Racial and Ethnic Residential Segregation in the United States: 1980-2000*

John Iceland, Daniel H. Weinberg, and Erika Steinmetz

U.S. Census Bureau

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

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Abstract

We examine trends in five dimensions of segregation for African Americans, Hispanics, Asians and Pacific Islanders, and American Indians and Alaska Natives: evenness, exposure, concentration, centralization, and clustering. The trend for African Americans is clearest—declines in segregation over the 1980 to 2000 period, regardless of the dimension considered. Nevertheless, segregation is still higher for African Americans than for the other groups across all measures. Latinos are generally the next most highly segregated group, followed by Asians and Pacific Islanders and then American Indians and Alaska Natives. Asians and Pacific Islanders and Hispanics both tended to experience increases in segregation over the period, though not across all dimensions. Increases were generally larger for Asians and Pacific Islanders than for Hispanics. The story of American Indian and Alaska Native residential segregation is mixed, with declines across some dimensions of segregation and increases in others.

Racial and Ethnic Residential Segregation in the United States: 1980-2000

Residential segregation has been the subject of considerable research for many years. An extensive tour through any major American city reveals that many neighborhoods are racially and ethnically homogenous. In addition to controversies about the causes and consequences of residential segregation, there are substantial disagreements as to how to best measure it. Massey and Denton (1988) identified 19 residential segregation indexes and used cluster analysis to distinguish five key dimensions: evenness, exposure, concentration, centralization, and clustering.

Based on Massey and Denton's recommendations and the behavior of these indexes in practice, we analyze trends in residential segregation using one index from each of the five dimensions over the 1980 to 2000 period. Using data from decennial censuses, we explore not only trends in Black/White residential segregation, but also the segregation of Hispanics, Asians and Pacific Islanders, and American Indians and Alaska Natives.

This analysis proceeds as follows. We begin with a brief recap of residential segregation issues, followed by a discussion of the methodological challenges of defining and measuring race and ethnicity, metropolitan areas and neighborhoods, and residential segregation. We then describe the data, discuss our findings, and end with a few summary remarks.

Background

Data recently released from the 2000 decennial census provide an opportunity to examine the extent of and changes in racial and ethnic residential segregation (hereafter often referred to by the short-hand term, "segregation") in the last two decades of the twentieth century. This study is descriptive and empirical and does not attempt to identify causes of segregation. At least

two studies have documented declines in segregation over the last decade or two, focusing on dissimilarity and isolation measures of segregation (Glaeser and Vigdor 2001, Lewis Mumford Center 2001). This analysis extends these studies by looking at additional dimensions of segregation and examining segregation across all groups, including Native Americans. A full report and segregation scores for 19 of Massey and Denton's indexes will also be published shortly and be available on the Internet at: <http://www.census.gov/hhes/www/resseg.html>.

Race and Ethnicity

Residential segregation measures are influenced by how race and ethnicity are defined and operationalized. In 1977, the Office of Management and Budget (OMB) issued Statistical Policy Directive 15, which provided the framework for data collection on race and ethnicity to federal agencies, including the Census Bureau, for the 1980 decennial census. That directive identified four racial groups: White; Negro or Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander – and one ethnicity – Spanish/Hispanic origin or descent. The questions on the 1980 and 1990 censuses asked individuals to self-identify with one of these four racial groups and indicate whether they were Hispanic or not.[1]

In the 1990s, after much research and public comment, OMB revised the racial classification to include five categories – White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or other Pacific Islander—and allowed individuals to

[1]The Population Censuses have a special dispensation from OMB to allow individuals to designate "Some Other Race" rather than one of those specifically listed. The vast majority of individuals choosing that option are Hispanic (Grieco and Cassidy 2001). The decennial census questions also ask about specific Asian and Pacific Islander races (e.g., Chinese).

report more than one race. Census 2000 figures indicate that 6.8 million, or 2.4 percent of the population, reported more than one race.

One issue that arises when measuring residential segregation is choosing a reference group against which the segregation of other groups can be measured. We have chosen non-Hispanic Whites as the reference group—a common selection (Massey and Denton 1988). For 2000 data, when individuals can report more than one race, we have chosen individuals who designate White *alone* as their racial classification, and not Hispanic.

For other group definitions, we used those that closely approximated 1990 census categories: African American, Asian and Pacific Islander, American Indian and Alaska Native, and Hispanic. So we combined the Asian and Native Hawaiian or other Pacific Islander groups in the 2000 data.[2] For each of the race/ethnicity analyses, we calculated residential segregation indexes using anyone designating themselves as a member of that racial group *alone* or *in combination* with another group (or groups).[3]

Areas and Units of Analysis

Residential segregation describes the distribution of different groups across units within a larger area. Thus, to measure residential segregation, we have to define both the appropriate area and its component parts (units of analysis). While residential segregation can occur at any geographic level, we have chosen to focus on metropolitan areas as reasonable approximations of

[2] Separate indexes for the two groups for 2000 will be available on the Census web site.
[3] The alternative is to just use the number of people who marked the single racial/ethnic category alone. Using the latter method has little impact on estimates of African American segregation, but a modest effect on those of Asians and Pacific Islanders and American Indians and Alaska Natives, as will be discussed in our more detailed upcoming report on this topic. Since Hispanic ethnicity is registered via a separate question, people of Hispanic origin may be of any race (or

housing markets. We present estimates for all independent and Primary MSAs, referred to hereafter as metropolitan areas, or MAs. The exact MA definitions we use are described in the data section below.

This analysis uses census tracts as the component parts, or units of analysis. Tracts are defined with local input, are intended to represent neighborhoods, and typically do not change much from census to census, except to subdivide. Census tracts are often chosen by other researchers.[4]

Residential Segregation Measures

Residential segregation has been the subject of extensive research for many years (Duncan and Duncan, 1955; Taeuber and Taeuber, 1965; Lieberson, 1980, 1981), using a variety of measures. Massey and Denton (1988) compiled, augmented, and compared these measures and used cluster analysis with 1980 Census data on 50 metropolitan areas to identify five dimensions of residential segregation – evenness, exposure, concentration, centralization, and clustering. These five clusters were further broken down into 20 measures of segregation, 19 of which we have calculated.[5]

Basically, *evenness* involves the differential distribution of the subject population, *exposure* measures potential contact, *concentration* refers to the relative amount of physical space occupied, *centralization* indicates the degree to which a group is located near the center of an urban area, and *clustering* measures the degree to which minority group members live

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multiple races) in this analysis. Thus, the race and ethnic categories used here are not mutually exclusive.

[4] We intend to examine census block groups in future work.

disproportionately in contiguous areas. Based on our assessment of the indexes, Massey and Denton's recommendations, and earlier research, we selected the following indexes to represent the five Massey-Denton dimensions: *evenness*-**dissimilarity,** *exposure*- **isolation**, *concentration*-**delta**, *centralization*- **absolute centralization**, and *clustering*- **spatial proximity.** We describe them below.

The most widely used measure of evenness, and the mostly widely used measure of residential segregation in general, is *dissimilarity*. Conceptually, dissimilarity, which ranges from 0 (complete integration) to 1 (complete segregation), measures the percent of a group's population that would have to change residence for each neighborhood to have the same percent of that group as the metropolitan area overall.

The exposure measure we use, the *isolation index*, describes "the extent to which minority members are exposed only to one another," (Massey and Denton, 1988, p. 288) and is computed as the minority-weighted average of the minority proportion in each area. It also varies from 0 to 1. For ease of presentation, we sometimes refer to the general exposure dimension by its converse label, isolation, in the exposition below, as higher levels of isolation represent higher levels of segregation.

As the measure of concentration we chose *delta*. This index, which varies from 0 to 1, measures the proportion of a group's population which would have to move across neighborhood to achieve a uniform density across a metropolitan area. Massey and Denton's preferred concentration measure, relative concentration, does not conform well to theoretical constraints, having several calculated values below -1.

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[5]We omit an index which measures the proportion of the minority group residing in the central city of the metropolitan area. Massey and Denton (1988) note that this index, while quite simple to calculate, is a rather poor measure of segregation.

Absolute centralization examines only the distribution of the minority group around the center and varies between -1 and 1. Positive values indicate a tendency for group members to reside close to the city center, while negative values indicate a tendency to live in outlying areas as compared to the reference group. A score of 0 means that a group has a uniform distribution throughout the metropolitan area.

Finally, the clustering measure used here, *spatial proximity*, basically measures the extent to which neighborhoods inhabited by minority members adjoin one another, or cluster, in space. Spatial proximity equals 1 if there is no differential clustering between minority and majority group members. It is greater than 1 when members of each group live nearer to one another than to members of the other group, and is less than 1 in the rare case that minority and majority members lived nearer to members of the other group than to members of their own group.

