Shifting Geographies: Examining the Role of Suburbanization in Black's Declining Segregation

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Abstract

Declines in the residential segregation of blacks in most metropolitan areas over the past thirty years have been widely noted. Over the same time period, blacks have been moving to the suburbs at a rate unsurpassed by any other group. This paper explores the relationship between black shifts to the suburbs and metropolitan segregation using the entropy index, which allows segregation to be decomposed into parts accounted for by within suburb, within city, and between suburb and city components. This method reveals that much of the decline in metropolitan segregation of blacks from others is due to declining central city segregation; suburban segregation has much lower average declines. Furthermore, a growing proportion of black/other segregation is explained by residential distributions *within* the suburbs. Uneven distributions of blacks across city lines account for nearly a third of black/other segregation in Midwest and Northeast in 2000. In the West, within suburban sorting is by far the most important component of metropolitan segregation of blacks from others, while in the South within city and within suburb sorting are relatively equal in importance.

Many studies of segregation have now noted the continued average declines in black-white segregation from 1980 to 2000 (Adelman 2004; Charles 2003; Farley and Frey 1994; Fischer 2003; Iceland 2004; Iceland and Weinberg 2002; Logan, Stults, and Farley 2004). What is less well known is *why* these declines have occurred. Logan and colleagues (2004) review the four main explanations to explain segregation declines: changes in the racial attitudes of whites, growth of a black middle class, regional population shifts, and increased metropolitan racial and ethnic diversity. To this list I add a fifth related factor, the growing suburbanization of African-Americans.

Although under-represented in the suburbs, blacks have outpaced other groups in their rate of their suburbanization especially during the 1990s; and we know from previous work that blacks tend to experience lower levels of segregation in the suburbs than in central cities (Adelman 2004; Alba, Logan, and Stults 2000; Charles 2003; Massey and Denton 1988; Massey and Fischer 1999; Pattillo 2005; Timberlake 2002). Given these facts, to what extent does the increased suburbanization of black explain decreases in residential segregation? This paper takes advantage of the decompositional properties of the entropy index to explore this question. By partitioning the segregation of blacks from others into within-city, within-suburb, and between city and suburb elements over the past thirty years, it is possible to see the extent to which each of these elements has changed in its relative importance in explaining metropolitan levels of segregation.

Blacks and Suburbanization

In the post Civil War South, the majority of blacks lived in the 'suburbs', rural areas on the outskirts of cities in which agriculture was their primary employment (Tolnay 2003; Wiese

2004). As the South entered the 20th century and became more industrialized, many blacks remained in these suburban locales. Wiese (2004) reports that prior to World War II, southern blacks commonly lived in densely settled communities on the urban fringe that were also home to working class whites. Prior to the 20th century, there is little evidence of white attempts at racial exclusion.

This situation began to change around the time of the Great Migration in the 1910s. Racial zoning ordinances were passed to prohibit blacks from residing in specified areas and private real estate covenants and deed restrictions were endorsed by the 1910 Convention of City Planners (Wiese 2004). Although racial zoning was declared unconstitutional by the Supreme Court in 1917, exclusionary real estate practices such as deed restrictions and covenants were in common use by the 1920s and continued to be used for nearly two decades hence[1]. Racial boundaries were drawn even more firmly with the post-World War II suburban boom, in which resources were systematically directed away from central cities towards the suburbs while black home-seekers were directed away from the suburbs.

Discrimination during the post-World War II time period was anything but subtle. Actions included homeowner's residential covenants restricting the sale of homes to blacks (and sometimes other groups, such as Asians), mortgage practices such as red-lining which restricted loans to white, suburban areas, and direct discrimination against black home-seekers by realtors (Jackson 1985; Massey and Denton 1993; Tolnay 2003; Yinger 1995). Understandably, the pace of black suburbanization was much slower than that of whites, but a black presence in the suburbs was slowly growing (Farley 1970; Guest 1978). This growing suburban presence was accompanied by emerging patterns of racial segregation from whites mirroring those found in

[1] The Supreme Court ruled in the 1948 case of Shelly v. Kraemer that such covenants were unenforceable.

central cities (Farley 1970). By the time discrimination in housing was made illegal with the Fair Housing Act of 1968, the physical separation of blacks from whites was firmly entrenched.

Although discrimination did not end with the passage of fair housing legislation, there is evidence that housing discrimination has been declining over time (see Turner, Ross, Galster, and Yinger 2002 for recent results from national housing audit studies). Decreased discrimination against blacks in housing and employment combined with increased access to higher education through affirmative action (Bowen and Bok 1998; Nettles, Perna, and Millett 1998(2000)) has resulted in a growing black middle class that has been rapidly establishing a suburban presence over the past several decades (Logan and Schneider 1984; Pattillo-McCoy 2000; Pattillo 2005; Wiese 2004). Has this suburbanization helped to erode the spatial separation blacks have experienced from other groups?

