				
Percent South	53.39	-	76.66	-
Percent Northeast	13.87	-	3.61	-
Percent Midwest	25.10	-	16.96	-
Percent West	7.64	-	2.77	-
Location				
Adjacent to Metro Area	-	-	76.04	-

*N* = 275 (Metro), 722 (Nonmetro)

In 2010, fifty-nine percent of metropolitan blacks lived in central cities, while 63 percent of nonmetropolitan blacks lived in municipalities. In the sample, 59 percent of the total metropolitan population resided in suburban areas. Over the 2000s, the white population in metropolitan areas grew by 10 percent, while the black metropolitan population grew by 61 percent. The white and black populations in nonmetropolitan areas grew by 2 and 301 percent, respectively, over the last decade. White median income and black median income in metropolitan areas were approximately \$65,000 and \$40,000, respectively, in 2010. In nonmetropolitan areas, the income figures were approximately \$53,000 for whites and \$32,000 for blacks. While nonmetropolitan areas had slightly higher percentages of individuals employed in manufacturing and government than do metropolitan areas (14 vs. 12 percent and 7 vs. 5 percent, respectively), metropolitan areas had a slightly higher percentage of individuals in the military (0.9 vs. 0.3 percent) and a substantially higher percentage of college-age (education) individuals (41 vs. 27 percent). Seventy-six percent of nonmetropolitan areas in the sample were adjacent to metropolitan areas. The South represented the majority of both metropolitan (53 percent) and nonmetropolitan areas (77 percent) in this sample.

This study fits two OLS regression models, weighted by either black or white population size, of black-white, black-nonblack, and white-nonwhite residential segregation for both metropolitan and nonmetropolitan areas in 2010. Each multivariate analysis begins with the associations between the independent variables, excluding the entropy (diversity) index, and patterns of segregation in metropolitan or nonmetropolitan areas in 2010. Each multivariate analysis then introduces the entropy index in a second model, while removing the percent black, percent Hispanic, and percent Asian variables.

## **Factors Related to Metropolitan Segregation**

In model 1 of Table 3, the associations between the independent variables and black-white segregation are largely consistent with Farley and Frey (1994)'s study. All of the associations are significant at the 0.001 level. Population size and percent black are positively associated with black-white segregation, with the former having a large association. Percent Hispanic and percent Asian, on the other hand, are associated with lower black-white segregation, thus supporting the buffer hypothesis. Percent foreign-born is negatively associated with black-white segregation. However, a high VIF value for the foreign-born variable suggests a multicollinearity issue (all VIF values can be found in Appendix A). Suburbanization of all groups has a negligible negative relationship with black-white segregation. Percent black in central cities is associated with higher black-white segregation, though the association is small. Black population growth (comparable to or greater than white population growth) has a negligible negative relationship with segregation. Percent housing change, as expected, has a negative, though small, relationship with segregation. Black-white median income ratio has a negative relationship with segregation, indicating that income might play a very important role in the residential location of blacks. The functional specialization variables are all associated with lower black-white segregation, with military communities having the largest relationship. With metropolitan areas in the South as the reference group, metropolitan areas in the Northeast and Midwest have relatively strong positive relationships with black-white segregation, while the West is associated with lower black-white segregation.

Table 3 Metro Area Factors Related to Black-White Segregation, 2010

	<u>Model 1</u>		<u>Model 2</u>	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Population Size				
Log of Population	1.038***	0.001	1.589***	0.001
Diversity				
Percent Black	0.102***	0.001	-	-
Percent Hispanic	-0.214***	0.001	-	-
Percent Asian	-0.879***	0.001	-	-
Percent Foreign-Born	-0.707***	0.001	0.406***	0.000
Entropy Index	-	-	-0.116***	0.000
Metro Population				
Suburbanized Residents	-0.033***	0.001	-0.102***	0.000
Percent Black in Central City	0.009***	0.001	0.020***	0.000
Population Growth, 1990-2010				
Black Minus White Growth	-0.010***	0.001	-0.004***	0.000
Housing Change and Income				
Housing Built Since 1990	-0.143***	0.001	-0.125***	0.000
B-W Median Income Ratio	-2.562***	0.005	-5.512***	0.006
Functional Specialization				
Percent Manufacturing	-0.205***	0.001	-0.287***	0.000
Percent Government	-0.313***	0.001	-0.140***	0.000
Percent Military	-1.482***	0.001	-1.444***	0.000
Percent Education	-0.117***	0.001	-0.159***	0.000
Region (Reference = South)				
Northeast	2.463***	0.003	1.052***	0.003
Midwest	7.090***	0.002	7.339***	0.002
West	-0.380***	0.003	-6.556***	0.003
Constant	67.620***	0.013	73.522***	0.014
Adjusted R <sup>2</sup>	0.838		0.794	

\*\*\* $p < 0.001$

When the entropy, or diversity, index is introduced in model 2 of Table 3, the directions of the associations remain the same, with the exception of percent foreign-born (a reversal that could be due to multicollinearity – see Appendix A). All associations remain significant at the 0.001 level. The strength of the associations remain very similar, though the negative associations between income and black-white segregation and the

West and black-white segregation are significantly larger in this model. The diversity index itself is associated with lower segregation, as expected.

