## Working Paper

# Neighborhood Segregation in Single-Race and Multirace America: A Census 2000 Study of Cities and Metropolitan Areas 

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## ExECUTIVE Summary

This report accompanies the release of detailed racial segregation indices for 1,246 individual U.S. cities with populations exceeding 25,000 and for the 318 U.S. metropolitan areas. These data can be accessed from the World Wide Web at www.CensusScope.org. This study extends earlier work on racial segregation from Census 2000 in the following respects:

- It examines segregation patterns for persons who identify themselves as one race alone as distinct from those who identify themselves as two or more races, which is possible for the first time in Census 2000.
- Its focus on large and small cities as well as metropolitan areas provides a comprehensive assessment of segregation variation across local areas and broader metropolitan regions.
- Segregation and exposure measures in this study are based on the block group unit (average population 1,100 ), which more closely approximates a neighborhood community area than the census tract unit (average population 5,000 ) used in other studies. This more refined block group-based segregation measure permits the detection of segregation patterns for small racial groups or in small areas that are camouflaged when tract-based segregation measures are used.

The opportunity to look at segregation for single-race and multirace groups with Census 2000 provides an important means of assessing the prospects of future integration in a multirace society where intermarriage and interrace identification are on the rise. Our analysis of singlerace and multirace segregation shows that:

- Persons who identify themselves as "white and black" live, on average, in neighborhoods that more closely approximate the racial composition of the average white person's neighborhood, rather than that of the average black person's neighborhood. For the combined metropolitan population of the United States, the average neighborhood of a "white and black" resident is 61 percent white and 19 percent
black. The average neighborhood of someone who identifies as black alone is 29 percent white and 54 percent black, and the average neighborhood of someone who identifies as white alone is 81 percent white and 6 percent black.
- Among the cities and metropolitan areas in our study, persons identifying with two or more races showed, on average, less segregation from whites than did minority persons identifying with a single race.

Our analysis of cities with more than 25,000 population shows the wide variation in segregation levels for each race and ethnic group. For most race groups, the highest levels of segregation tend to occur in the nation's largest cities. For example, the City of New York ranks in the top six of all cities for each minority group's segregation from whites. It ranks third in segregation for blacks, fifth for Hispanics, first for American Indians, first for Hawaiians, and sixth for those who identify themselves as two or more races. Hence, studies that focus only on segregation in large cities or in cities that have the largest minority populations overstate the level of racial segregation that exits in most cities with a minority presence. Other findings are:

- Among cities with more than 100,000 population, white-black segregation ranges from an index of dissimilarity of 21 (Chandler, AZ) to 87 (Chicago, IL); Asian segregation from whites ranges from 15 (Coral Springs, FL) to 66 (New Orleans, LA); and Hispanic segregation from whites ranges from 17 (Hialeah, FL) to 71 (Oakland, CA).
- The lowest segregation from whites for each race group tends to be associated with cities with less than 100,000 population, located in the suburbs, and, largely, in California, Texas, and other "multiethnic" states in the Sunbelt. Lowest city segregation indices for each race are in: The Colony, TX (white-black index of 8); Morgan Hill, CA (whiteAsian segregation index of 9); Copperas Cove, TX (white-Hispanic segregation index of 8); Moore, OK (white-American Indian index of 12); Carson, CA (white-Hawaiian index of 25 ); and Cerritos, CA (white-multiple race index of 7).

City segregation indices differ from metropolitan segregation indices because the former reflect local patterns that can vary within the same metropolitan unit. Our analyses of dissimilarity of both levels indicate that:

- On average, segregation levels are higher for metropolitan areas than for cities. Among the cities in our study, the average segregation levels for blacks, Asians, and Hispanics are indices of 45,32 , and 35 respectively. Average segregation levels among metropolitan areas for these three groups are indices of 59, 45, and 43, respectively.
- Among smaller racial categories, Hawaiians show the highest average segregation levels, with an index of 53 for cities and 61 for metropolitan areas. Persons identifying themselves as two or more races show the lowest average segregation levels: an index of 27 for cities and 33 for metropolitan areas. American Indian segregation levels lie inbetween, with an average index of 39 for cities and 43 for metropolitan areas.
- Different cities within the same metropolitan area can have quite different segregation measures. For example, although the Detroit primary metropolitan statistical area ranks second among all areas on white-black metropolitan segregation (index of 87), the city of Detroit ranks 55th, with an index of 63, among cities of more than 100,000 population. On the other hand, metropolitan Atlanta ranks 53rd in white-black segregation with a
metropolitanwide dissimilarity index of 69 , whereas the city of Atlanta ranks fourth in segregation, with an index of 83 , among cities of more than 100,000 population. This shows that the metropolitan segregation index does not easily translate into segregation levels of large or small cities within the metropolitan area.

Finally, our use of the block group as a proxy for neighborhood in this segregation study provides a more refined measure that reveals segregation across smaller neighborhoods, rather than the larger census tract measures that have been used in some earlier studies. Block groupbased segregation tends to be greater in smaller cities and metropolitan areas or where the minority population is small.

- On average, the white-black dissimilarity index is 5.8 points higher when block groups, rather than tracts, are used to measure segregation. The disparity is greatest in smaller metropolitan areas. For example, in metropolitan Reno, NV, white-black segregation measured on the basis of block groups has an index of 44, whereas the counterpart segregation index measured on the basis of census tracts is only 34 .
- Indices of neighborhood exposure to other races are also affected by the choice of block group or tract as the neighborhood measure. For example, in metropolitan Jamestown, NY, the average black person lives in a neighborhood that is 69 percent white when the neighborhood is measured on the basis of block groups. However, that percentage rises to 81 percent white if the larger census tract is considered to be the neighborhood.


## Introduction

This report accompanies the first release of detailed racial residential segregation indices for 1,246 individual U.S. cities with populations exceeding 25,000 and for the 318 U.S. metropolitan areas. A complete set of both the dissimilarity and exposure indices based on Census 2000 raceethnic information at the block group level can be accessed from the World Wide Web at www.CensusScope.org.

This report provides an overview of these statistics. Using the dissimilarity index, it ranks metropolitan areas and cities in several population-size classes based on the segregation of different racial and ethnic minority groups from non-Hispanic whites. It also examines neighborhood-level exposure of specific race-ethnic groups to other races for the national metropolitan population and for individual cities.

This report differs from previous Census 2000 segregation studies in the following respects: (1) it analyzes segregation of persons who identify with two or more racial groups, and different racial combinations of these groups, distinct from persons who identify with one race alone; (2) it includes all individual cities with Census 2000 populations greater than 25,000 , in addition to all metropolitan areas; and (3) it calculates segregation and exposure indices using data for block groups, which are smaller than census tracts and are more consistent with the concept of neighborhood.

For the first time in 2000, the U.S. Census questionnaire permitted individuals to identify themselves with more than one racial group. These broad categories of race are: (1) white, (2) black or African American, (3) American Indian or Alaskan Native, (4) Asian, (5) Native Hawaiian or other Pacific Islander, and (6) some other race. Because racial residential segregation patterns have been so ingrained in metropolitan areas, the ability to identify persons of different race combinations with Census 2000 provides an opportunity to determine if mixedrace persons are more integrated residentially than those who identify with a single race alone. This is especially important given the increased propensity toward mixed-race marriages (Suro 1999) and the tendency for minority populations to grow and cluster in specific metropolitan areas (Frey 2002; Frey and Fielding 1995; Myers 1999, 2001).

Our analysis shows that persons of mixed race are more likely to live in integrated neighborhoods than persons of one race only. Measures of segregation and exposure for these different biracial and mixed-race combinations have been computed for each area (city or metropolitan area) in this study.