Suburbanization and Segregation

Blacks who have made the leap to suburban living still experience much higher levels of segregation than do other groups, but these levels of segregation tend to be lower than those experienced by their inner city counterparts (Adelman 2004; Alba, Logan, and Stults 2000; Charles 2003; Massey and Denton 1988; Massey and Fischer 1999; Pattillo 2005; Timberlake 2002). It is unclear from previous research whether the increasing suburbanization of blacks would result in declines in their overall levels of segregation in the metropolis. On the one hand, increasing black presence in the suburbs might temporarily result in a drop in metropolitan segregation simply because segregation levels are lower in the suburbs. Likewise, greater contact with blacks in the suburbs could lower levels of prejudice by exposing whites to African

Americans of similar status, a possibility that is consistent with attitudinal research suggesting a growing tolerance among whites for racial diversity within neighborhoods (Charles 2003).

On the other hand, if the black presence in the suburbs becomes too great, it may trigger efforts by whites to enforce spatial separation to maintain low levels of contact with blacks. Massey and colleagues proposed that once the proportion black reached some threshold which exceeded white's tolerance for contact (estimated from survey data to be about 5% black), segregation would increase (Massey and Denton 1993; Massey and Gross 1991). Massey and Gross (1991) tested this assertion, finding that in the face of substantial declines in segregation as measured by the dissimilarity index there had been relatively small increases in black/white contact as measured by the P* in these same metropolitan areas. More recently, Krivo and Kaufman (1999) have extended this line of research to look for threshold effects in a multi-ethnic context, finding further evidence that whites have a limited tolerance for sharing residential space with blacks. Although the focus of these studies is on metropolitan wide segregation, it is plausible that a similar process could occur within the suburbs.

What does the evidence show? To my knowledge there has been no direct examination of the extent to which black suburbanization is related to black residential segregation, although there are several examples of studies that compare levels of segregation in central cities and suburbs. The most closely related research simply compares levels of segregation in central cities and suburbs. Massey and Denton (1988) take this approach to examine trends in the suburbanization and segregation of blacks, Hispanics, and Asians from whites during the 1970s. Compared to other minority groups, blacks are uniquely segregated and this segregation from non-Hispanic whites is reduced only slightly for those residing in suburban locales (Massey and Denton 1988). This same basic pattern was found by Massey and Fischer (1999) in the 1990

census and Logan reports that for 2000, the segregation of minorities from whites in the suburbs of major metropolitan areas remained virtually unchanged from 1990 (2001). Other researchers using this approach have also reported lower average levels of segregation from whites experienced by blacks in the suburbs relative to their central city counterparts (Adelman 2004; Denton and Massey 1988; Logan 2001; Massey and Fischer 1999; Timberlake 2002).

Research more tangential to the issue of this paper looks at the relationship between suburbanization and black segregation using the percent of a group living in the suburbs as an independent variable in regression models. Alba, Logan, and Stults (2000) find that suburban location increases neighborhood exposure to whites for the black residents of Chicago, Cleveland, and Detroit relative to their central city counterparts. Using more recent data from the 2000 census, Logan and colleagues (2004) run regression models to examine factors associated with segregation of minority groups from non-Hispanic whites, including the percent of the minority group located in the suburban ring. They find that greater black presence in the suburbs is associated with small but statistically significant increases in black/white segregation (Logan, Stults, and Farley 2004). This finding is consistent with the hypothesis stated above---that lower segregation in the suburbs mainly follows from the fact minority percentages fall within white's tolerance limits for minority contact. But this analysis was not set up as a test of this hypothesis since the only dependent variable examined is metropolitan wide segregation and there is no account of actual population movements.

None of the above approaches can adequately address the extent to which suburbanization over the past thirty years is related to wide-spread declines in black segregation. Although calculating indexes separately for each level of geography does a good job of illustrating differences in segregation across levels of geography, it does not reveal how much

each element contributes to metropolitan-wide segregation. Likewise, regression methods simply show us how much population increases in the suburbs are correlated with changes in segregation, but this approach is not based on actual distributions of households across city and suburban lines. To examine the impact of black suburbanization on metropolitan shifts in segregation directly, it is necessary to partition segregation into its constituent elements in order to account for changes in how much suburban residential distributions contribute to metropolitan segregation. This paper accomplishes this goal using the entropy index of segregation (described in detail below), which allows for the decomposition of segregation by different levels of geography and by different combinations of groups.