Clearly this selection of five specific indexes has subjective elements, so all 19 are available on the Internet. We note that the dissimilarity index is the one most often chosen by researchers calculating only one index.

Data

The data for this analysis were drawn from internal Census Bureau files giving population counts for all racial groups and for Hispanics by census tract in all metropolitan areas. We present data for independent MAs and Primary MAs, not Consolidated MAs. Town and city-based MAs are used in New England. When presenting comparable data for 1980, 1990, and 2000, we used the 2000 boundaries of metropolitan areas, as defined by the Office of

Management and Budget (OMB) on June 30, 1999, to ensure comparability.[6] Using this definition, there were 330 MAs in our analysis.[7]

We present some estimates at aggregate summary levels -- for all U.S. metropolitan areas. Most estimates are for "selected" MAs-- those with a minority population which either: 1) numbers at least 20,000, or , 2) comprises at least 3 percent of the MA population in 1980. These restrictions were imposed because segregation indexes for metropolitan areas with small minority populations are less reliable than those with larger ones. Random factors and geocoding errors are more likely to play a large role in determining the settlement pattern of group members when fewer members are present, causing these indexes to contain greater variability. Farley and Frey (1996) used these same cutoffs.

Results

African Americans

The number of African Americans in the U.S. grew over the last few decades: 26.5 million in 1980, 30.0 million in 1990, and 36.4 million in 2000.[8] Blacks comprised 11.7 percent of the total U.S. population in 1980, 12.1 percent in 1990, and 12.9 percent in 2000. About 79 percent of Blacks lived in metropolitan areas in 2000—nearly the same as the total population.

Table 1 shows the extent of residential segregation of Blacks in 1980, 1990, and 2000, by characteristics of the metropolitan area. There were 220 metropolitan areas (of the 330 total) with at least 10 census tracts and 3 percent or 20,000 or more Blacks in 1980. All five measures

[6] The OMB will redefine MAs based on Census 2000 counts in 2003.
[7] More precisely, 331 MAs were defined in 1999. One of them, Barnstable-Yarmouth, MA, was excluded from this analysis because it contained no census tracts in 1980.

of segregation indicate a reduction in the residential segregation of Blacks between 1980 and 1990, and a further reduction between 1990 and 2000. The two-decade reduction ranges from 4 percent (absolute centralization and spatial proximity) to 12 percent (dissimilarity), regardless of whether all metropolitan areas or just "selected" metropolitan areas are examined.

(Table 1 here)

The largest metropolitan areas (1 million or more population) had higher residential segregation than the middle-sized ones (500,000 to 999,999 population), which in turn had higher residential segregation than the smallest metropolitan areas. This was true for all indexes for all three years, though for several indexes, the difference between small and medium metropolitan areas is small. The 1980-1990 and 1990-2000 reductions in the residential segregation of Blacks took place in all regions for all five indexes, and for metropolitan areas of different sizes for four of the five indexes. In 2000, the West region had the lowest level of residential segregation for three of the five indexes, and the South was lowest for the remaining two. The Midwest had the highest level of residential segregation for four of the five indexes; the Northeast had the highest level for the remaining one.

Residential segregation varied by the percentage (expressed in quartiles) of the population that is Black. While all four metropolitan area quartiles show a pattern of decreasing residential segregation over time, three of the five indexes show a pattern of higher segregation in places with a higher percentage of Blacks in any one year while two show the reverse. As the percentage of the population that is Black increases, Blacks are less likely to be evenly spread across the metropolitan area (higher dissimilarity index), less likely to share common

[8] The 2000 figure includes all people who self-identify as Black or African American alone or in combination with another race. The number of people who self-identified as Black or African American alone was 34.7 million.

neighborhoods (higher isolation index), less concentrated in dense areas (lower delta index), more likely to live near other Blacks (higher spatial proximity index), and less likely to be centralized (lower absolute centralization index).

Table 2 illustrates the percentage of metro areas experiencing change in segregation scores (in five ranges). The proportion of metropolitan areas with increases of 1 percent or more on an index between 1980 and 2000 ranged from only 3 percent (dissimilarity) to 34 percent (spatial proximity). On the other hand, the proportion with decreases of 1 percent or more between 1980 and 2000 ranged from 43 percent (spatial proximity) to 92 percent (dissimilarity). Thus, the most widely used index, dissimilarity, shows only 8 of 220 metropolitan areas had an increase in residential segregation between 1980 and 2000 while 203 metropolitan areas had a decrease. The others indicated a much less uniform pattern, but still tended to show a decline in segregation.[9]

(Table 2 here)

Overall, the decline in the residential segregation of African Americans between 1980 and 1990 period continued over the 1990 to 2000 period. Only 15 of the 220 metropolitan areas examined showed an increase in the dissimilarity index of 1 percent or more between 1980 and 1990. Similarly, between 1990 and 2000 only 17 showed such an increase. Conversely, an overwhelming number of metro areas experienced declines in the dissimilarity index in both decades. The reduction of African American residential segregation thus remained steady, even if modest.

[9] For more details, Appendix Table A1 ranks the level of residential segregation from 1980 to 2000 for individual metropolitan areas with 1 million or more population in 1980 and at least 3 percent, or 20,000, or more Blacks.

Hispanics and Latinos

Table 3 shows the residential segregation indexes for Hispanics for 1980, 1990, and 2000. The picture is mixed, though increases in segregation for Hispanics are more common than decreases across the dimensions studied. For all metropolitan areas, the isolation index showed a considerable increase, the spatial proximity a modest increase, and the dissimilarity index a slight increase over the 1980 to 2000 period. On the other hand, the delta index declined slightly, while centralization declined appreciably.

(Table 3 here)

There is a mixed pattern for metropolitan areas in the Northeast and Midwest regions. For each of these regions, two indexes showed an increase, two showed a decrease, and one did not change much. On the other hand, four of the five indexes indicate a decline in the residential segregation of Hispanics in Southern metropolitan areas between 1980 and 2000 while four of the five indexes indicate an increase in residential segregation in Western metropolitan areas over the same period.

While the picture is also mixed for metropolitan areas of 1 million or more and areas of under 500,000 people, there was an increase in three of the five indexes (and no change in the other two) for medium-sized metropolitan areas (500,000-999,999). The medium-sized areas tend to have lower levels of segregation than areas of larger or smaller size.

The highest level of residential segregation of Hispanics was in areas with the highest percentage of Hispanics. In 2000, the dissimilarity index was 10 percent higher in areas where the population is 17.5 percent Hispanic or more than in areas that are under 3.9 percent Hispanic. The isolation index is 147 percent higher, the delta index is 3 percent higher, the absolute centralization index is 1 percent higher, and the spatial proximity index is 11 percent higher.

With a few minor exceptions, the increase in segregation is monotonic from the under 3.9 percent category to the 3.9-7.3 percent category, to the 7.3-17.5 percent category, to the highest category.

Table 4 gives the distribution of percent change in each index by decade. This table reflects the findings described earlier. According to the isolation and spatial proximity indexes, residential segregation increased over each decade measured. The absolute centralization index decreased, and the other two indexes do not change much on average, though increases outnumber decreases for the dissimilarity index.[10]

(Table 4 here)

In sum, the residential segregation picture for Hispanics in the United States is somewhat mixed, but with increases more common than declines. There is some slight evidence of declines in segregation in the South, but increases for medium-sized metropolitan areas and for metropolitan areas with large percentages of Hispanics.

Asians, Native Hawaiians, and Other Pacific Islanders

Table 5 shows results for Asian, Native Hawaiians, and other Pacific Islanders. Regardless of whether we consider all or selected metropolitan areas, we see a relatively small increase in evenness and clustering of Asians and Pacific Islanders between 1980 and 2000, a larger increase in isolation, no change in concentration, and a relatively small decrease in centralization.

(Table 5 here)

[10] Appendix Table A2 ranks the level of residential segregation from 1980 to 2000 for individual metropolitan areas with 1 million or more population in 1980, and at least 3 percent or 20,000 or more Hispanics/Latinos.

Nineteen of the 30 metropolitan areas that had at least 3 percent or 20,000 or more Asians and Pacific Islanders in 1980 are in the West. Yet regional variations in patterns of change are rather minor. Asians and Pacific Islanders in the West in 2000 are more isolated that those in the other regions, a bit less centralized, and live slightly closer to one another (spatial proximity).

There seem to be substantial differences by size of metropolitan area. Larger metropolitan areas have more segregation, as measured by the dissimilarity and spatial proximity indexes, than medium and smaller areas. The isolation index is nearly twice as high for medium-sized areas (500,000 to 999,999) than for larger or smaller areas, though there are only three of them, compared with 20 large areas and 7 small ones. In contrast, three of the five indexes -- delta, absolute centralization, and spatial proximity – are smallest for the medium-sized areas.