Table 4 Metro Area Factors Related to Black-Nonblack Segregation, 2010

	<u>Model 1</u>		<u>Model 2</u>	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<b>Population Size</b>				
Log of Population	1.077***	0.001	1.900***	0.001
<b>Diversity</b>				
Percent Black	0.092***	0.001	-	-
Percent Hispanic	-0.398***	0.001	-	-
Percent Asian	-1.456***	0.001	-	-
Percent Foreign-Born	0.788***	0.001	0.336***	0.001
Entropy Index	-	-	-0.247***	0.001
<b>Metro Population</b>				
Suburbanized Residents	-0.028***	0.001	-0.127***	0.001
Percent Black in Central City	0.001***	0.001	0.016***	0.001
<b>Population Growth, 1990-2010</b>				
Black Minus Nonblack Growth	-0.009***	0.001	-0.005***	0.001
<b>Housing Change and Income</b>				
Housing Built Since 1990	-0.143***	0.001	-0.112***	0.001
B-NB Median Income Ratio	-4.684***	0.005	-7.003***	0.005
<b>Functional Specialization</b>				
Percent Manufacturing	-0.195***	0.001	-0.320***	0.001
Percent Government	-0.268***	0.001	-0.009***	0.001
Percent Military	-1.334***	0.001	-1.280***	0.001
Percent Education	-0.063***	0.001	-0.121***	0.001
<b>Region</b> (Reference = South)				
Northeast	-0.197***	0.003	-1.970***	0.003
Midwest	8.355***	0.002	8.599***	0.003
West	2.530***	0.004	-7.681***	0.003
Constant	66.935***	0.014	76.204***	0.017
Adjusted R <sup>2</sup>	0.805		0.712	

\*\*\* $p < 0.001$

Model 1 of Table 4 shows the associations between the independent variables, excluding the diversity index, and black-nonblack segregation in metropolitan areas. As in the regression analysis for black-white segregation, the relationships between the

variables and black-nonblack segregation are all statistically significant at the 0.001 level, and most of the relationships are very similar to those found in the black-white analysis. Metropolitan areas with larger populations tend to have higher black-nonblack segregation. Percent black is also associated with higher black-nonblack segregation in metropolitan areas (though the effect is quite small), while percent Hispanic and percent Asian are associated with lower black-nonblack segregation (similar to the findings for black-white segregation). Percent foreign born has a positive relationship with black-nonblack segregation, but multicollinearity likely plays a role in this finding as suggested by the VIF value (see Appendix A). Suburbanization has a very small negative relationship with black-nonblack segregation, while percent black in central cities barely has a positive relationship with black-nonblack segregation. Greater black population growth has a negative relationship with black-nonblack segregation, but the association is negligible as it was with black-white segregation. Percent housing change has a small negative relationship with black-nonblack segregation. Income seems to have a larger negative association with black-nonblack segregation than it did with black-white segregation; the higher the median income of blacks in relation to that of nonblack groups, the lower the black-nonblack segregation. The functional specializations again have negative relationships with black-nonblack segregation, with military communities having the largest association, as expected. In a reversal of what was found for black-white segregation, metropolitan areas in the Northeast are associated with lower black-nonblack segregation (South as the reference). On the other hand, the Midwest and West have very strong positive relationships with black-nonblack segregation, especially the Midwest.

When the diversity index is introduced in model 2 of Table 4, most of the independent variables maintain the direction of their respective relationships with black-nonblack segregation, and all of the relationships are statistically significant at the 0.001 level. Although the diversity index is associated with lower black-nonblack segregation, population size has a larger positive association with black-nonblack segregation than it did in model 1. The black-nonblack median income ratio has an even larger negative relationship with black-nonblack segregation. This finding supports the weak version of place stratification, suggesting that blacks with more income tend to live in less segregated areas. Perhaps the most striking change is in the region variables. While the Northeast gains a very large negative relationship with black-nonblack segregation, the West's positive relationship with black-nonblack segregation has completely reversed into a relatively large negative relationship, suggesting that diversity is an important variable to consider when studying segregation in western metropolitan areas.

Model 1 of Table 5 shows the associations between the independent variables, excluding the diversity index, and white-nonwhite segregation in metropolitan areas. All of the associations are statistically significant at the 0.001 level, and many of the relationships are similar in direction and size to those of the black-white and black-nonblack analyses. Population size and white-nonwhite segregation in metropolitan areas have a positive relationship, as does percent black and white-nonwhite segregation. As in the previous regression analyses, percent Hispanic and percent Asian are associated with lower segregation. Percent foreign-born has a positive relationship with white-nonwhite segregation, but multicollinearity could be an issue with this relationship. Suburbanization is associated with lower white-nonwhite segregation (though the effect

is miniscule), and percent black in central cities has a negligible negative relationship with white-nonwhite segregation. White growth is positively related to white-nonwhite segregation. Percent housing change is associated with lower segregation.

Table 5 Metro Area Factors Related to White-Nonwhite Segregation, 2010

	Model 1		Model 2	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Population Size				
Log of Population	0.637***	0.001	1.514***	0.001
Diversity				
Percent Black	0.354***	0.001	-	-
Percent Hispanic	-0.154***	0.001	-	-
Percent Asian	-1.037***	0.001	-	-
Percent Foreign-Born	0.532***	0.001	0.015***	0.001
Entropy Index	-	-	-0.082***	0.001
Metro Population				
Suburbanized Residents	-0.046***	0.001	-0.168***	0.001
Percent Black in Central City	-0.002***	0.001	0.018***	0.001
Population Growth, 1990-2010				
White Minus Nonwhite Growth	0.025***	0.001	-0.172***	0.001
Housing Change and Income				
Housing Built Since 1990	-0.135***	0.001	0.003***	0.001
W-NW Median Income Ratio	-1.229***	0.005	0.597***	0.006
Functional Specialization				
Percent Manufacturing	0.032***	0.001	-0.198***	0.001
Percent Government	-0.345***	0.001	-0.153***	0.001
Percent Military	-1.377***	0.001	-1.454***	0.001
Percent Education	-0.049***	0.001	-0.112***	0.001
Region (Reference = South)				
Northeast	3.170***	0.003	-0.913***	0.003
Midwest	3.592***	0.002	2.095***	0.003
West	3.188***	0.003	-5.847***	0.003
Constant	52.579***	0.017	78.464***	0.020
Adjusted R <sup>2</sup>	0.775		0.630	