Data and Methods

The analyses in this paper are based on 1980, 1990, and 2000 tract level data standardized to 2000 tract boundaries extracted from the Geolytics Neighborhood Change CD, with tract level central city indicators appended to this dataset. Following the U.S. Census Bureau, suburban locations are defined as tracts lying within the metropolitan boundaries but outside of the central city core. The urban areas employed in this paper include independent and primary metropolitan areas (MSAs and PMSAs), which I limit to those that had at least 50,000 residents in1980, had at least 2500 black residents in 1980, and had both central city and suburban elements in 2000. This results in a final set of 219 metropolitan areas. Race and Hispanic ethnicity are measured by person level counts at the tract level of residents by the race and Hispanic ethnicity self-identified on the census form. Because Hispanics can be of any race, they are excluded from the race counts used in this paper making the race/ethnicity categories used in this paper mutually exclusive. The main focus of this paper is to measure the extent to which black segregation has changed over time and across city lines. Therefore the major

comparisons that will be examined will be between blacks and all other groups (whites, Hispanics, Asians, and all others) and between blacks and non-Hispanic whites (for greater comparability with previous research).

Measuring Segregation

Theil's (1972) entropy index of segregation (*H*) is used to measure residential segregation because of several advantages it holds over more commonly used measures of segregation such as indices of dissimilarity and exposure. Like the dissimilarity index, it is a measure of evenness which compares the distribution of groups in each tract to the representation of those groups in the metropolitan area as a whole. Unlike the dissimilarity index, however, the entropy index can measure segregation among more than two groups simultaneously. The primary advantage to using entropy for this paper, however, lies in its properties of decomposition (detailed below). Since the entropy index is not widely used in segregation research, it is instructive to review its components and interpretation.

The entropy index is based on comparisons of diversity at one level (ex. census tract) to diversity at some higher level (ex. metropolitan area). The lower bound of the index is 0, which would occur if each census tract had the same diversity as the metropolitan area as a whole. If all of the census tracts contained only one group (no diversity) relative to a diverse metropolitan area, this would be a state of complete segregation with an entropy index value of 1. Formula 1 shows the measure of diversity used in the entropy index, where *pr* is the proportion of the population composed of group *r*, indexed over all groups. It reaches its minimum value of 0 when there is only one group present and its maximum value of ln(*n*) when each group is represented equally.

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

(1)

The entropy index (*H*) compares diversity at the tract level (*E*) to diversity a higher level of aggregation, such as the metropolitan area as a whole (*Em*), weighted by the proportion of the aggregated population living in that tract (*wt/W*) and summed over all tracts. The calculation is shown in equation 2. The entropy index ranges from a value of 0, indicating no segregation, to 1, indicating complete segregation (Theil 1972).

$$H = \sum_{t=1}^{n} \frac{w_t (E_m - E_t)}{W E_m} \qquad (2)$$

An essential part of this analysis is the entropy index's properties of decomposition into between and within-group components. The general form of this decomposition is given by equation 3, where *p* are the elements of being decomposition *P*. Reardon et al. (2000) provide a proof of this decomposition in the appendix of their paper.

$$H = \sum_{p \in P} \left(\frac{w_p}{W} \right) \left(\frac{E_p}{E} \right) H_p \qquad (3)$$

Following Reardon et al. (2000), this paper uses geographic decomposition of entropy to partition metropolitan segregation into within city, within suburb, and between city and suburban components. A formula for this decomposition is given by Equation 4 (corresponding to Equation 6 in Reardon et al.), where *Wc, Ws,* and *W* are population totals and *Ec, Es,* and *E* are diversity values for the city, suburbs, and metropolitan areas as whole respectively. The first

element on the right hand side of the equation is the portion of total metropolitan segregation attributed to segregation between the city and suburbs. The remaining two elements represent the within city and within suburbs portions of metropolitan segregation respectively. Each component shows the proportion of segregation that can only be reduced through redistributing elements in that component.

$$H = Hcxs + \frac{WcEc}{WE} Hc + \frac{WsEs}{WE} Hs \quad (4)$$

Given that the within suburbs, within city, and between city and suburbs components of the decomposition add up to the total metropolitan segregation, it is also possible to calculate the percent of metropolitan segregation attributed to each element simply by dividing them by total segregation. This is useful way to make comparisons over time and across places that are irrespective to differences in levels of segregation.