Areas with the fewest percentage (under 1.8 percent) of Asians and Pacific Islanders had by far the lowest level of isolation and clustering. Both the isolation and clustering indexes increase monotonically with the percentage Asian and Pacific Islander. Variations for the evenness and concentration measures vary less by percentage Asian and Pacific Islander and over time.

Results in Table 6 indicate that three of the five indexes – dissimilarity, isolation, and spatial proximity – stand out as being most likely to show increases in segregation. As a matter of fact, all 30 metropolitan areas had an increase in isolation of more than 5 percent between 1980 and 2000. The delta and absolute centralization indexes showed more decreases than increases, with only centralization showing considerably more decreases than increases.[11]

(Table 6 here)

[11] Appendix Table A3 ranks the level of residential segregation from 1980 to 2000 for individual metropolitan areas with 1 million or more population in 1980 and at least 3 percent or 20,000 or more Asians and Pacific Islanders.

In sum, there seems to have been an increase in the residential segregation of Asians and Pacific Islanders over the 1980-2000 period, most notably in their isolation from the settlement patterns of non-Hispanic Whites. The higher the proportion of Asians and Pacific Islanders in an area, the more they are isolated, and the more they tend to live with one another.

American Indians and Alaska Natives

Discussing the metropolitan residential segregation of American Indians and Alaska Natives is difficult because of their relatively small population and because many still live on typically rural American Indian reservations and in Alaska Native villages. Of the 4.1 million American Indians and Alaska Natives counted in Census 2000 (1.5 percent of the U.S. population), 1.4 million, or 34 percent, lived outside metropolitan areas.[12]

Because of the relatively small population of American Indians and Alaska Natives, only 13 metropolitan areas qualified for our analysis (MAs which have at least 3 percent or 20,000 or more American Indian and Alaska Native population in 1980). These metropolitan areas are: Tulsa OK, Anchorage AK, Rapid City SD, Fort Smith AR-OK, Lawton OK, Albuquerque NM, Great Falls MT, Yakima WA, Bellingham WA, Yuma AZ, Oklahoma City OK, Phoenix-Mesa AZ, and Los Angeles-Long Beach CA.

Table 7 illustrates the extent of residential segregation of American Indians and Alaska Natives in 1980, 1990, and 2000. It has the weighted average of American Indian and Alaska Native segregation in all metropolitan areas and in the 13 areas which meet the population

[12]The 2000 American Indian and Alaska Native population figure includes all people who self-identify as American Indian or Alaska Native alone or in combination with another race. The number of people who self-identified as American Indian or Alaska Native alone in 2000 was 2.5 million. Fifty-six and 45 percent lived in nonmetropolitan areas in 1980 and 1990, respectively, when using 2000 MA boundaries.

criteria described above. It should be noted that the 13 selected metropolitan areas account for only 12.7 percent of all U.S. American Indian and Alaska Natives and only 19.4 percent of metropolitan American Indians and Alaska Natives.

(Table 7 here)

The most widely used measure of residential segregation, dissimilarity, indicates a reduction in American Indian and Alaska Native segregation in both decades—for all metropolitan areas and for the 13 large metropolitan areas. The overall 1980-2000 reduction is 11 percent for all metropolitan areas, and 6 percent for the selected metropolitan areas. In all metropolitan areas the reduction occurred mostly in the 1990-2000 decade, while for the selected metropolitan areas, the reduction was more even. The measure of clustering, spatial proximity, also showed a reduction for all metropolitan areas and for selected metropolitan areas, 10 percent for the former over the 1980 to 2000 period, and 15 percent for the latter, with large declines in the 1990 to 2000 period overwhelming small increases in the 1980s. Isolation is the one measure which showed increases both among all and selected metropolitan areas between 1980 and 2000. Delta and absolute centralization showed mixed results, with declines among all metropolitan areas, but increases when only selected MAs are considered.

Table 7 also shows that in all decades, the four metropolitan areas in Oklahoma (in the South region) had substantially lower levels of residential segregation for all five indexes than the eight in the West. Patterns of segregation across different sized metropolitan areas and across quartiles of percent American Indian and Alaska Native were less clear. The small number of metropolitan areas in some of the categories rules out precise conclusions.

Table 8 shows the distribution of the percentage change – the proportion of metropolitan areas with changes in five ranges. This table reflects the varied messages on trends in

segregation of the previous analyses in this section. For example, dissimilarity decreased by 5 percent or more between 1980 and 2000 in 11 of the 13 areas, while isolation increased by 5 percent or more over the same period in 9 of the 13 areas.[13]

(Table 8 here)

In summary, the story of American Indian and Alaska Native residential segregation over the 1980 to 2000 period is a mixed one. The most widely used measure of residential segregation, dissimilarity, indicates a reduction in 1980-1990 and again in 1990-2000, both for all metropolitan areas and selected metropolitan areas. This reduction is moderate, on the order of 6-11 percent. Other residential segregation indexes show a different pattern, though, with some indexes showing an increase in segregation.

Conclusions

Trends in segregation vary by racial/ethnic group and across measures. The trend for African Americans is clearest of all—declines in segregation in the1980-1990 period continued over the 1990 to 2000 period, regardless of the dimension of segregation considered. Nevertheless, African American segregation is still higher than that experienced by other groups across all measures. Latinos are generally the next most highly segregated, followed by Asians and Pacific Islanders, and then American Indians and Alaska Natives across a majority of the measures.

Asians and Pacific Islanders and Hispanics tended to experience increases in segregation, though not across all dimensions. Increases were generally larger for Asians and Pacific

[13] Appendix Table A4 ranks the level of residential segregation from 1980 to 2000 for the 13 selected metropolitan areas with at least 3 percent or 20,000 or more American Indians and Alaska Natives in 1980.

Islanders than for Hispanics. Increases in segregation were apparent for both groups when using the dissimilarity index (evenness), the isolation index (exposure), and the spatial proximity index (clustering). Both groups, however, experienced declines in the absolute centralization index (centralization), and Hispanics also had declines in the delta index (concentration) while Asian and Pacific Islanders showed little change in delta.

The story of American Indian and Alaska Native residential segregation is mixed. The most widely used measure of residential segregation, dissimilarity, indicates a reduction in segregation. Clustering also shows a decline. On the other hand, there were increases in isolation and mixed patterns for centralization and concentration. Findings for this group are somewhat complicated due to their relatively small population, the fact that many still live on typically rural American Indian reservations and in Alaska Native villages, and perhaps even to changes in patterns of self identification over time.

In terms of trends across the five dimensions of segregation, declines in segregation were most evident in centralization, where all groups experienced declines over the 1980 to 2000 period when all metropolitan areas are considered. Again when all metropolitan areas are considered, three of the four groups experienced declines in concentration. Trends for the evenness and clustering dimensions were split, with two racial/ethnic groups experiencing increases and two experiencing declines. Finally, exposure (isolation) was the one dimension where increasing segregation was the norm, with only African Americans experiencing declines. Because the isolation index is sensitive to the overall size of the minority group in question, it is unsurprising that this index showed the greatest increase—as the population of all of the minority groups grew substantially over the 1980 to 2000 period. Holding other factors constant, this itself would tend to produce increases in isolation.

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Table 1. Residential Segregation Indexes for African Americans by Characteristics of Selected Metropolitan Areas: 1980-2000