\*\*\**p* < 0.001

Interestingly, white-nonwhite median income ratio shows a negative relationship with white-nonwhite segregation in model 1. With the exception of the manufacturing

functional specialization, all functional specializations have a negative relationship with white-nonwhite segregation. As expected, metropolitan areas with a higher percentage of individuals in the military tend to be less segregated than others. Finally, with the South as the reference, all regions have similarly large positive associations with white-nonwhite segregation.

When the diversity index is introduced in model 2 of Table 5, many of the relationships change direction – more so than the previous two regression analyses. All of the relationships are statistically significant at the 0.001 level. The diversity index has a negative relationship with white-nonwhite segregation, but the association is smaller than it was in the black-white and black-nonblack cases. Population size now has a larger positive association with white-nonwhite segregation, while percent foreign-born now has a negligible positive association (and a higher VIF value). Suburbanization has a slightly larger negative effect in the analysis, while black percent in central cities has reversed from a negligible negative relationship to an expected, but negligible, positive relationship with white-nonwhite segregation. Percent housing change changes direction and becomes a negligible factor with diversity in the model, while the white-nonwhite income ratio is now positively related to white-nonwhite segregation, suggesting that some whites with higher income may not prefer living in multiethnic areas. All functional specializations have negative relationships with segregation in model 2, with the military specialization, again, showing a larger effect. Similar to the case with the previous black-nonblack regression analysis, the addition of diversity as a control variable makes a striking difference for the region variables. The Midwest maintains its positive relationship with white-nonwhite segregation, but the Northeast and West now have

negative relationships with white-nonwhite segregation, with the West having a larger association with segregation than it did in model 1.

### **Factors Related to Nonmetropolitan Segregation**

Model 1 of Table 6 presents the associations between the independent variables, excluding the diversity index, and black-white segregation in nonmetropolitan areas. Many of the associations are similar to the findings of Lichter et al. (2007) on black-white nonmetropolitan place segregation in 2000, but there are a few notable exceptions. In contrast to the previous metropolitan analyses in this study and the findings of Lichter et al. (2007) on nonmetropolitan small towns, population size has a negative association with black-white segregation in nonmetropolitan areas. This finding is in line with the proposition that overall population growth can lead to lower racial residential segregation in nonmetropolitan areas (Hwang and Murdock 1983), which has received some support from evidence in nonmetropolitan Texas (Murdock et al. 1994) and in Southern counties across the United States (Allen and Turner 2011). Percent black also has a very small negative association with black-white segregation in nonmetropolitan areas. Allen and Turner (2011) also found that percent black and white-black segregation were negatively related in Southern counties. Perhaps the large black proportion of the South's population and the lower cost of living in nonmetropolitan areas make it more difficult for blacks and whites to maintain patterns of segregation.

Other associations in model 1 of Table 6 are simpler to interpret. Percent Hispanic and percent Asian are associated with lower black-white segregation, similar to the findings in the previous metropolitan analyses. Percent foreign-born is also negatively related to black-white segregation in nonmetropolitan areas, but the association is small.

Percent black in municipalities and black population growth have negligible positive relationships with black-white segregation. As in Lichter et al. (2007), percent housing change, black-white median income ratio, and the functional specializations all have negative relationships with black-white segregation. Nonmetropolitan areas that are adjacent to metropolitan areas tend to have lower black-white segregation, a finding consistent with prior research (Hwang and Murdock 1983). The micropolitan dummy variable is positively associated with black-white segregation, which seems odd given that population size is negatively associated with segregation in the same model (micropolitan areas, by definition, are larger nonmetropolitan areas). The region variables show very different relationships with black-white segregation in nonmetropolitan areas than they did in Lichter et al.'s (2007) study of small towns. With the South as a reference, all of the region variables are associated with higher black-white segregation in nonmetropolitan areas, especially the Northeast.

Table 6 Nonmetro Area Factors Related to Black-White Segregation, 2010

	<u>Model 1</u>		<u>Model 2</u>	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Population Size				
Log of Population	-1.397***	0.007	-0.690***	0.007
Diversity				
Percent Black	-0.096***	0.001	-	-
Percent Hispanic	-0.020***	0.001	-	-
Percent Asian	-3.657***	0.009	-	-
Percent Foreign-Born	-0.153***	0.002	0.299***	0.001
Entropy Index	-	-	-0.224***	0.001
Nonmetro Population				
Percent Black in Municipalities	0.029***	0.001	0.021***	0.001
Population Growth, 1990-2010				
Black Minus White Growth	0.005***	0.001	0.005***	0.001
Housing Change and Income				
Housing Built Since 1990	-0.097***	0.001	-0.103***	0.001
B-W Median Income Ratio	-3.334***	0.024	-3.745***	0.023
Functional Specialization				
Percent Manufacturing	-0.186***	0.001	-0.163***	0.001
Percent Government	-0.381***	0.001	-0.369***	0.001
Percent Military	-1.508***	0.002	-0.994***	0.002
Percent Education	-0.036***	0.001	-0.079***	0.001
Region				
(Reference = South)				
Northeast	9.621***	0.027	5.411***	0.028
Midwest	2.351***	0.016	-0.182***	0.017
West	3.736***	0.049	1.432***	0.048
Location				
Adjacent to Metro Area	-1.508***	0.008	-1.399***	0.008
Micropolitan Area (Dummy)	0.351***	0.010	-0.851***	0.010
Constant	99.015***	0.076	99.378***	0.074
Adjusted R <sup>2</sup>	0.415		0.416	