Shifting Geography of Black Segregation

Table 1 shows the growing suburbanization of whites, blacks, Hispanics, and others by region from 1980 to 2000. From this table it is immediately apparent that the United States has become an increasingly suburban country. Even by 1980, over half of those residing in metropolitan areas lived in suburban communities. By 2000, 62% of metropolitan residents were living in the suburbs. There is much variation across groups, however, in their degree of suburban presence. Blacks are far less suburbanized than all other groups with only 38% choosing suburban location in 2000 compared to 43% of Hispanics and 71% of whites. Nonetheless, this relatively smaller representation of blacks in the suburbs belies the fact that the pace of suburbanization for blacks was faster than for any other group over the past twenty years.

From 1980 to 2000 the suburban population of blacks grew by 42%. This is over twice as fast as the growth rate for Hispanics (20%), who were the second fastest growing group over this time period.

TABLE 1 ABOUT HERE

The extent of suburbanization for blacks varies considerably by region. Blacks are least suburbanized in the Northeast, with an average of only 26% living in the suburbs by 2000. The percentage of blacks living in the Midwestern suburbs was only slightly higher at 29%, but this represented a 62% growth rate in this region since 1980. This increase in black suburbanization is considerably higher than for any other region, where the percent change ranged from 28 to 36. Blacks are considerably more suburbanized in the South and West, however, with nearly 50% living in the suburbs in 2000.

As the population has shifted outward from metropolitan core, so has the geography of residential segregation. Table 2 shows trends in the segregation of blacks from all other groups from 1980 to 2000 by metropolitan status. Across the 248 metropolitan areas, average levels of segregation of blacks from all others declined from 0.368 in 1980 to 0.270 in 2000. There were clear differences in the level of segregation experienced by blacks from others in the central cities compared to the suburbs, with higher average levels of segregation in central cities for most metropolitan areas. In 1980, the average entropy index value of segregation of blacks from all others was 0.350 in the city compared to 0.267 in the suburbs. By 2000, these values were 0.238 and 0.210 respectively, suggesting that average declines in the segregation of blacks from other groups have been more rapid within the city limits. The lower panels of Table 2 calculate the same segregation indices but this time with respect to non-Hispanic whites. While the

general trends are similar to those found in segregation from all other groups, segregation levels from whites are higher and the disparity between segregation from whites compared to segregation from all other groups grows somewhat over time. For instance, in 1980 black's segregation from whites in all metros was on average 6% higher than from all other groups, but this gap groups to 14% by 2000.

TABLE 2 ABOUT HERE

There is much variation in these trends that becomes apparent when looking at regional differences. Figure 1a shows the absolute change in segregation black/non-black segregation by city and suburban status. It is clear from this figure and from Table 2 that the disparities in the pace of segregation across city boundaries are most dramatic in the Northeast, where the percentage decline in segregation were on average nearly three times higher within the city (-34%) than in the suburbs (-13%). The large relative declines in city segregation cannot be explained by the higher average levels of segregation of blacks from others in Northeastern metros in the 1980s since these levels were actually lower, on average, than in the South and Midwest in the same year (0.374 and .427 respectively); and the percentage decline in segregation was actually greater in the West. Although levels of segregation differ by regions, more rapid declines in cities relative to suburbs have resulted in a decreased gap in the levels of segregation between cities and suburbs in all regions except for the West. In this most suburbanized of all regions, levels of segregation between blacks and others have been slightly higher in the suburbs than in the city during all periods examined here.

FIGURE 1 ABOUT HERE

Data presented so far have established that blacks are increasingly suburbanized and that the degree of segregation that they experience from other groups has generally been declining

over the past twenty years. This brings us to the question of whether there is a relationship between these two trends. Table 3 shows a geographic decomposition of the segregation of blacks from all others in metropolitan areas broken down by the part attributable to segregation within the central city, segregation within the suburbs, and segregation across city and suburb lines. In 1980, slightly more than half of the variation in black versus other segregation could be attributed to uneven distributions of households within the city limits, while about thirty percent was due to sorting within suburban tracts. This leaves about 17% of the average black versus other segregation attributable to unequal distributions across city/suburban boundaries.

TABLE 3 ABOUT HERE

By 2000, however, we find considerable change in how much within-suburbs, within-city, and between suburbs and city elements explain overall levels of black segregation. Consistent with residential movements to the suburbs, the proportion of total black versus other segregation explained by within-city residential distributions declines to 41%, accompanied by an increasing proportion of segregation explained by the relative distribution of households between city and suburban tracts (21%) as well as an increase in how much suburban residential sorting contributes to metropolitan wide black versus other segregation (38%).