(weighted averages)	Number of Metropolitan Areas	Dissimilarity Index (Evenness)			Isolation Index (Exposure)			Delta Index (Concentration)			Absolute Centralization Index (Centralization)			Spatial Proximity Index (Clustering)		
		1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
All metropolitan areas	330	0.727	0.678	0.640	0.655	0.614	0.591	0.834	0.816	0.793	0.753	0.743	0.722	1.435	1.400	1.374
Selected metropolitan Areas	220	0.730	0.682	0.645	0.662	0.622	0.601	0.835	0.816	0.793	0.755	0.745	0.724	1.441	1.406	1.381
Region																
Northeast	31	0.779	0.766	0.739	0.690	0.695	0.679	0.860	0.840	0.819	0.754	0.736	0.717	1.442	1.463	1.465
Midwest	53	0.822	0.788	0.741	0.726	0.691	0.651	0.909	0.894	0.859	0.816	0.814	0.788	1.598	1.570	1.526
South	114	0.660	0.605	0.581	0.632	0.585	0.581	0.776	0.764	0.748	0.711	0.710	0.695	1.348	1.312	1.303
West	22	0.714	0.625	0.559	0.580	0.490	0.435	0.867	0.839	0.823	0.806	0.773	0.740	1.478	1.364	1.283
Population size																
1 Million or more	43	0.780	0.732	0.694	0.717	0.680	0.657	0.869	0.845	0.815	0.805	0.787	0.757	1.543	1.502	1.469
500,000-999,999	33	0.685	0.632	0.597	0.605	0.551	0.529	0.807	0.795	0.776	0.684	0.687	0.684	1.307	1.273	1.263
Under 500,000	144	0.604	0.559	0.530	0.530	0.495	0.484	0.748	0.744	0.738	0.648	0.656	0.652	1.218	1.206	1.205
Percent Black/African American (quartiles)																
Under 6.2%	55	0.638	0.570	0.531	0.366	0.321	0.311	0.868	0.851	0.836	0.834	0.818	0.798	1.183	1.165	1.157
6.2-10.5%	55	0.715	0.661	0.613	0.523	0.474	0.446	0.857	0.843	0.817	0.720	0.709	0.688	1.234	1.222	1.223
10.5-19.1%	55	0.754	0.693	0.649	0.673	0.624	0.597	0.851	0.826	0.801	0.771	0.757	0.732	1.495	1.433	1.398
Over 19.1%	55	0.729	0.696	0.669	0.719	0.698	0.689	0.816	0.800	0.775	0.742	0.735	0.714	1.481	1.466	1.446

Notes: Selected metropolitan areas are those 220 with at least 10 tracts and 3% or 20,000 or more Blacks or African Americans in 1980.

Higher values indicate more segregation; the reference group is non-Hispanic Whites. Characteristics of metropolitan areas as of 1980.

Means weighted by size of African American population.

Source: Census Summary File 1, 1980-2000.

Table 2. Distribution of Percent Change in Residential Segregation Indexes for African Americans: 1980-2000

	Dissimilarity Index (Evenness)		Isolation Index (Exposure)		Delta Index (Concentration)		Absolute Centralization Index (Centralization)		Spatial Proximity Index (Clustering)	
	number	percent	number	percent	number	percent	number	percent	number	percent
1980-1990										
Increase of 5% or more	5	2%	19	9%	15	7%	40	18%	8	4%
Increase of 1-4.99%	10	5%	26	12%	33	15%	37	17%	42	19%
Change of less than 1%	20	9%	13	6%	55	25%	47	21%	74	34%
Decrease of 1-4.99%	51	23%	43	20%	100	45%	58	26%	69	31%
Decrease of 5% or more	134	61%	119	54%	17	8%	38	17%	27	12%
1990-2000										
Increase of 5% or more	5	2%	35	16%	6	3%	30	14%	9	4%
Increase of 1-4.99%	12	5%	37	17%	18	8%	31	14%	66	30%
Change of less than 1%	29	13%	20	9%	39	18%	25	11%	65	30%
Decrease of 1-4.99%	46	21%	47	21%	132	60%	77	35%	67	30%
Decrease of 5% or more	128	58%	81	37%	25	11%	57	26%	13	6%
1980-2000										
Increase of 5% or more	7	3%	34	15%	17	8%	41	19%	19	9%
Increase of 1-4.99%	1	0%	19	9%	18	8%	27	12%	55	25%
Change of less than 1%	9	4%	16	7%	23	10%	24	11%	51	23%
Decrease of 1-4.99%	24	11%	24	11%	95	43%	58	26%	46	21%
Decrease of 5% or more	179	81%	127	58%	67	30%	70	32%	49	22%

Note: Includes 220 Metropolitan Areas with at least 10 tracts and 3% or 20,000 or more Blacks or African Americans in 1980.
Source: Census 1980-2000 Summary File 1.

Table 3. Residential Segregation Indexes for Hispanics or Latinos by Characteristics of Selected Metropolitan Areas: 1980-2000

(weighted averages)	Number of Metropolitan Areas	Dissimilarity Index (Evenness)			Isolation Index (Exposure)			Delta Index (Concentration)			Absolute Centralization Index (Centralization)			Spatial Proximity Index (Clustering)		
		1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
All metropolitan areas	330	0.502	0.500	0.509	0.454	0.508	0.552	0.774	0.769	0.764	0.725	0.716	0.689	1.200	1.225	1.232
Selected metropolitan	123	0.511	0.508	0.517	0.477	0.531	0.585	0.778	0.772	0.767	0.731	0.720	0.695	1.210	1.236	1.246
Region																
Northeast	22	0.616	0.612	0.615	0.497	0.543	0.578	0.792	0.773	0.757	0.721	0.693	0.666	1.196	1.246	1.290
Midwest	13	0.571	0.560	0.567	0.336	0.384	0.449	0.779	0.786	0.765	0.736	0.744	0.710	1.226	1.307	1.328
South	38	0.479	0.456	0.461	0.547	0.563	0.601	0.770	0.759	0.736	0.744	0.741	0.706	1.203	1.186	1.182
West	50	0.477	0.494	0.514	0.449	0.529	0.597	0.777	0.777	0.791	0.726	0.715	0.695	1.218	1.252	1.261
Population size																
1 Million or more	36	0.540	0.541	0.552	0.478	0.545	0.600	0.788	0.781	0.774	0.774	0.757	0.729	1.236	1.268	1.278
500,000-999,999	16	0.466	0.442	0.463	0.372	0.399	0.468	0.748	0.743	0.744	0.611	0.622	0.624	1.147	1.168	1.204
Under 500,000	71	0.432	0.416	0.421	0.521	0.543	0.589	0.759	0.749	0.756	0.630	0.629	0.609	1.150	1.150	1.154
Percent Hispanic/Latino (quartiles)																
Under 3.9%	31	0.437	0.444	0.483	0.153	0.207	0.291	0.751	0.754	0.751	0.719	0.719	0.706	1.058	1.094	1.144
3.9-7.3%	31	0.477	0.472	0.476	0.255	0.302	0.372	0.726	0.728	0.722	0.599	0.610	0.594	1.093	1.137	1.180
7.3-17.5%	31	0.474	0.480	0.517	0.348	0.421	0.524	0.773	0.776	0.777	0.720	0.713	0.698	1.172	1.220	1.268
Over 17.5%	30	0.541	0.535	0.532	0.601	0.662	0.718	0.791	0.779	0.774	0.755	0.741	0.711	1.261	1.278	1.266

Notes: Selected metropolitan areas are those 123 with at least 10 tracts and 3% or 20,000 or more Hispanics or Latinos in 1980.
Higher values indicate more segregation; the reference group is non-Hispanic Whites. Characteristics of metropolitan areas as of 1980.
Means weighted by size of Hispanic population.
Source: Census Summary File 1, 1980-2000.

Table 4. Distribution of Percent Change in Residential Segregation Indexes for Hispanics or Latinos: 1980-2000

	Dissimilarity Index (Evenness)		Isolation Index (Exposure)		Delta Index (Concentration)		Absolute Centralization Index (Centralization)		Spatial Proximity Index (Clustering)	
	number	percent	number	percent	number	percent	number	percent	number	percent
1980-1990										
Increase of 5% or more	30	24%	96	78%	7	6%	17	14%	18	15%
Increase of 1-4.99%	16	13%	12	10%	37	30%	24	20%	46	37%
Change of less than 1%	8	7%	4	3%	28	23%	25	20%	43	35%
Decrease of 1-4.99%	25	20%	7	6%	41	33%	36	29%	14	11%
Decrease of 5% or more	44	36%	4	3%	10	8%	21	17%	2	2%
1990-2000										
Increase of 5% or more	55	45%	108	88%	10	8%	15	12%	32	26%
Increase of 1-4.99%	24	20%	9	7%	30	24%	12	10%	52	42%
Change of less than 1%	6	5%	4	3%	30	24%	19	15%	33	27%
Decrease of 1-4.99%	23	19%	0	0%	48	39%	43	35%	4	3%
Decrease of 5% or more	15	12%	2	2%	5	4%	34	28%	2	2%
1980-2000										
Increase of 5% or more	52	42%	114	93%	22	18%	23	19%	56	46%
Increase of 1-4.99%	9	7%	6	5%	29	24%	14	11%	35	28%
Change of less than 1%	9	7%	1	1%	18	15%	9	7%	20	16%
Decrease of 1-4.99%	20	16%	0	0%	31	25%	27	22%	7	6%
Decrease of 5% or more	33	27%	2	2%	23	19%	50	41%	5	4%

Note: Includes 123 Metropolitan Areas with at least 10 tracts and 3% or 20,000 or more Hispanics or Latinos in 1980.
Source: Census 1980-2000 Summary File 1.