\*\*\* $p < 0.001$

When the diversity index is introduced in model 2 of Table 6, the directions of the associations remain largely the same, and all of the associations are statistically significant at the 0.001 level. The diversity index is negatively related to black-white segregation in nonmetropolitan areas, though the association is slightly larger than it was

in the metropolitan black-white analysis. Percent foreign-born is now positively associated with black-white segregation in nonmetropolitan areas, consistent with spatial assimilation theory, and the micropolitan variable now shows a negative relationship with segregation. The other associations remain very similar, but the region variables now show some notable differences in their relationships with black-white segregation (with South as the reference). Both the Northeast and the West are still associated with higher segregation, but the size of each relationship has been reduced. Interestingly, nonmetropolitan areas in the Midwest now show a small negative relationship with black-white segregation.

Model 1 of Table 7 shows the associations of the independent variables, excluding the diversity index, and black-nonblack segregation in nonmetropolitan areas. The results are remarkably similar to those of the black-white analysis above, and all of the associations are statistically significant at the 0.001 level. Population size has a negative relationship with black-nonblack segregation in nonmetropolitan areas. Percent black, percent Hispanic, percent Asian, and percent foreign-born also have negative relationships with black-nonblack segregation. Percent black in municipalities and higher black population growth have positive but negligible relationships with black-nonblack segregation in nonmetropolitan areas. Percent housing change is associated with lower black-nonblack segregation. In contrast to the findings in all previous analyses, the black-nonblack median income ratio is positively related to black-nonblack segregation in nonmetropolitan areas. This finding might suggest that blacks with higher income are either less able or prefer not to move into some integrated areas in nonmetropolitan America. As expected, the functional specializations have negative relationships with

black-nonblack segregation. Nonmetropolitan areas adjacent to metropolitan areas are less segregated along the black-nonblack color line, but the micropolitan variable is positively associated with black-nonblack segregation. As in model 1 of the black-white nonmetropolitan analysis, the region variables (with the South as the reference) are all associated with higher black-nonblack segregation, especially the Northeast.

Table 7 Nonmetro Area Factors Related to Black-Nonblack Segregation, 2010

	Model 1		Model 2	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Population Size				
Log of Population	-1.589***	0.007	-0.808***	0.007
Diversity				
Percent Black	-0.101***	0.001	-	-
Percent Hispanic	-0.089***	0.001	-	-
Percent Asian	-3.814***	0.010	-	-
Percent Foreign-Born	-0.347***	0.002	-0.007***	0.001
Entropy Index	-		-0.237***	0.001
Nonmetro Population				
Percent Black in Municipalities	0.032***	0.001	0.023***	0.001
Population Growth, 1990-2010				
Black Minus Nonblack Growth	0.005***	0.001	0.005***	0.001
Housing Change and Income				
Housing Built Since 1990	-0.102***	0.001	-0.105***	0.001
B-NB Median Income Ratio	0.619***	0.013	1.116***	0.013
Functional Specialization				
Percent Manufacturing	-0.220***	0.001	-0.195***	0.001
Percent Government	-0.450***	0.001	-0.440***	0.001
Percent Military	-0.839***	0.002	-1.047***	0.002
Percent Education	-0.029***	0.001	-0.072***	0.001
Region				
(Reference = South)				
Northeast	8.899***	0.028	4.469***	0.029
Midwest	2.116***	0.017	-0.703***	0.017
West	4.015***	0.051	0.664***	0.050
Location				
Adjacent to Metro Area	-1.804***	0.009	-1.399***	0.009
Micropolitan Area (Dummy)	0.435***	0.011	-0.798***	0.010
Constant	98.800***	0.078	98.278***	0.075
Adjusted R <sup>2</sup>	0.436		0.442	

\*\*\**p* < 0.001

When the diversity index is introduced in model 2 of Table 7, the directions of almost all associations remain the same, and the associations are statistically significant at the 0.001 level. The diversity index is negatively related to black-nonblack nonmetropolitan segregation, as is population size. Percent foreign-born now has a negligible negative relationship with black-nonblack segregation. The positive relationship between black-nonblack income ratio and segregation remains. The notable difference between models 1 and 2 is in the micropolitan and region variables. The micropolitan variable shows a negative relationship with black-nonblack segregation when diversity is controlled. While the Northeast and West are still associated with higher black-nonblack segregation, the associations have weakened considerably in model 2. However, the West now shows a negative relationship with segregation (similar to the case in model 2 of the black-white nonmetropolitan analysis).