FIGURE 2 ABOUT HERE

As in the previous tables, significant regional differences emerge in the decomposition. Figure 2 illustrates these changes over time by region. All regions show declines in the proportion of metropolitan black/other segregation accounted for by within city segregation, but these proportions vary by region. The Northeast has the lowest average proportion of segregation explained by within city sorting at 31% in 2000, while the South had the highest (44%). There is considerable variation in the proportion of segregation explained by the

between city and suburb component. In the Midwest and Northeast, the between city and suburb component explains 26% and 38% (respectively) of total segregation experienced by blacks in 2000. Put another way, this means that somewhere around a third of black/other segregation in these metropolitan areas could only be reduced by redistributed people across city lines.

The largest differences across regions come in the proportion of segregation explained by the between city and suburb and within suburban elements. In the Northeast and Midwest, the proportion of segregation that could only be reduced through declines in between city and suburb segregation accounts for increased to 38% and 26% of total segregation respectively by 2000. This component is far less significant in explaining black segregation in the South and West, where it accounts for only 14% and 10% of the variation in segregation respectively. In the West, sorting *within* the suburbs is by far the most important factor in explaining black/other segregation, accounting on average for over fifty percent of the variation in segregation scores by 2000. The South, on the other hand, has nearly equal proportions of black/other segregation explained by within city and within suburb components in 2000 (~40% each). For comparison, the geographic decomposition of blacks versus non-Hispanic whites are shown in Appendix A. The trends are very similar to those noted above for segregation between blacks and all other groups, with the main difference being those already noted with respect to higher overall levels of segregation.

Conclusions

This paper has illustrated the importance of the increasing suburbanization of blacks in understanding the declines in their residential segregation over the past 30 years. While black's segregation from other groups has been declining at all levels of geography in most metropolitan areas, the pace of segregation in most regions has been more rapid in the central cities than in the

suburbs. The suburban/city disparity in the pace of segregation declines was most apparent in the Northeast, where segregation levels declined on average nearly three times faster in the cities than in the suburbs. The differential pace of segregation declines in the cities and suburbs has resulted in a shrinking of the gap between segregation at these two levels of geography in all region except the West, where the suburbanization of blacks has always been higher and black segregation from others lower relative to other regions.

The entropy decomposition revealed changes in the relative importance of within city, within suburbs, and between city and suburbs residential distributions in explaining the metropolitan wide segregation of blacks from others. Corresponding with population shifts to the suburbs, a growing proportion of segregation between blacks and others is explained by the relative distribution of persons within suburban tracts. In the Midwest and Northeast, a substantial portion of the segregation between blacks and other groups takes place due to uneven distributions across city boundaries. By contrast, this between city and suburb component is relatively unimportant in explaining the segregation of blacks from others in the West and South. In the West, within suburban sorting is by far the most important component of metropolitan segregation of blacks from others, while in the South within city and within suburb sorting are relatively equal in importance.

What future trends are suggested by these results? The segregation of blacks from other groups could be impacted the most in the Northeast through movements between the city and suburbs, but residential movements *within* central cities and *within* suburban tracts are nearly as significant in explaining overall segregation between blacks and others in 2000. Segregation in the Mid-west between blacks and others would be reduced more through population movements *within* city limits (42% of variation), but within suburbs and between city and suburbs population

shifts are also important. In the South, future declines in black/other segregation can be achieved primarily through changes in residential patterns *within* city and *within* suburban locations, rather than through shifts across the suburban lines. Segregation levels between blacks and others are already rather low on average in the West, but any future declines are most likely going to be achieved by population movements within the suburbs (the dominant element in the decomposition).

This entropy analysis of changes in black's residential segregation from other groups has confirmed that population shifts to the suburbs have become increasingly important in explaining patterns of segregation. Although suburban neighborhoods are often on average of better quality than those in the central city, it is important to note a growing body of literature on inequality *within* suburban destinations (Alba and Logan 1991; Logan and Alba 1993; Pattillo-McCoy 2000). Blacks are often clustered in the inner ring of the suburbs, which tend to be poorer (Jargowsky 2005) and located in closer proximity to low-income neighborhoods inside the city limits. Future research should delve more into these within suburb distinctions.

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Table 1. Percent Suburban for Whites, Blacks, Non-Blacks (including Whites), and Totals by Region, 1980-2000.