We have calculated exposure and segregation indices for each city exceeding a population of 25,000 in the United States, in addition to every metropolitan area. Earlier studies using Census 2000 data have provided valuable information at the metropolitan level; however, metropolitan areas consist of counties that contain many individual municipalities. Segregation in these localities often varies widely from the entire metropolitan area. For example, the Detroit metropolitan area has a white-black segregation index of 87 , one of the highest of all metropolitan areas. Yet, within metropolitan Detroit, the white-black segregation indices for the cities of Ann Arbor, Inkster, and Detroit are 39, 52, and 63, respectively.

An additional refinement of our study, as compared to others conducted subsequent to Census 2000, is the use of the block group rather than the census tract as a proxy for a neighborhood. Census tracts have an average population of about 5,000 and can range to populations of up to 15,000 in large cities. Block groups have average populations of about 1,100 and therefore are more consistent with small areas that approximate more closely what is considered a neighborhood (Myers 1992).

Whereas early Census 2000 studies on segregation tended to focus on tracts, segregation studies based on block groups are more consistent with historical time series analyses (Frey and Farley 1996; Sorensen, Taeuber, and Hollingsworth 1975; Taeuber and Taeuber 1965). The use of block groups in estimating segregation indices tends to increase the average level of segregation in most areas (on average, metropolitan white-black segregation increases by 5.8 points). Segregation levels are higher in smaller metropolitan areas or where the minority group is smaller. It is in these areas that segregation within the block group area might be camouflaged when the larger tract units are used.

The remainder of this paper provides some background on residential segregation, describes the methods and data used to calculate the segregation indices, and presents an overview of segregation statistics that were compiled. The paper and the accompanying Web site (www.CensusScope.org) provide information on how cities and metropolitan areas rank on these measures and make this information accessible to the public. In later research, we will conduct statistical analyses designed to show how and why these measures vary across metropolitan areas and cities. We also will discuss, in greater depth, the use of single-race-based and multiple-racebased segregation measures toward enhancing the understanding of racial integration of U.S. cities and metropolitan areas.

## Background and Previous Research

Many studies have documented the distinct racial and ethnic residential location patterns in the United States (Frey and Farley 1996; Glaeser and Vigdor 2001; Logan 2001a; Massey and Denton 1987; Sorensen, Taeuber, and Hollingsworth 1975; Taeuber and Taeuber 1965; Van Valey, Roof, and Wilcox 1977). These patterns result from a variety of causes, including disparate economic resources across groups, preferences to reside with same-group neighbors, community zoning laws that discourage economic integration, and the long history of discriminatory practices by lending institutions, real estate agents, insurers, and rental agents.

The effects of discriminatory practices have been most evident in the segregation of African Americans from whites, which has been documented in a series of trend studies (Massey and Denton 1993; Taeuber and Taeuber 1965). Because of the fair housing legislation in the 1960s and its subsequent enforcement, and the emergence of a large black middle-class population, black segregation levels recorded in the 1990 census showed an overall modest decline from 1980 levels (Frey and Farley 1996). Nonetheless, metropolitan area segregation levels in 1990 were still relatively high, such that, on average, 6 out of 10 blacks would have had to change neighborhoods (block groups) to be distributed in the same way that whites were. Segregation was lowest and showed the greatest decline in metropolitan areas with a preponderance of recent
construction and significant in-migration of blacks and in "melting pot areas" where other race and ethnic minorities were present (Frey and Farley 1996).

Segregation of Hispanics and Asians is also of increasing interest in light of the substantial immigration waves that have affected many metropolitan areas in the past two decades. Data from the 1990 census for all metropolitan areas show that Hispanics and Asians were substantially less segregated than blacks at the block group level (Frey and Farley 1996). On average, only 4 in 10 Hispanics or Asians would have had to change residences to be distributed in the same way as the white populations in their respective metropolitan areas. The continuing large waves of Hispanic and Asian immigration since 1990 suggest an even greater potential for continued segregation among these groups and a more complicated set of "race and space" dynamics, especially in large melting pot areas.