Table 5. Residential Segregation Indexes for Asians and Pacific Islanders by Characteristics of Selected Metropolitan Areas: 1980-2000

(weighted averages)	Number of Metropolitan Areas	Dissimilarity Index (Evenness)			Isolation Index (Exposure)			Delta Index (Concentration)			Absolute Centralization Index (Centralization)			Spatial Proximity Index (Clustering)		
		1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
All metropolitan areas	330	0.405	0.412	0.411	0.233	0.264	0.306	0.741	0.753	0.743	0.701	0.700	0.683	1.057	1.083	1.096
Selected metropolitan Areas	30	0.422	0.424	0.433	0.292	0.330	0.395	0.733	0.742	0.735	0.700	0.693	0.672	1.071	1.104	1.124
Region																
Northeast	6	0.450	0.443	0.461	0.169	0.234	0.320	0.734	0.723	0.720	0.729	0.704	0.699	1.045	1.064	1.089
Midwest	2	0.444	0.440	0.431	0.092	0.132	0.175	0.729	0.753	0.719	0.736	0.755	0.725	1.037	1.071	1.074
South	3	0.363	0.393	0.418	0.069	0.128	0.221	0.793	0.797	0.780	0.810	0.800	0.776	1.018	1.048	1.088
West	19	0.419	0.420	0.426	0.360	0.396	0.467	0.728	0.740	0.735	0.680	0.672	0.644	1.086	1.124	1.146
Population size																
1 Million or more	20	0.427	0.428	0.437	0.194	0.283	0.362	0.760	0.751	0.740	0.748	0.716	0.688	1.069	1.106	1.129
500,000-999,999	3	0.412	0.393	0.408	0.675	0.641	0.689	0.619	0.659	0.668	0.516	0.527	0.534	1.085	1.091	1.088
Under 500,000	7	0.375	0.434	0.398	0.153	0.275	0.307	0.806	0.831	0.811	0.751	0.752	0.724	1.050	1.103	1.114
Percent Asian and Pacific Islander (quartiles)																
Under 1.8%	8	0.388	0.398	0.421	0.062	0.102	0.175	0.728	0.739	0.732	0.719	0.725	0.710	1.017	1.041	1.067
1.8-3.1%	7	0.433	0.430	0.438	0.151	0.222	0.303	0.765	0.768	0.758	0.772	0.761	0.750	1.045	1.068	1.090
3.1-5.7%	8	0.386	0.412	0.412	0.147	0.250	0.332	0.768	0.754	0.739	0.737	0.699	0.666	1.045	1.091	1.133
Over 5.7%	7	0.433	0.432	0.442	0.428	0.469	0.556	0.712	0.726	0.720	0.659	0.648	0.613	1.099	1.143	1.163

Notes: Selected metropolitan areas are those 30 with at least 10 tracts and 3% or 20,000 or more Asians and Pacific Islanders in 1980.

Higher values indicate more segregation; the reference group is non-Hispanic Whites. Characteristics of metropolitan areas as of 1980.

Means weighted by size of Asian and Pacific Islander population.

Source: Census Summary File 1, 1980-2000.

Table 6. Distribution of Percent Change in Residential Segregation Indexes for Asians and Pacific Islanders: 1980-2000

	Dissimilarity Index (Evenness)		Isolation Index (Exposure)		Delta Index (Concentration)		Absolute Centralization Index (Centralization)		Spatial Proximity Index (Clustering)	
	number	percent	number	percent	number	percent	number	percent	number	percent
1980-1990										
Increase of 5% or more	14	47%	28	93%	2	7%	3	10%	6	20%
Increase of 1-4.99%	4	13%	1	3%	7	23%	7	23%	16	53%
Change of less than 1%	2	7%	0	0%	12	40%	5	17%	8	27%
Decrease of 1-4.99%	5	17%	0	0%	8	27%	10	33%	0	0%
Decrease of 5% or more	5	17%	1	3%	1	3%	5	17%	0	0%
1990-2000										
Increase of 5% or more	9	30%	29	97%	0	0%	1	3%	2	7%
Increase of 1-4.99%	10	33%	1	3%	1	3%	0	0%	20	67%
Change of less than 1%	1	3%	0	0%	12	40%	8	27%	7	23%
Decrease of 1-4.99%	5	17%	0	0%	16	53%	15	50%	1	3%
Decrease of 5% or more	5	17%	0	0%	1	3%	6	20%	0	0%
1980-2000										
Increase of 5% or more	14	47%	30	100%	1	3%	2	7%	13	43%
Increase of 1-4.99%	7	23%	0	0%	7	23%	4	13%	16	53%
Change of less than 1%	2	7%	0	0%	9	30%	4	13%	0	0%
Decrease of 1-4.99%	1	3%	0	0%	10	33%	11	37%	1	3%
Decrease of 5% or more	6	20%	0	0%	3	10%	9	30%	0	0%

Note: Includes 30 Metropolitan Areas with at least 10 tracts and 3% or 20,000 or more Asians and Pacific Islanders in 1980.
Source: Census 1980-2000 Summary File 1.

Table 7. Residential Segregation Indexes for American Indians and Alaska Natives by Characteristics of Selected Metropolitan Areas: 1980-2000

(weighted averages)	Number of Metropolitan Areas	Dissimilarity Index (Evenness)			Isolation Index (Exposure)			Delta Index (Concentration)			Absolute Centralization Index (Centralization)			Spatial Proximity Index (Clustering)		
		1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
All metropolitan areas	330	0.373	0.368	0.333	0.082	0.102	0.103	0.695	0.685	0.676	0.622	0.619	0.611	1.197	1.244	1.077
Selected metropolitan Areas	13	0.414	0.404	0.390	0.177	0.188	0.205	0.673	0.674	0.699	0.627	0.646	0.658	1.376	1.466	1.164
Region																
Northeast	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Midwest	1	0.398	0.399	0.384	0.110	0.132	0.177	0.924	0.918	0.885	0.908	0.899	0.871	1.049	1.053	1.050
South	4	0.286	0.283	0.253	0.076	0.101	0.144	0.584	0.587	0.587	0.530	0.542	0.561	1.036	1.051	1.053
West	8	0.487	0.488	0.465	0.236	0.250	0.239	0.715	0.726	0.755	0.673	0.709	0.706	1.574	1.769	1.228
Population size																
1 Million or more	2	0.461	0.481	0.483	0.181	0.205	0.208	0.742	0.757	0.754	0.715	0.738	0.712	1.368	1.567	1.160
500,000-999,999	2	0.254	0.250	0.226	0.069	0.093	0.137	0.607	0.603	0.605	0.590	0.608	0.608	1.025	1.035	1.038
Under 500,000	9	0.510	0.493	0.422	0.278	0.277	0.281	0.647	0.660	0.714	0.549	0.601	0.625	1.728	1.843	1.318
Percent American Indian and Alaska Native (quartiles)																
Under 3%	4	0.413	0.400	0.418	0.153	0.165	0.184	0.726	0.726	0.728	0.681	0.690	0.682	1.278	1.379	1.125
3-3.8%	3	0.526	0.539	0.456	0.171	0.151	0.187	0.664	0.624	0.584	0.224	0.323	0.389	1.208	1.127	1.139
3.8-4.4%	2	0.526	0.534	0.469	0.170	0.226	0.275	0.579	0.584	0.600	0.585	0.613	0.547	1.264	1.314	1.286
Over 4.4%	4	0.379	0.374	0.319	0.218	0.220	0.237	0.606	0.618	0.674	0.621	0.631	0.668	1.580	1.660	1.223

Notes: Selected metropolitan areas are those 13 with at least 10 tracts and 3% or 20,000 or more American Indians and Alaska Natives in 1980.

Higher values indicate more segregation; the reference group is non-Hispanic Whites. Characteristics of metropolitan areas as of 1980.

Means weighted by size of American Indian and Alaska Native population.

Source: Census Summary File 1, 1980-2000.