	1980 Percent Living in Suburbs				1990 Percent Living in Suburbs				2000 Percent Living in Suburbs			
	White	Black	Non-Black (inc. whites)	**Total**	White	Black	Non-Black (inc. whites)	**Total**	White	Black	Non-Black (inc. whites)	**Total**
By Region												
Northeast (N=40)	0.675	0.198	0.633	0.582	0.710	0.222	0.650	0.596	0.743	0.261	0.658	0.603
Midwest (N=57)	0.660	0.181	0.646	0.586	0.696	0.227	0.678	0.618	0.730	0.293	0.703	0.644
South (N=117)	0.606	0.354	0.586	0.542	0.660	0.419	0.635	0.594	0.699	0.482	0.665	0.629
West (N=34)	0.600	0.384	0.584	0.571	0.628	0.435	0.601	0.591	0.650	0.490	0.616	0.608
All MSAs (N=248)	0.636	0.284	0.611	0.568	0.674	0.340	0.640	0.599	0.706	0.401	0.659	0.622
Total Population (X1000)	121,886	21,165	137,751	158,916	131,233	24,439	156,865	181,304	135,354	29,641	176,584	206,225

Source: Geolytics Neighborhood Change CD, U.S. Census 2000 STF 3A

Table 2. Entropy Index Measures of Segregation of Blacks from All Other Groups and from Whites by Metropolitan Status, 1980-2000.

	1980			1990			2000		
	Metro	Suburb	City	Metro	Suburb	City	Metro	Suburb	City
Blacks versus all others									
All MSAs (N=248)	0.368	0.267	0.350	0.322	0.247	0.294	0.270	0.210	0.238
By Region									
North	0.373	0.214	0.303	0.344	0.213	0.258	0.293	0.187	0.199
Midwest	0.423	0.316	0.373	0.394	0.312	0.333	0.334	0.259	0.273
South	0.373	0.274	0.395	0.318	0.247	0.329	0.272	0.216	0.272
West	0.249	0.225	0.213	0.188	0.178	0.153	0.135	0.131	0.108
Blacks versus Whites									
All MSAs (N=248)	0.391	0.280	0.377	0.349	0.262	0.324	0.307	0.231	0.277
By Region									
North	0.402	0.222	0.341	0.389	0.227	0.313	0.353	0.207	0.263
Midwest	0.435	0.322	0.386	0.407	0.319	0.347	0.356	0.271	0.296
South	0.393	0.285	0.418	0.337	0.258	0.348	0.299	0.234	0.302
West	0.296	0.258	0.267	0.244	0.219	0.216	0.200	0.185	0.180

Source: Geolytics Neighborhood Change CD, U.S. Census 2000 STF 3A

Table 3. Geographic Decomposition of Blacks versus All Others Entropy Index by Metropolitan Status, 1980-2000

	1980				1990				2000			
	Total	City	Between City and Suburb	Suburb	**Total**	City	Between City and Suburb	Suburb	**Total**	City	Between City and Suburb	Suburb
Total												
Component	0.368	0.195	0.061	0.113	0.322	0.152	0.061	0.109	0.270	0.112	0.057	0.101
% Share	**1.000**	0.529	0.165	0.306	**1.000**	0.471	0.189	0.340	**1.000**	0.413	0.212	0.375
Regions												
Northeast												
Component	0.373	0.165	0.125	0.084	0.344	0.132	0.123	0.089	0.293	0.092	0.112	0.088
% Share	**1.001**	0.442	0.335	0.224	**1.001**	0.383	0.358	0.259	**1.001**	0.315	0.383	0.302
Midwest												
Component	0.423	0.234	0.092	0.098	0.394	0.195	0.093	0.106	0.334	0.145	0.086	0.102
% Share	**1.000**	0.552	0.217	0.231	**1.000**	0.494	0.236	0.270	**1.000**	0.434	0.258	0.307
South												
Component	0.373	0.208	0.033	0.132	0.318	0.158	0.035	0.124	0.272	0.120	0.037	0.114
% Share	**1.000**	0.559	0.088	0.354	**1.001**	0.498	0.111	0.391	**1.000**	0.442	0.138	0.421
West												
Component	0.249	0.117	0.027	0.105	0.188	0.079	0.022	0.087	0.135	0.051	0.014	0.070
% Share	**1.000**	0.468	0.110	0.422	**1.000**	0.419	0.115	0.466	**1.000**	0.377	0.103	0.521