Soon after the Census 2000 racial statistics were released, two national studies compared segregation patterns across metropolitan areas (Glaeser and Vigdor 2001; Logan 2001a). Both of these studies examined variations in segregation measures across metropolitan areas and employed census tracts (rather than block groups) as neighborhood units of analysis in measuring segregation.

Logan's (2001a) analysis emphasized segregation across the major racial groups: non-Hispanic whites, non-Hispanic blacks, non-Hispanic Asians, and Hispanics. This analysis did not evaluate separately segregation patterns of minority persons who reported a single race or patterns of persons who reported multiple races. Nor did it examine patterns for smaller racial groups such as American Indians. Instead, largely to maintain consistency with pre-2000 census categories, this study included multirace persons who reported being black or African American along with other races in the non-Hispanic black category. Remaining multiracial persons who reported that they were Asian or Pacific Islanders were included in the non-Hispanic Asian category.

The findings of the Logan (2001a) study reinforce metropolitan area segregation results observed after the 1990 census. Black segregation from whites remained substantially higher than Asian or Hispanic segregation from whites, yet the former declined slightly in most metropolitan areas, whereas the latter increased to a small extent. Yet, variation occurred across all of these measures, and the study emphasized a relative lack of change in the high segregation levels observed for larger, northern metropolitan areas where most blacks continue to reside.

Glaeser and Vigdor's (2001) study focused exclusively on black-nonblack segregation across metropolitan areas and found results somewhat similar to the white-black patterns revealed in Logan's (2001a) study. Despite similar results, Glaeser and Vigdor chose to emphasize those metropolitan areas where black segregation declined the most-those located in the South and West regions, which are among the metropolitan areas experiencing rapid growth in their black populations.

The current study builds on this earlier work by placing a greater focus on single-race and multirace segregation patterns, examining large and small cities as well as metropolitan areas, and using segregation measures based on block groups rather than tracts. Because of the greater dispersion of new Hispanic and Asian groups to smaller localities within and across metropolitan
areas, and the increasing movement of blacks toward suburban and smaller communities (Frey 2001; Myers and Park 2001), this study provides the first nuanced evaluation of racial segregation at the local level, based on the new race-ethnic information contained in Census 2000.

## Measures

This research uses two different measures of residential segregation. The first is the index of dissimilarity (defined below), which has become the standard indicator of racial and ethnic segregation between pairs of groups within a metropolitan area. The index is calculated for small neighborhood-like areas (block groups), for which data are available only from decennial U.S. censuses. In any given city or metropolitan area, this index examines the extent to which racial and ethnic minority groups are segregated from whites or are segregated from each other.

The index of dissimilarity has an intuitive interpretation. A maximum index value of 100 means that the two groups being compared reside in completely separate neighborhoods (i.e., complete segregation), whereas a minimum index value of 0 indicates that both groups are distributed in exactly the same way across neighborhoods (i.e., complete integration). Values between 0 and 100 can be interpreted as the percent of one group that would have to relocate into a different neighborhood to be distributed in exactly the same way as the other group. For example, a whiteblack dissimilarity index of 75 means that 75 percent of the black population would have to change neighborhoods to be distributed in the same way as the white population.

The formula used to calculate the dissimilarity index for two race and ethnic groups within the same city (or metropolitan area) is as follows:

$$
\begin{equation*}
D=\frac{1}{2} \sum_{i=1}^{n}\left|\frac{P_{1 i}}{P_{1}}-\frac{P_{2 i}}{P_{2}}\right| \times 100, \tag{1}
\end{equation*}
$$

$$
\text { where } \begin{aligned}
& P_{1}=\text { citywide population of Group } 1 \\
& P_{2}=\text { citywide population of Group } 2 \\
& P_{1 i}=\text { neighborhood } i \text { population of Group } 1 \\
& P_{2 i}=\text { neighborhood } i \text { population of Group } 2 \\
& n=\text { number of neighborhoods in city. }
\end{aligned}
$$

These indices were calculated for all metropolitan areas and for each city with a Census 2000 population of at least 25,000 . The study uses standard Office of Management and Budget classifications of metropolitan statistical areas, primary metropolitan statistical areas, and New England county metropolitan areas. Metropolitan areas are ranked with respect to degree of segregation for each of the largest racial and ethnic minority groups. Cities were ranked not only as a group, but also within three different population-size classes. Average (unweighted mean)
segregation indices also are presented for metropolitan areas and cities in different regions and size classes.