Table 8. Distribution of Percent Change in Residential Segregation Indexes for American Indians and Alaska Natives: 1980-2000

	Dissimilarity Index (Evenness)		Isolation Index (Exposure)		Delta Index (Concentration)		Absolute Centralization Index (Centralization)		Spatial Proximity Index (Clustering)	
	number	percent	number	percent	number	percent	number	percent	number	percent
1980-1990										
Increase of 5% or more	4	31%	9	69%	1	8%	3	23%	3	23%
Increase of 1-4.99%	2	15%	0	0%	4	31%	5	38%	5	38%
Change of less than 1%	1	8%	0	0%	2	15%	1	8%	4	31%
Decrease of 1-4.99%	1	8%	1	8%	6	46%	4	31%	0	0%
Decrease of 5% or more	5	38%	3	23%	0	0%	0	0%	1	8%
1990-2000										
Increase of 5% or more	1	8%	10	77%	2	15%	4	31%	0	0%
Increase of 1-4.99%	0	0%	0	0%	3	23%	2	15%	2	15%
Change of less than 1%	0	0%	0	0%	2	15%	2	15%	8	62%
Decrease of 1-4.99%	1	8%	1	8%	4	31%	4	31%	1	8%
Decrease of 5% or more	11	85%	2	15%	2	15%	1	8%	2	15%
1980-2000										
Increase of 5% or more	1	8%	9	69%	2	15%	4	31%	1	8%
Increase of 1-4.99%	0	0%	0	0%	3	23%	3	23%	5	38%
Change of less than 1%	0	0%	0	0%	3	23%	2	15%	3	23%
Decrease of 1-4.99%	1	8%	0	0%	4	31%	3	23%	1	8%
Decrease of 5% or more	11	85%	4	31%	1	8%	1	8%	3	23%

Note: Includes 13 Metropolitan Areas with at least 10 tracts and 3% or 20,000 or more American Indians and Alaska Natives in 1980.
Source: Census 1980-2000 Summary File 1.

Table A1. Residential Segregation for African Americans in Large Metropolitan Areas: 1980-2000

	Dissimilarity Index (Evenness)				Isolation Index (Exposure)				Delta Index (Concentration)				Absolute Centralization Index (Centralization)				Spatial Proximity Ind (Clustering)		
	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000
Atlanta, GA	0.737	0.671	0.645	23	0.698	0.657	0.667	11	0.776	0.758	0.699	42	0.767	0.755	0.717	35	1.447	1.443	1.420
Baltimore, MD	0.744	0.713	0.675	17	0.737	0.706	0.680	10	0.851	0.834	0.811	29	0.846	0.848	0.819	18	1.596	1.578	1.522
Bergen-Passaic, NJ	0.803	0.768	0.723	11	0.585	0.596	0.583	19	0.860	0.821	0.787	31	0.710	0.696	0.678	36	1.241	1.284	1.300
Boston, MA-NH	0.763	0.693	0.658	22	0.594	0.543	0.504	27	0.861	0.835	0.812	28	0.877	0.855	0.825	15	1.475	1.469	1.444
Buffalo-Niagara Falls, NY	0.801	0.800	0.766	7	0.663	0.651	0.634	16	0.917	0.916	0.878	8	0.860	0.842	0.818	19	1.416	1.453	1.474
Chicago, IL	0.878	0.838	0.797	5	0.855	0.809	0.776	5	0.908	0.888	0.844	18	0.721	0.717	0.663	38	1.812	1.802	1.734
Cincinnati, OH-KY-IN	0.781	0.761	0.739	8	0.637	0.608	0.584	18	0.911	0.920	0.884	5	0.926	0.921	0.898	4	1.323	1.317	1.313
Cleveland-Lorain-Elyria, OH	0.854	0.824	0.768	6	0.784	0.772	0.721	7	0.919	0.901	0.874	9	0.892	0.879	0.856	12	1.729	1.751	1.660
Columbus, OH	0.729	0.673	0.616	28	0.576	0.528	0.495	28	0.907	0.887	0.841	19	0.896	0.874	0.869	8	1.319	1.268	1.250
Dallas, TX	0.771	0.625	0.587	33	0.715	0.571	0.542	25	0.855	0.825	0.799	30	0.780	0.800	0.775	25	1.485	1.316	1.271
Denver, CO	0.689	0.640	0.605	30	0.496	0.410	0.364	34	0.907	0.890	0.863	13	0.938	0.918	0.898	3	1.251	1.191	1.186
Detroit, MI	0.874	0.874	0.846	1	0.805	0.823	0.813	2	0.928	0.908	0.865	12	0.889	0.878	0.848	13	1.818	1.826	1.821
Fort Lauderdale, FL	0.836	0.683	0.608	29	0.730	0.581	0.599	17	0.826	0.812	0.770	37	0.483	0.773	0.744	30	1.292	1.173	1.296
Hartford, CT	0.712	0.696	0.644	24	0.562	0.543	0.490	29	0.829	0.817	0.773	36	0.819	0.807	0.746	29	1.396	1.432	1.313
Houston, TX	0.754	0.664	0.663	20	0.719	0.635	0.649	15	0.829	0.795	0.775	35	0.846	0.808	0.784	24	1.468	1.353	1.382
Indianapolis, IN	0.788	0.746	0.704	13	0.653	0.599	0.554	22	0.927	0.913	0.880	7	0.833	0.861	0.858	11	1.440	1.373	1.302
Kansas City, MO-KS	0.773	0.725	0.688	15	0.687	0.615	0.568	20	0.905	0.891	0.862	15	0.903	0.894	0.888	6	1.461	1.361	1.331
Los Angeles-Long Beach, CA	0.808	0.728	0.664	19	0.758	0.693	0.652	14	0.865	0.817	0.787	32	0.843	0.789	0.721	34	1.783	1.652	1.558
Miami, FL	0.785	0.690	0.694	14	0.738	0.735	0.782	3	0.887	0.847	0.831	23	0.807	0.735	0.677	37	1.526	1.454	1.435
Milwaukee-Waukesha, WI	0.839	0.826	0.818	2	0.718	0.725	0.720	8	0.935	0.923	0.893	1	0.894	0.890	0.864	10	1.646	1.696	1.652
Minneapolis-St. Paul, MN-WI	0.677	0.622	0.576	34	0.330	0.296	0.313	36	0.897	0.889	0.863	14	0.948	0.938	0.917	1	1.110	1.136	1.169
Nassau-Suffolk, NY	0.767	0.761	0.730	10	0.525	0.540	0.550	23	0.775	0.766	0.737	40	0.378	0.354	0.334	43	1.207	1.260	1.287
New Orleans, LA	0.698	0.679	0.684	16	0.715	0.713	0.738	6	0.867	0.836	0.833	22	0.901	0.866	0.847	14	1.351	1.388	1.402
New York, NY	0.812	0.813	0.810	3	0.793	0.818	0.827	1	0.865	0.848	0.834	20	0.789	0.770	0.765	26	1.441	1.454	1.469
Newark, NJ	0.827	0.825	0.801	4	0.765	0.784	0.781	4	0.922	0.905	0.886	2	0.691	0.657	0.639	39	1.651	1.790	1.814
Norfolk-Va Beach-Newport News, VA-NC	0.595	0.494	0.460	39	0.618	0.551	0.547	24	0.733	0.738	0.736	41	0.747	0.743	0.730	32	1.244	1.179	1.181
Oakland, CA	0.739	0.678	0.618	27	0.649	0.606	0.563	21	0.843	0.809	0.761	38	0.582	0.520	0.435	41	1.427	1.400	1.326
Orange County, CA	0.447	0.382	0.371	43	0.106	0.084	0.091	43	0.644	0.580	0.539	43	0.644	0.517	0.369	42	1.030	1.021	1.023
Philadelphia, PA-NJ	0.781	0.768	0.720	12	0.723	0.719	0.687	9	0.862	0.839	0.816	27	0.836	0.822	0.807	21	1.641	1.678	1.670
Phoenix-Mesa, AZ	0.613	0.503	0.433	41	0.355	0.239	0.197	40	0.919	0.902	0.885	4	0.913	0.910	0.892	5	1.088	1.063	1.055
Pittsburgh, PA	0.725	0.707	0.671	18	0.545	0.518	0.483	30	0.876	0.873	0.865	11	0.820	0.831	0.821	17	1.261	1.252	1.261
Portland-Vancouver, OR-WA	0.686	0.630	0.464	38	0.350	0.298	0.190	41	0.909	0.899	0.866	10	0.946	0.939	0.907	2	1.175	1.158	1.102
Providence-Fall River-Warwick, RI-MA	0.727	0.664	0.600	32	0.308	0.319	0.285	38	0.872	0.848	0.824	25	0.813	0.826	0.755	27	1.105	1.126	1.133
Riverside-San Bernardino, CA	0.526	0.439	0.449	40	0.264	0.234	0.305	37	0.902	0.881	0.886	3	0.875	0.872	0.867	9	1.081	1.089	1.119
Rochester, NY	0.677	0.672	0.661	21	0.485	0.499	0.517	26	0.855	0.854	0.845	17	0.834	0.827	0.821	16	1.240	1.277	1.325
Saint Louis, MO-IL	0.817	0.769	0.731	9	0.741	0.694	0.660	12	0.927	0.899	0.881	6	0.931	0.911	0.885	7	1.562	1.448	1.458
San Antonio, TX	0.613	0.543	0.492	36	0.511	0.415	0.375	33	0.842	0.854	0.818	26	0.839	0.846	0.818	20	1.221	1.184	1.165
San Diego, CA	0.643	0.579	0.535	35	0.409	0.355	0.346	35	0.852	0.822	0.828	24	0.762	0.730	0.737	31	1.264	1.224	1.163
San Francisco, CA	0.675	0.638	0.600	31	0.514	0.478	0.432	32	0.877	0.858	0.833	21	0.795	0.785	0.794	22	1.167	1.145	1.109
San Jose, CA	0.478	0.430	0.399	42	0.135	0.143	0.151	42	0.790	0.793	0.776	34	0.751	0.752	0.747	28	1.052	1.040	1.035
Seattle-Bellevue-Everett, WA	0.671	0.559	0.489	37	0.357	0.284	0.224	39	0.889	0.871	0.850	16	0.922	0.859	0.791	23	1.196	1.138	1.105
Tampa-St. Petersburg-Clearwater, FL	0.781	0.693	0.629	25	0.607	0.510	0.472	31	0.844	0.802	0.754	39	0.617	0.585	0.577	40	1.317	1.241	1.276
Washington, DC-MD-VA-WV	0.687	0.650	0.625	26	0.686	0.653	0.654	13	0.825	0.804	0.779	33	0.819	0.781	0.724	33	1.585	1.508	1.457