Source: Geolytics Neighborhood Change CD, U.S. Census 2000 STF 3A

Figure 1. Absolute Change in Black vs. Others Segregation by Region, 1980-2000

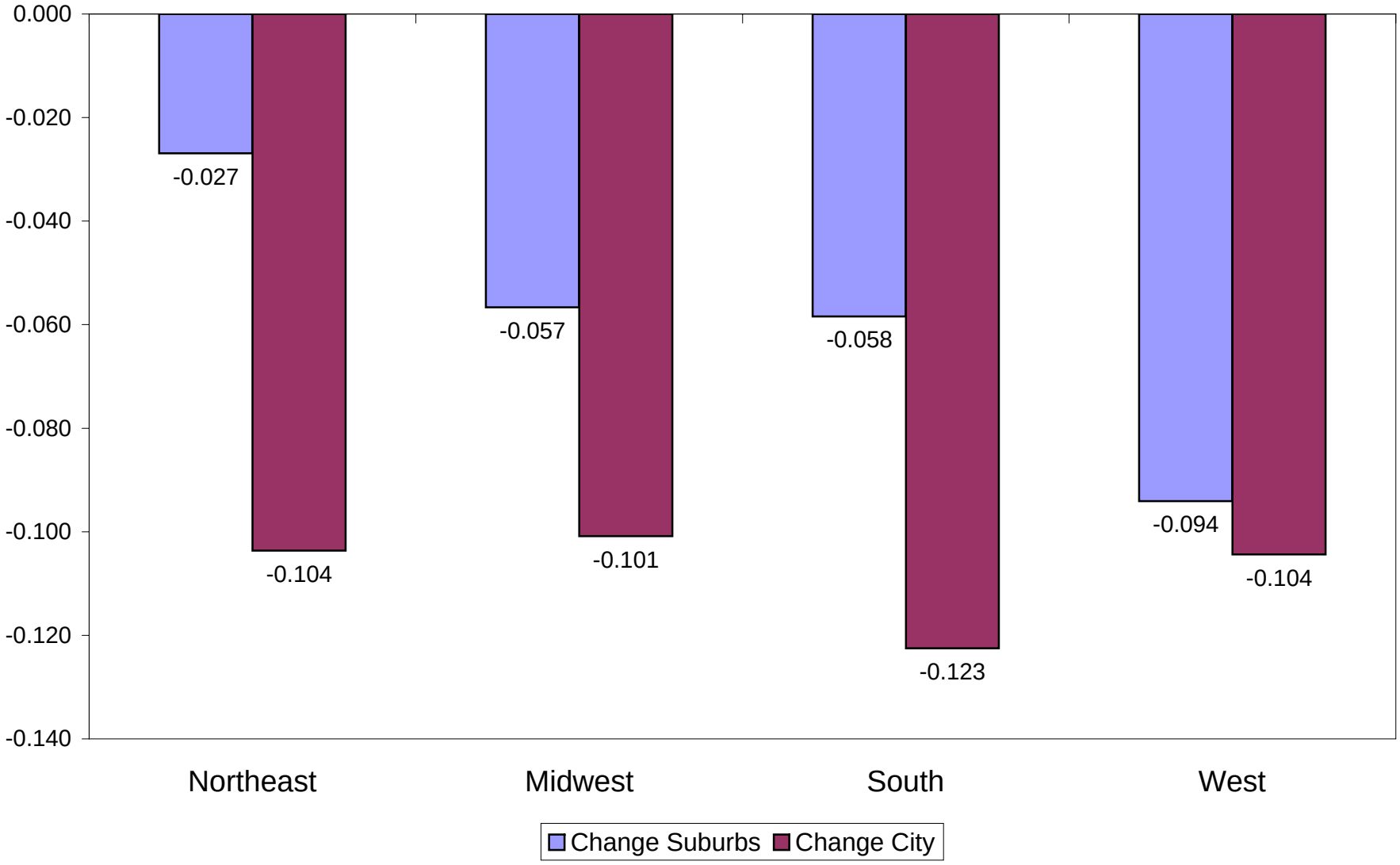
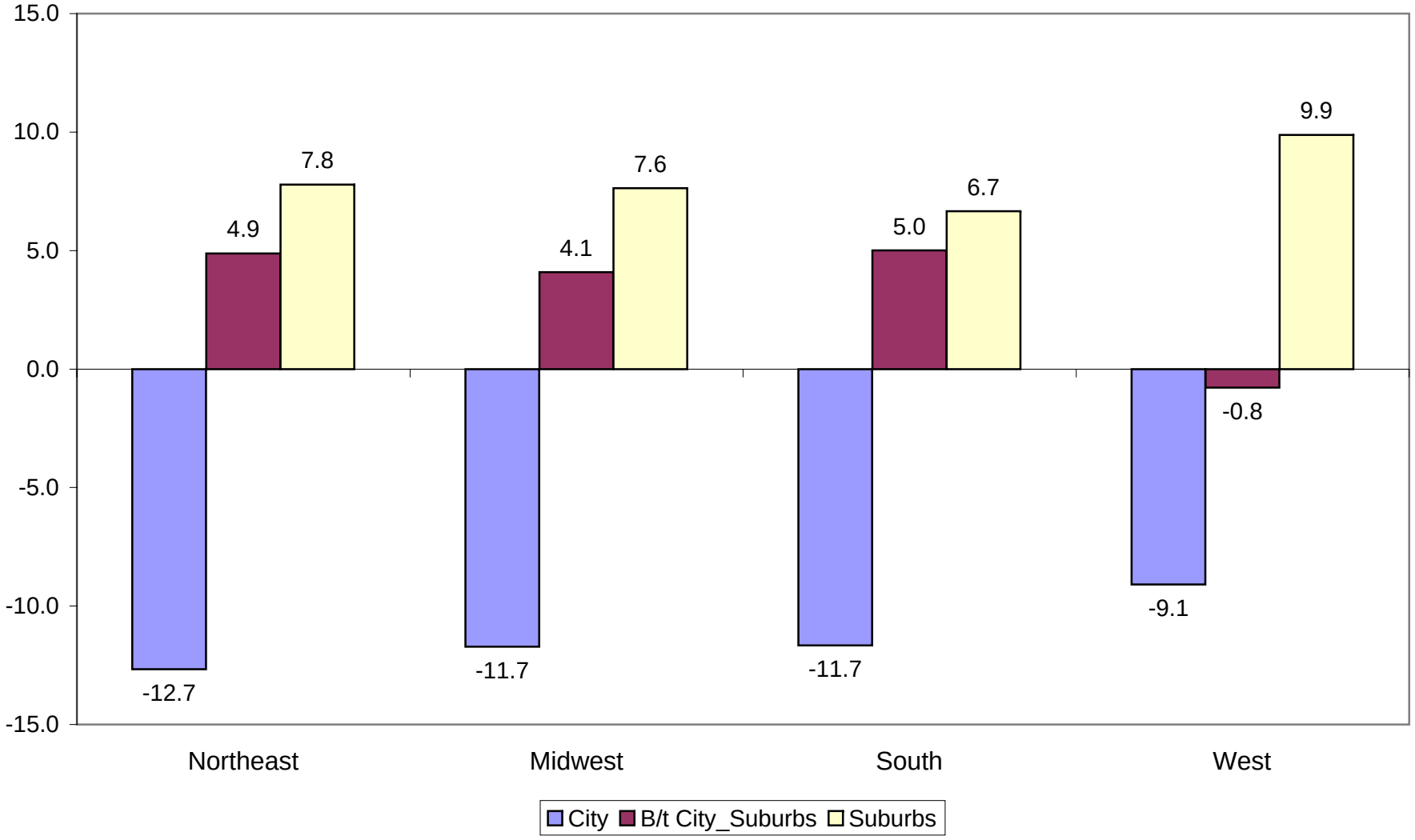