Table 8 Nonmetro Area Factors Related to White-Nonwhite Segregation, 2010

	<u>Model 1</u>		<u>Model 2</u>	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Population Size				
Log of Population	-1.098***	0.007	-0.889***	0.007
Diversity				
Percent Black	0.066***	0.001	-	-
Percent Hispanic	-0.342***	0.001	-	-
Percent Asian	-4.237***	0.010	-	-
Percent Foreign-Born	0.014***	0.002	-1.007***	0.001
Entropy Index	-	-	0.044***	0.001
Nonmetro Population				
Percent Black in Municipalities	0.016***	0.001	-0.007***	0.001
Population Growth, 1990-2010				
White Minus Nonwhite Growth	-0.067***	0.001	-0.128***	0.001
Housing Change and Income				
Housing Built Since 1990	-0.015***	0.001	0.032***	0.001
W-NW Median Income Ratio	1.218***	0.009	0.944***	0.009
Functional Specialization				
Percent Manufacturing	-0.131***	0.001	-0.103***	0.001
Percent Government	-0.376***	0.001	-0.343***	0.001
Percent Military	-0.583***	0.002	-1.011***	0.002
Percent Education	-0.022***	0.001	-0.058***	0.001
Region (Reference = South)				
Northeast	6.402***	0.028	6.318***	0.030
Midwest	0.380***	0.016	-0.038***	0.018
West	0.138**	0.044	-6.136**	0.044
Location				
Adjacent to Metro Area	-2.062***	0.009	-2.510***	0.009
Micropolitan Area (Dummy)	-0.414***	0.011	-1.090***	0.011
Constant	88.837***	0.094	93.469***	0.085
Adjusted R <sup>2</sup>	0.466		0.412	

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$

Model 1 of Table 8 shows the associations of the independent variables, excluding the diversity index, and white-nonwhite segregation in nonmetropolitan areas. All of the relationships are statistically significant at the 0.001 level, with the exception of the West region variable, which is significant at the 0.01 level. Unlike the case in the

white-nonwhite analysis of metropolitan areas, population size has a negative relationship with white-nonwhite segregation. In line with the white-nonwhite metropolitan findings, however, percent black has a positive, though small, relationship with white-nonwhite segregation in nonmetropolitan areas. Percent Hispanic and percent Asian have negative relationships with segregation (similar to what has been found in every previous analysis of this study). Percent foreign-born and percent black in municipalities have negligible positive relationships with white-nonwhite segregation, as does white population growth. White-nonwhite median income ratio has a positive relationship with segregation in nonmetropolitan areas, similar to the findings of the white-nonwhite metropolitan analysis. The functional specializations have expected negative relationships with segregation. Nonmetropolitan areas adjacent to metropolitan areas tend to have lower white-nonwhite segregation, as do nonmetropolitan areas that are classified as micropolitan areas. The region variables (with the South as the reference) are associated with higher segregation, though the associations are not as large as they were in the black-white and black-nonblack nonmetropolitan analyses.

When the diversity index is introduced in model 2 of Table 8, many of the associations change directions, though multicollinearity does not appear to be an issue (see Appendix A for VIF values). All of the relationships are statistically significant at the 0.001 level, with the exception of the Midwest region variable, which is significant at the 0.05 level. The diversity index has a negligible positive relationship with white-nonwhite segregation in nonmetropolitan areas. Percent foreign-born is now negatively related to white-nonwhite segregation. Percent housing change now has a small positive relationship with white-nonwhite segregation. The functional specializations are still

negatively associated with white-nonwhite segregation. While the Northeast variable has maintained its positive relationship with segregation, the Midwest's association has gone in the opposite direction, though the effect is small. The West, however, now shows a strikingly negative relationship with white-nonwhite segregation in nonmetropolitan areas, which is similar to the findings in all of the metropolitan models with diversity controlled.

## CHAPTER VI

### CONCLUSION

The goal of this study was to examine racial residential segregation in U.S. metropolitan and nonmetropolitan areas. The study was driven by the concept of a color line – an invisible but powerful social barrier between racial groups that can manifest itself via residential patterns. Throughout the majority of U.S. history, blacks and whites have been the main components of the dominant color line in society, but the persistent immigration of Hispanics and Asians, as well as other demographic factors, from the last several decades has created a more complex picture. Three broad theoretical perspectives – black exceptionalism, multiculturalism, and the tri-racial order – shed light on how population shifts of whites, blacks, Hispanics, and Asians might impact race relations in the United States. These considerations led to a broad question: is the historical black-white color line being replaced by a black-nonblack or white-nonwhite color line?

The study used block-level Census data and the dissimilarity index to answer this question. The results clearly indicate that although evidence exists for all three of these color lines (Lee and Bean 2010), black-white segregation is still the most salient pattern in 2010, whether it is compared to black-nonblack or white-nonwhite segregation in metropolitan areas, nonmetropolitan areas, or the United States as a whole. This finding was the same with unweighted numbers and numbers weighted by the black (or white) population.

However, the results also show that black-nonblack segregation, while slightly lower than black-white segregation, is several points higher than white-nonwhite segregation. Do these patterns of residential segregation reflect black exceptionalism? Possibly, but based on the results of this study, black exceptionalism arguably best describes the stubborn divide between whites and blacks, as whites show less segregation from Hispanics and Asians (Logan and Stults 2011). Parisi et al. (2011) show evidence of black exceptionalism in multiple patterns of segregation in 2000 but also indicate that national segregation scores can be influenced by multiple scales of geography. This study did not consider every such scale or every possible pattern of segregation; thus, any conclusion based on this study's findings must be cautious in declaring outright black exceptionalism. At the same time, the results of this study illustrate that whites are less segregated from other groups than blacks, on average. In terms of social and economic opportunities via residential location, perhaps whites and other groups tend to benefit more than blacks from multiculturalism, which seems to imply a form of black exceptionalism.