Note: Includes 43 Metropolitan Areas with 3% or 20,000 or more Blacks or African Americans and 1,000,000 or more total population in 1980. Higher values indicate more segregation; the reference group is non-Hispanic Whites
Source: Census 2000 Summary File 1.

Table A2. Residential Segregation for Hispanics or Latinos in Large Metropolitan Areas: 1980-2000

	Dissimilarity Index (Evenness)				Isolation Index (Exposure)				Delta Index (Concentration)				Absolute Centralization Index (Centralization)				Spatial Proximity Ind (Clustering)		
	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000
Atlanta, GA MSA	0.299	0.349	0.511	18	0.063	0.088	0.297	26	0.652	0.667	0.673	31	0.734	0.737	0.703	23	1.006	1.016	1.104
Baltimore, MD PMSA	0.326	0.301	0.358	32	0.062	0.045	0.075	35	0.652	0.651	0.666	32	0.606	0.615	0.589	32	1.011	1.012	1.017
Bergen-Passaic, NJ PMSA	0.609	0.588	0.578	10	0.396	0.475	0.528	13	0.732	0.723	0.710	28	0.676	0.653	0.629	27	1.152	1.232	1.279
Boston, MA-NH PMSA	0.553	0.547	0.587	9	0.219	0.264	0.330	24	0.759	0.764	0.779	18	0.761	0.746	0.749	15	1.077	1.109	1.160
Chicago, IL PMSA	0.635	0.619	0.611	6	0.437	0.487	0.550	9	0.792	0.803	0.774	20	0.749	0.764	0.715	21	1.325	1.426	1.423
Cleveland-Lorain-Elyria, OH PMSA	0.575	0.575	0.577	11	0.162	0.183	0.218	30	0.786	0.781	0.768	24	0.613	0.618	0.613	29	1.063	1.095	1.126
Dallas, TX PMSA	0.485	0.498	0.537	14	0.311	0.406	0.546	10	0.781	0.788	0.777	19	0.793	0.816	0.801	9	1.119	1.172	1.256
Denver, CO PMSA	0.488	0.465	0.500	21	0.323	0.338	0.434	18	0.870	0.857	0.844	4	0.914	0.897	0.881	1	1.146	1.162	1.215
Detroit, MI PMSA	0.413	0.398	0.456	26	0.105	0.128	0.244	28	0.690	0.669	0.662	33	0.679	0.651	0.627	28	1.047	1.063	1.169
Fort Lauderdale, FL PMSA	0.262	0.259	0.310	34	0.080	0.141	0.306	25	0.440	0.685	0.693	29	0.264	0.705	0.612	30	1.010	1.016	1.071
Hartford, CT MSA	0.663	0.659	0.634	4	0.383	0.444	0.447	17	0.816	0.804	0.772	21	0.745	0.731	0.678	25	1.174	1.287	1.295
Houston, TX PMSA	0.499	0.494	0.551	12	0.425	0.492	0.618	5	0.797	0.779	0.755	25	0.851	0.813	0.780	11	1.218	1.229	1.307
Kansas City, MO-KS MSA	0.404	0.394	0.455	27	0.129	0.135	0.229	29	0.791	0.811	0.802	9	0.834	0.842	0.848	4	1.032	1.035	1.083
Los Angeles-Long Beach, CA PMSA	0.573	0.611	0.631	5	0.603	0.715	0.781	2	0.778	0.771	0.770	22	0.788	0.757	0.718	19	1.344	1.379	1.350
Miami, FL PMSA	0.525	0.503	0.439	29	0.625	0.734	0.791	1	0.809	0.798	0.780	17	0.855	0.820	0.772	13	1.290	1.250	1.142
Milwaukee-Waukesha, WI PMSA	0.550	0.564	0.595	8	0.190	0.266	0.396	21	0.793	0.794	0.786	15	0.749	0.744	0.708	22	1.072	1.143	1.333
Minneapolis-St. Paul, MN-WI MSA	0.364	0.355	0.465	25	0.050	0.057	0.158	31	0.788	0.799	0.792	12	0.852	0.857	0.854	3	1.015	1.018	1.066
Nassau-Suffolk, NY PMSA	0.371	0.423	0.469	24	0.134	0.221	0.340	22	0.569	0.587	0.597	36	0.385	0.369	0.350	35	1.033	1.064	1.123
New Orleans, LA MSA	0.265	0.314	0.358	31	0.104	0.123	0.147	33	0.817	0.827	0.827	5	0.859	0.864	0.846	5	1.024	1.026	1.033
New York, NY PMSA	0.652	0.656	0.667	2	0.604	0.665	0.708	3	0.829	0.808	0.793	11	0.837	0.816	0.812	7	1.244	1.299	1.347
Newark, NJ PMSA	0.669	0.669	0.650	3	0.408	0.481	0.534	12	0.847	0.826	0.808	7	0.606	0.572	0.545	33	1.183	1.309	1.384
Oakland, CA PMSA	0.365	0.388	0.469	23	0.250	0.333	0.486	16	0.697	0.691	0.689	30	0.349	0.341	0.292	36	1.066	1.100	1.185
Orange County, CA PMSA	0.425	0.499	0.551	13	0.350	0.501	0.612	6	0.643	0.652	0.648	34	0.642	0.594	0.533	34	1.163	1.317	1.374
Philadelphia, PA-NJ PMSA	0.628	0.623	0.601	7	0.351	0.426	0.429	20	0.769	0.752	0.744	26	0.765	0.757	0.727	18	1.183	1.290	1.365
Phoenix-Mesa, AZ MSA	0.522	0.486	0.521	16	0.390	0.404	0.511	14	0.859	0.857	0.866	2	0.818	0.849	0.861	2	1.163	1.172	1.225
Portland-Vancouver, OR-WA PMSA	0.208	0.256	0.343	33	0.030	0.065	0.158	32	0.727	0.736	0.800	10	0.756	0.747	0.785	10	1.006	1.017	1.043
Providence-Fall River-Warwick, RI-MA MSA	0.497	0.614	0.676	1	0.114	0.283	0.429	19	0.783	0.829	0.851	3	0.684	0.785	0.777	12	1.032	1.122	1.271
Riverside-San Bernardino, CA PMSA	0.381	0.358	0.425	30	0.358	0.427	0.578	7	0.879	0.868	0.879	1	0.802	0.830	0.835	6	1.119	1.128	1.204
St. Louis, MO-IL MSA	0.264	0.229	0.273	19	0.046	0.029	0.057	4	0.737	0.723	0.716	23	0.782	0.755	0.736	14	1.004	1.004	1.011
San Antonio, TX MSA	0.575	0.535	0.507	20	0.699	0.688	0.704	11	0.811	0.804	0.769	6	0.827	0.810	0.769	26	1.382	1.347	1.342
San Diego, CA MSA	0.418	0.453	0.506	15	0.345	0.436	0.543	15	0.806	0.804	0.819	13	0.706	0.682	0.660	20	1.112	1.166	1.213
San Francisco, CA PMSA	0.455	0.498	0.535	17	0.309	0.411	0.497	8	0.793	0.793	0.790	16	0.801	0.764	0.716	24	1.112	1.134	1.145
San Jose, CA PMSA	0.452	0.478	0.513	35	0.378	0.471	0.570	34	0.732	0.769	0.782	14	0.704	0.707	0.699	17	1.180	1.233	1.291
Seattle-Bellevue-Everett, WA PMSA	0.191	0.207	0.303	36	0.031	0.047	0.112	36	0.787	0.785	0.786	27	0.797	0.755	0.733	16	1.004	1.007	1.025
Tampa-St. Petersburg-Clearwater, FL MSA	0.498	0.453	0.444	28	0.220	0.215	0.278	27	0.666	0.622	0.621	35	0.716	0.623	0.597	31	1.098	1.126	1.150
Washington, DC-MD-VA-WV PMSA	0.322	0.423	0.480	22	0.097	0.222	0.338	23	0.792	0.810	0.802	8	0.846	0.842	0.805	8	1.027	1.082	1.140

Note: Includes 36 Metropolitan Areas with 3% or 20,000 or more Hispanics or Latinos and 1,000,000 or more total population in 1980. Higher values indicate more segregation; the reference group is non-His

Source: Census 2000 Summary File 1.