Figure 2. Change from 1980 to 2000 in the Percent of Black vs. Other Segregation Explained by City vs. Suburban Population Distributions



Appendix A. Geographic Decomposition of Blacks versus Whites Entropy Index by Metropolitan Status, 1980-2000.

	1980				1990				2000			
	Total	City	Between City and Suburb	Suburb	**Total**	City	Between City and Suburb	Suburb	**Total**	City	Between City and Suburb	Suburb
Total												
Component	0.391	0.209	0.064	0.118	0.349	0.165	0.066	0.117	0.307	0.128	0.066	0.113
% Share	**1.000**	0.533	0.164	0.303	**1.000**	0.475	0.191	0.335	**1.000**	0.416	0.216	0.368
Regions												
Northeast (N=36)												
Component	0.402	0.182	0.133	0.087	0.389	0.155	0.139	0.096	0.353	0.115	0.139	0.099
% Share	**1.001**	0.452	0.331	0.217	**1.001**	0.397	0.357	0.246	**1.000**	0.326	0.393	0.281
Midwest (N=49)												
Component	0.435	0.239	0.097	0.100	0.407	0.200	0.099	0.109	0.356	0.153	0.095	0.108
% Share	**1.000**	0.549	0.222	0.230	**1.000**	0.490	0.243	0.268	**1.000**	0.430	0.267	0.303
South (N=104)												
Component	0.393	0.222	0.034	0.137	0.337	0.169	0.037	0.130	0.299	0.133	0.041	0.124
% Share	**1.001**	0.564	0.087	0.349	**1.001**	0.502	0.111	0.387	**1.001**	0.446	0.138	0.416
West (N=30)												
Component	0.296	0.144	0.031	0.121	0.244	0.109	0.026	0.108	0.200	0.082	0.019	0.100
% Share	**1.000**	0.487	0.106	0.407	**1.000**	0.447	0.109	0.444	**1.000**	0.408	0.095	0.497

Source: Geolytics Neighborhood Change CD, U.S. Census 2000 STF 3A