The results of this study also show that tract-level data might underestimate segregation, as suggested by other research (Allen and Turner 2011; Lichter et al. 2007). At the block level, this study shows that the average black-white dissimilarity score in 2010 for metropolitan areas was 67 (71 if weighted by the black population). In contrast, Logan and Stults (2011) found that the average black-white dissimilarity score in metropolitan areas was 59 in 2010 at the tract level. In the appendix to their study, they warn that tract-level segregation averages in metropolitan areas with smaller populations should be interpreted cautiously. Moreover, the current study's 2010 weighted average

black-nonblack (66) and weighted average white-nonwhite segregation (60) in metropolitan areas are noticeably higher than the tract-level numbers (55 and 45, respectively) reported in Iceland and Sharp (2013). Block-level numbers seem to account for more detailed patterns of residential segregation.

This study also reveals some differences in segregation patterns between metropolitan and nonmetropolitan areas. According to the unweighted numbers, black-white, black-nonblack, and white-nonwhite segregation patterns are moderately higher in nonmetropolitan areas, while declines in segregation between 1990 and 2010 for metropolitan and nonmetropolitan areas are quite similar. Interestingly, when black-white and black-nonblack segregation averages are weighted by the black population, the metropolitan and nonmetropolitan scores tend to equalize. Specifically, average black-white segregation is slightly higher in metropolitan areas, while average black-nonblack segregation is slightly higher in nonmetropolitan areas. White-nonwhite scores weighted by the white population still show higher segregation in nonmetropolitan areas, but the metropolitan-nonmetropolitan gap narrows by a few points, which are not significant in a substantive sense. These weighted scores indicate that blacks and whites tend to be similarly residentially segregated in metropolitan and nonmetropolitan areas.

The most important finding from the metropolitan and nonmetropolitan comparison is that almost every score shows high segregation, according to Massey and Denton's (1993) classification. The modest 1990-2010 declines in black-white, black-nonblack, and white-nonwhite segregation in both metropolitan and nonmetropolitan areas suggest that the color lines are quite resilient even though they may have weakened in recent years. These residential patterns suggest that metropolitan and nonmetropolitan

racial groups still have significantly different access to jobs, schools, and other opportunities.

On the other hand, the results of the multivariate analysis show that metropolitan and nonmetropolitan segregation can have different relationships with independent variables. Population size tends to be associated with higher segregation in metropolitan areas and lower segregation in nonmetropolitan areas. This finding seems to support the theoretical idea that overall population growth can transform a rigid nonmetropolitan structure that fosters racial residential segregation (Hwang and Murdock 1983). Also, in contrast to the case for metropolitan areas, this study shows that percent black in nonmetropolitan areas tends to have a negative, though quite small, relationship with black-white and black-nonblack segregation.

While higher black median income tends to translate into lower black-white segregation in both metropolitan and nonmetropolitan areas, it has a negative relationship and a positive relationship with black-nonblack segregation in metropolitan and nonmetropolitan areas, respectively. This finding might suggest that higher-income blacks are less able or choose not to live in nonmetropolitan areas with other minorities. On the other hand, perhaps blacks and other minorities simply concentrate in different nonmetropolitan areas based on network ties. More research is needed on residential preferences in nonmetropolitan areas.

The region variables show that metropolitan areas in the West tend to be the least segregated. Moreover, metropolitan areas in the Northeast and West tend to be associated with less black-nonblack and white-nonwhite segregation when the diversity index is added to the model and the percent minority population variables are removed.

Nonmetropolitan areas in the South tend to be less segregated. But when diversity is added to and the percent minority population variables are excluded from the nonmetropolitan models, black-white and black-nonblack segregation are lower in the Midwest than in the South, and white-nonwhite segregation has a relatively large relationship with the West in nonmetropolitan areas. Since segregation tends to drop more consistently and dramatically in the metropolitan Northeast and West when diversity is controlled, diversity and percent minority population share seem to matter even more in metropolitan areas. Clearly, scholars should continue to examine diversity as a significant factor in residential segregation patterns while accounting for minority population shares.

This study is the first to compare metropolitan and nonmetropolitan dissimilarity scores of black-nonblack and white-nonwhite segregation, two color lines that have received much attention in the recent literature. The metropolitan/nonmetropolitan comparisons do not matter, however, if the importance of nonmetropolitan research is dismissed. Such a stance would not be new; even after nonmetropolitan data were made available by the Census Bureau, the majority of residential segregation studies focused on metropolitan areas. The importance of studying metropolitan areas is not an issue but, rather, a standard. The popular American idea that “Size matters” might speak to the greater attention given to metropolitan areas. But this approach has limitations from a scientific standpoint.

A color line in the United States can affect any group of people anywhere, whether in the most diverse city in the country or an unincorporated area that might have one gas station. Following this fact, when this study asked the question about which color

line is the most dominant in the United States, both metropolitan and nonmetropolitan areas had to be considered. The size of a geographic area does not make it more or less important for scientific evaluation. To argue otherwise is akin to a biologist ignoring parts of the human body because they are smaller. Like the biologist that accounts for every part of the body, sociologists are capable of adopting an unending curiosity in the examination of segregation within all geographic units, whether metropolitan or nonmetropolitan.