Table A3. Residential Segregation for Asians and Pacific Islanders in Large Metropolitan Areas: 1980-2000

	Dissimilarity Index (Evenness)				Isolation Index (Exposure)				Delta Index (Concentration)				Absolute Centralization Index (Centralization)				Spatial Proximity Ind (Clustering)		
	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000
Baltimore, MD PMSA	0.376	0.382	0.389	13	0.030	0.054	0.097	20	0.686	0.691	0.687	15	0.634	0.670	0.652	16	1.007	1.018	1.032
Bergen-Passaic, NJ PMSA	0.342	0.344	0.359	16	0.048	0.121	0.213	10	0.531	0.525	0.529	20	0.374	0.363	0.361	18	1.012	1.031	1.067
Boston, MA-NH PMSA	0.482	0.439	0.448	7	0.133	0.110	0.163	15	0.711	0.710	0.700	13	0.805	0.781	0.760	8	1.041	1.062	1.067
Chicago, IL PMSA	0.453	0.443	0.424	9	0.107	0.149	0.193	12	0.726	0.757	0.720	11	0.732	0.759	0.724	13	1.044	1.084	1.085
Detroit, MI PMSA	0.405	0.428	0.456	6	0.030	0.056	0.113	17	0.741	0.734	0.716	12	0.756	0.737	0.729	12	1.008	1.015	1.037
Houston, TX PMSA	0.424	0.459	0.484	3	0.088	0.157	0.281	8	0.814	0.817	0.799	6	0.821	0.790	0.760	9	1.026	1.073	1.131
Los Angeles-Long Beach, CA PMSA	0.468	0.463	0.477	4	0.277	0.405	0.502	3	0.752	0.740	0.740	10	0.766	0.713	0.670	14	1.123	1.190	1.222
Nassau-Suffolk, NY PMSA	0.305	0.324	0.353	18	0.023	0.059	0.107	19	0.536	0.540	0.547	19	0.336	0.314	0.300	19	1.005	1.016	1.032
New York, NY PMSA	0.492	0.484	0.505	1	0.234	0.328	0.438	4	0.785	0.778	0.779	8	0.799	0.773	0.774	7	1.063	1.085	1.113
Newark, NJ PMSA	0.312	0.313	0.355	17	0.040	0.075	0.130	16	0.687	0.685	0.684	16	0.667	0.656	0.653	15	1.007	1.016	1.037
Oakland, CA PMSA	0.374	0.390	0.405	11	0.180	0.318	0.435	5	0.712	0.686	0.651	17	0.455	0.379	0.291	20	1.058	1.116	1.154
Orange County, CA PMSA	0.272	0.330	0.395	12	0.086	0.224	0.369	6	0.584	0.561	0.550	18	0.587	0.505	0.442	17	1.013	1.064	1.153
Philadelphia, PA-NJ PMSA	0.403	0.433	0.436	8	0.057	0.109	0.173	14	0.709	0.699	0.687	14	0.721	0.739	0.736	11	1.011	1.035	1.063
Portland-Vancouver, OR-WA PMSA	0.284	0.308	0.311	20	0.032	0.059	0.107	18	0.838	0.858	0.848	2	0.883	0.896	0.880	1	1.009	1.018	1.034
Riverside-San Bernardino, CA PMSA	0.287	0.328	0.360	15	0.037	0.102	0.191	13	0.875	0.886	0.890	1	0.842	0.880	0.860	2	1.012	1.039	1.060
San Diego, CA MSA	0.460	0.481	0.461	5	0.181	0.291	0.362	7	0.841	0.831	0.826	4	0.775	0.781	0.775	6	1.061	1.118	1.145
San Francisco, CA PMSA	0.511	0.501	0.484	2	0.368	0.460	0.523	2	0.845	0.839	0.826	5	0.862	0.860	0.847	3	1.130	1.137	1.144
San Jose, CA PMSA	0.314	0.385	0.410	10	0.159	0.366	0.525	1	0.762	0.775	0.769	9	0.751	0.760	0.754	10	1.035	1.119	1.157
Seattle-Bellevue-Everett, WA PMSA	0.390	0.364	0.343	19	0.160	0.198	0.240	9	0.857	0.849	0.828	3	0.877	0.842	0.804	5	1.061	1.075	1.081
Washington, DC-MD-VA-WV PMSA	0.322	0.355	0.382	14	0.068	0.125	0.208	11	0.808	0.807	0.788	7	0.849	0.833	0.812	4	1.016	1.039	1.071

Note: Includes 20 Metropolitan Areas with 3% or 20,000 or more Asians and Pacific Islanders and 1,000,000 or more total population in 1980. Higher values indicate more segregation; the reference group is non-Hispanic Whites.
Source: Census 2000 Summary File 1.

Table A4. Residential Segregation for American Indians and Alaska Natives in Selected Metropolitan Areas: 1980-2000

	Dissimilarity Index (Evenness)				Isolation Index (Exposure)				Delta Index (Concentration)				Absolute Centralization Index (Centralization)				Spatial Proximity Ind (Clustering)		
	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000	2000 rank	1980	1990	2000
Albuquerque, NM MSA	0.602	0.562	0.472	5	0.505	0.463	0.416	1	0.521	0.535	0.695	8	0.479	0.494	0.578	10	2.785	3.049	1.666
Anchorage, AK MSA	0.322	0.319	0.288	10	0.104	0.128	0.185	6	0.850	0.890	0.892	1	0.879	0.904	0.865	3	1.019	1.035	1.039
Bellingham, WA MSA	0.435	0.456	0.380	7	0.235	0.224	0.218	5	0.771	0.759	0.743	6	0.783	0.781	0.786	6	1.070	1.088	1.091
Fort Smith, AR-OK MSA	0.551	0.607	0.515	2	0.123	0.177	0.221	4	0.454	0.495	0.451	13	0.048	0.059	0.152	13	1.117	1.178	1.194
Great Falls, MT MSA	0.357	0.393	0.310	9	0.069	0.081	0.092	13	0.892	0.895	0.835	4	0.860	0.848	0.859	4	1.014	1.016	1.017
Lawton, OK MSA	0.340	0.318	0.254	11	0.096	0.106	0.132	11	0.459	0.442	0.519	12	0.422	0.454	0.492	12	1.075	1.105	1.051
Los Angeles-Long Beach, CA PMSA	0.351	0.390	0.474	4	0.037	0.050	0.172	8	0.711	0.703	0.716	7	0.665	0.641	0.643	7	1.005	1.006	1.031
Oklahoma City, OK MSA	0.257	0.228	0.213	13	0.054	0.079	0.107	12	0.671	0.658	0.642	10	0.560	0.583	0.576	11	1.016	1.016	1.018
Phoenix-Mesa, AZ MSA	0.629	0.566	0.498	3	0.401	0.349	0.261	3	0.788	0.808	0.813	5	0.792	0.828	0.817	5	1.925	2.089	1.356
Rapid City, SD MSA	0.398	0.399	0.384	6	0.110	0.132	0.177	7	0.924	0.918	0.885	2	0.908	0.899	0.871	2	1.049	1.053	1.050
Tulsa, OK MSA	0.252	0.270	0.237	12	0.080	0.107	0.161	9	0.561	0.552	0.574	11	0.611	0.603	0.634	8	1.031	1.054	1.055
Yakima, WA MSA	0.655	0.667	0.607	1	0.221	0.299	0.367	2	0.662	0.671	0.652	9	0.698	0.711	0.582	9	1.395	1.442	1.436
Yuma, AZ MSA	0.617	0.428	0.368	8	0.346	0.139	0.153	10	0.880	0.858	0.881	3	0.039	0.870	0.882	1	1.545	1.039	1.040

Note: Includes 13 Metropolitan Areas with 3% or 20,000 or more American Indians and Alaska Natives in 1980. Higher values indicate more segregation; the reference group is non-Hispanic Whites.
Source: Census 2000 Summary File 1.