The second segregation measure used in this analysis is the index of residential exposure or, simply, the exposure index (see White 1986). The exposure index is used to calculate the racial composition of the average neighborhood for a specific group. For example, it can be used to calculate the average neighborhood racial composition for blacks in a city. This could then be compared with the average neighborhood racial composition for whites in the same city. This measure takes into account both the underlying neighborhood segregation in the city as well as the racial composition of the whole city. The following formula is used to calculate the average percent of Group 2 that lives in the average neighborhood of Group 1:

$$
\begin{equation*}
P=\sum_{i=1}^{n}\left(\frac{P_{1 i}}{P_{1}}\right)\left(\frac{P_{2 i}}{T_{i}}\right) \times 100 \tag{2}
\end{equation*}
$$

$$
\text { where } \begin{aligned}
& P_{1}=\text { citywide population of Group } 1 \\
& P_{1 i}=\text { neighborhood } i \text { population of Group } 1 \\
& P_{2 i}=\text { neighborhood } i \text { population of Group } 2 \\
& T_{i}=\text { neighborhood } i \text { total population } \\
& n=\text { number of neighborhoods in city. }
\end{aligned}
$$

This formula also is used when calculating the percent of Group 1 that lives in the average neighborhood of Group 1. (In this case, all $P$ values in the above equation pertain to Group 1.)

## Data

The indices of dissimilarity and exposure in this study were compiled from Census 2000 Public Law (PL 94-171) data files, which represent the first detailed release of census data for small geographic areas (U.S. Bureau of the Census 2001). These files contain base tabulations of the population by race and Hispanic origin for every level of geography down to the block group level, which is the geographic unit used to calculate the dissimilarity and exposure indices.

As indicated earlier, this study pays particular attention to identifying groups by single-race and multirace status. In Census 2000, for the first time, respondents were asked to identify themselves according to one or multiple races. On a separate question they were asked to identify themselves as Hispanic (Spanish/Hispanic/Latino). Hence, it is possible to classify persons by both Hispanic status and race (including different combinations of races).

This study follows the convention of earlier studies of Hispanic status and race categories (Frey and Farley 1996; Logan 2001a; Massey and Denton 1987) by classifying persons who are Hispanic as one group and classifying the non-Hispanic population by their racial identification.

Because non-Hispanics can be classed by single race alone or multiple races, the following represents the classification system used in this study: (1) Hispanic, (2) non-Hispanic white only, (3) non-Hispanic black only, (4) non-Hispanic Asian only, (5) non-Hispanic American Indian and Alaskan Native only, (6) non-Hispanic Hawaiian and other Pacific Islander only, (7) nonHispanic persons of other races only, and (8) non-Hispanic persons who reported combinations of races. In some cases the latter group is treated as a single category, and in other cases combinations of non-Hispanic races are examined separately: non-Hispanic whites and blacks, non-Hispanic whites and Asians, and non-Hispanic whites and American Indians. For ease of exposition, we use the terms "whites," "blacks," "Asians," "American Indians," "Hawaiians," "other," and "two or more" to pertain to the broad non-Hispanic race groups discussed above.

## Exposure to Other Races and Ethnic Groups

We begin our discussion with an elaboration on the exposure index as a measure of neighborhood race-ethnic composition. In simple terms, the exposure index shows the racial composition of the average neighborhood (block group) lived in by a given race-ethnic group. The index can be calculated for individual metropolitan areas and cities. These indices appear on the Web site www.CensusScope.org. This section focuses on exposure indices for different groups at the national level and for the four census regions. We also examine intergroup exposure in two large cities: Los Angeles and New York.