Big areas can only grow so big. Minority population size is indeed greater in metropolitan areas, but minority population growth is surging and transforming what everyone thought they knew about nonmetropolitan areas. Lichter (2012:6) argues that just as Chicago in the 1920s and 1930s “provided a scientific laboratory for uncovering empirically the putative negative effects (e.g., anonymity, anomie, impersonal relationships) of rapid urbanization spawned by in-migration of foreign-born [groups],” the same can be said for nonmetropolitan areas that are currently experiencing rapid minority population growth. Hispanic immigration has already changed many nonmetropolitan places in the Midwest and South. How will Hispanic immigration change other places that it has not yet reached? Will a new stream of immigrants, perhaps from Asia, start settling in other nonmetropolitan areas during the 2010s or beyond? The possibility is certainly not out of the question, and sociologists should keep a close eye on these developments and the racial residential patterns that may or may not come with them. The black-white divide, for example, might remain dominant in metropolitan areas, but a different color line could eventually dominate nonmetropolitan areas.

How will increasing population and diversity in nonmetropolitan areas affect racial residential segregation of all groups in the far future? If “white flight” is still a major factor in residential segregation, many whites may not be able to fly forever. That fact can apply to any household, regardless of color or background, uncomfortable with neighbors of different appearances and cultures. Location is a resource that people guard (Logan and Alba 1993), but as expansive as it is, the United States has limited space. Eventually, racial groups will either start living among each other more often (Logan and Zhang 2010), or class will become the new dominant marker of residential segregation, as theorized by Massey et al. (2009). The steady decline of racial residential segregation shown in this study and in the larger literature seems to suggest it is only a matter of time. Most importantly, developments in metropolitan *and* nonmetropolitan areas will play an important role in how residential patterns transform in the next several decades.

This study is but a small step in evaluating the state of racial residential segregation for the entire U.S. body. Because residential segregation is more complex than ever, this study’s broad and descriptive nature has several limitations. The first limitation involves the color line itself. Essentially, research that concentrates on residential segregation argues that “America’s changing color line is perhaps best expressed in shifting patterns of neighborhood residential segregation” (Parisi et al. 2011:2), “perhaps” being the key word. Residential integration may not indicate “whitening,” for example, as minority groups can face discrimination of many forms that do not merely reflect choice of residence (O’Brien 2008). America’s color line can also be expressed through internal and external racial classification, intermarriage rates, and friendship ties, to name a few relevant concepts (Lee and Bean 2010). Scholars who

focus on residential segregation might argue that residential patterns can influence these concepts, but these concepts can also influence residential segregation. Therefore, any color line in the United States is multidimensional and cannot be fully understood by studying residential segregation or any single variable alone.

Second, racial residential segregation itself is a multidimensional concept. This study focuses on evenness, measured by the index of dissimilarity, for reasons related to computation, interpretation, and consistency, but the other dimensions, such as exposure, can deliver different insights into racial residential segregation (Massey and Denton 1988b). Other scholars (Johnson et al. 2007) have attempted to redefine the traditional five dimensions to increase our understanding of how segregation affects racial groups.

Third, to identify the dominant color line in both U.S. metropolitan and nonmetropolitan areas, this study broadly defines racial groups as black, white, nonblack, and nonwhite. At the same time, this type of classification misses the incredible diversity of racial groups in the country. At the very least, this study does not specifically examine the residential segregation of two large racial groups: Hispanics and Asians. But even if the segregation of these groups had been examined, broad racial categories would still conceal a great amount of diversity within these groups that can have important insight for segregation studies. After all, segmented assimilation has been helpful in explaining the divergent mobility patterns of Hispanic subgroups (South et al. 2005a). Kim and White (2010) also indicate that subgroups within the broad Asian category show significant variation in residential patterns. Furthermore, the Census Bureau now allows individuals to classify themselves as multiracial. As Lee and Bean (2010) demonstrate, different multiracial people face different barriers. A compelling example is that while

multiracial Asians have more freedom to identify as “white,” some ethnic Asian groups may discriminate against multiracial Asian children. In contrast, cultural reproduction of the one-drop rule makes it extremely difficult for multiracial blacks to identify as anything other than “black,” but blacks tend to be very receptive of multiracial blacks (Lee and Bean 2010), which leaves strategic assimilation as an option for success (Lacy 2004). The growing recognition of multiracial individuals in U.S. society will continue to demand more attention from sociologists, including those who study residential segregation.

Fourth, the independent variables in this analysis are ecological and therefore may not necessarily capture behavioral factors that affect the residential segregation of groups. Residential preferences and avoidance of other groups can only be assumed when an ecological variable has a significant relationship with residential segregation. For example, metropolitan areas with higher percentages of blacks might be associated with higher segregation in a regression model, but one can only speculate that this finding means that whites make conscious choices to avoid metropolitan areas with higher percentages of blacks. Hence, there is a need for qualitative or ethnographic case-study research.

Fifth, and finally, this study did not analyze factors associated with changes in residential segregation between 1990 and 2010. This study is thus essentially a snapshot of the dominant color line in 2010. A longitudinal analysis could indicate whether, for example, diversity played more of a role in metropolitan segregation declines as opposed to nonmetropolitan declines.

Based on the results of the last two Presidential elections, the United States might be moving toward multiculturalism faster than what many might have predicted or, according to some sentiments, preferred. At the same time, President Obama's two terms could be interpreted by some as the beginning of a post-racial era, which Bonilla-Silva (2004) would describe as an effort to uphold white dominance. Ultimately, the politics of our time can only elucidate so much about racial dynamics. The idea that physical distance provides insight into social distance remains a key theoretical contribution from the field of sociology and a relatively reliable way to gauge progress in U.S. race relations. However, scholarly attention must be paid to all geographic areas, no matter the size, to assess what the country as a whole is truly experiencing in terms of a given color line. Otherwise, significant developments in diversity, avoidance, and integration could be lost to future generations of social scientists.

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APPENDIX A

MULTICOLLINEARITY TEST: VARIANCE INFLATION FACTOR (VIF) VALUES

Table 9 VIF Values for Black-White Metropolitan Analysis

	Model 1	Model 2
Log of Population	4.67	4.65
Percent Black	3.56	-
Percent Hispanic	7.46	-
Percent Asian	6.85	-
Percent Foreign-Born	15.54	7.96
Entropy Index	-	5.39
Suburbanized Residents	4.59	3.30
Percent Black in Central City	1.97	1.93
Black Minus White Growth	1.89	1.83
Housing Built Since 1990	3.49	2.89
B-W Median Income Ratio	1.57	1.44
Percent Manufacturing	3.03	2.98
Percent Government	2.42	2.22
Percent Military	1.55	1.56
Percent Education	1.61	1.50
Northeast	3.78	2.91
Midwest	2.69	2.59
West	2.95	1.81

Table 10 VIF Values for Black-Nonblack Metropolitan Analysis

	Model 1	Model 2
Log of Population	4.03	4.14
Percent Black	3.32	-
Percent Hispanic	7.42	-
Percent Asian	6.67	-
Percent Foreign-Born	15.14	7.61
Entropy Index	-	5.28
Suburbanized Residents	4.43	3.28
Percent Black in Central City	2.00	1.97
Black Minus Nonblack Growth	2.60	2.59
Housing Built Since 1990	4.23	3.69
B-NB Median Income Ratio	1.33	1.28
Percent Manufacturing	3.04	3.00
Percent Government	2.36	2.18
Percent Military	1.54	1.55
Percent Education	1.60	1.49
Northeast	3.74	2.93
Midwest	2.62	2.49
West	2.91	1.81

Table 11 VIF Values for White-Nonwhite Metropolitan Analysis

	Model 1	Model 2
Log of Population	4.13	4.17
Percent Black	3.96	-
Percent Hispanic	7.40	-
Percent Asian	7.13	-
Percent Foreign-Born	19.25	10.26
Entropy Index	-	5.11
Suburbanized Residents	4.39	3.39
Percent Black in Central City	1.92	1.90
White Minus Nonwhite Growth	7.44	5.23
Housing Built Since 1990	10.61	7.26
W-NW Median Income Ratio	1.48	1.44
Percent Manufacturing	3.11	3.00
Percent Government	2.27	2.13
Percent Military	1.53	1.55
Percent Education	1.61	1.51
Northeast	3.79	2.93
Midwest	2.86	2.67
West	3.05	1.72

Table 12 VIF Values for Black-White Nonmetropolitan Analysis

	Model 1	Model 2
Log of Population	2.56	2.48
Percent Black	2.22	-
Percent Hispanic	4.00	-
Percent Asian	2.06	-
Percent Foreign-Born	4.19	1.68
Entropy Index	-	2.19
Percent Black in Municipalities	1.77	1.57
Black Minus White Growth	1.09	1.09
Housing Built Since 1990	1.95	1.60
B-W Median Income Ratio	1.40	1.32
Percent Manufacturing	1.32	1.30
Percent Government	1.54	1.53
Percent Military	1.50	1.27
Percent Education	1.53	1.31
Northeast	1.23	1.32
Midwest	1.39	1.53
West	1.13	1.08
Adjacent to Metro Area	1.11	1.10
Micropolitan Area (Dummy)	2.79	2.66

Table 13 VIF Values for Black-Nonblack Nonmetropolitan Analysis

	Model 1	Model 2
Log of Population	2.56	2.46
Percent Black	1.97	-
Percent Hispanic	3.99	-
Percent Asian	2.06	-
Percent Foreign-Born	4.19	1.66
Entropy Index	-	2.01
Percent Black in Municipalities	1.73	1.55
Black Minus Nonblack Growth	1.09	1.09
Housing Built Since 1990	1.95	1.61
B-NB Median Income Ratio	1.11	1.08
Percent Manufacturing	1.32	1.30
Percent Government	1.52	1.52
Percent Military	1.48	1.24
Percent Education	1.51	1.30
Northeast	1.23	1.32
Midwest	1.38	1.53
West	1.13	1.08
Adjacent to Metro Area	1.10	1.10
Micropolitan Area (Dummy)	2.80	2.66

Table 14 VIF Values for White-Nonwhite Nonmetropolitan Analysis

	Model 1	Model 2
Log of Population	2.57	2.49
Percent Black	3.38	-
Percent Hispanic	3.97	-
Percent Asian	2.05	-
Percent Foreign-Born	4.16	1.62
Entropy Index	-	2.14
Percent Black in Municipalities	1.71	1.51
White Minus Nonwhite Growth	8.68	5.07
Housing Built Since 1990	7.17	5.62
W-NW Median Income Ratio	1.05	1.06
Percent Manufacturing	1.36	1.34
Percent Government	1.58	1.54
Percent Military	1.46	1.23
Percent Education	1.53	1.31
Northeast	1.22	1.29
Midwest	1.35	1.50
West	1.15	1.08
Adjacent to Metro Area	1.10	1.10
Micropolitan Area (Dummy)	2.78	2.69