## Single and Multirace Comparisons

Figure 1 shows the racial composition of the combined U.S. metropolitan population for the year 2000. Two-thirds of all residents are non-Hispanic white, 14.2 percent are Hispanic, 12.9 percent are black, and 4.3 percent are Asian. Other groups account for much smaller percentages: American Indians ( 0.5 percent), Hawaiians ( 0.1 percent), and members of two or more races (1.7 percent). If these race and ethnic groups were distributed equally across U.S. metropolitan neighborhoods with no segregation, this would be the exact racial composition of every neighborhood.

However, because segregation patterns do exist, the average neighborhood composition experienced by each racial group differs from this national aggregate. Figure 2 shows the average neighborhood race-ethnic composition for members of each major racial group residing in U.S. metropolitan areas in the year 2000. On average, whites live in neighborhoods that are 81 percent white, blacks live in neighborhoods that are 54 percent black, Asians live in neighborhoods that are 20 percent Asian, and Hispanics live in neighborhoods that are 47 percent Hispanic. The small American Indian population lives in neighborhoods that are, on average, 10 percent American Indian. Persons identifying with two or more races live in neighborhoods that are composed of only 3.8 percent of their counterparts, on average. However, persons identifying with two or more races are more likely than blacks, Hispanics, or Asians to have whites living in their neighborhoods.

Figure 1. Race-Ethnic Composition of Combined U.S. Metropolitan Areas for the Year 2000

$\square$ White $\square$ Black $\square$ American Indian $\square$ Asian $\square$ Hawaiian $\square$ Other $\square$ Two or More Races $\square$ Hispanic

Source: Data from U.S. Bureau of the Census (2001).

Figure 2. Average Neighborhood Race-Ethnic Composition for Each Racial Group for the Combined U.S. Metropolitan Areas for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

We now turn to an analysis of exposure indices for persons who identify with two distinct races. Our emphasis is on comparing exposure indices for different dual-race groups with those of the corresponding single-race groups. We conduct the analysis for the entire U.S. metropolitan population.

In figure 3 we compare exposure indices of persons identifying themselves as "white and black" with exposure levels of those identified as white only and black only. On average, residents who identify as white and black live in neighborhoods that are more similar to the average neighborhood of whites than to the average neighborhood of blacks. That is, the average neighborhood for a white and black person is 61 percent white, compared to 81 percent white for the average neighborhood of a white person and 29 percent white for the average neighborhood of a black person. Moreover, the average neighborhood for a white and black person contains only 19 percent blacks, compared with the average black person's neighborhood, which is 54 percent black.

Figure 3. Comparison of Average Neighborhood Race-Ethnic Composition for Whites Only, Blacks Only, and Persons Reporting as White and Black, for the Combined U.S. Metropolitan Areas for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).
Figure 4 presents a comparable analysis for persons identifying themselves as "white and Asian." Here we see that the average race-ethnic composition of a white and Asian person's neighborhood is between that of persons identifying themselves as Asian only and that of persons identifying themselves as white only. The average neighborhood for a white and Asian person is 65 percent white, squarely in-between the 50 percent white neighborhoods of Asians and the 81 percent white neighborhoods of whites. Exposure to Asians also is nearly at the midway point: 10.5 percent exposure for persons who are white and Asian compared with 20.7 percent exposure for Asians only and 3.3 percent exposure for whites only.

Figure 4. Comparison of Average Neighborhood Race-Ethnic Composition for Whites Only, Asians Only, and Persons Reporting as White and Asian, for the Combined U.S. Metropolitan Areas for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Figure 5 presents an analysis for persons identifying themselves as "white and American Indian." This comparison shows that the average neighborhood race-ethnic composition for a white and American Indian person is slightly more similar to that of whites than to that of American Indians. The average exposure of a white and American Indian person to other American Indians is only 1.4 percent, compared to 10.2 percent exposure for American Indians.

Figure 5. Comparison of Average Neighborhood Race-Ethnic Composition for Whites Only, American Indians Only, and Persons Reporting as White and American Indian, for the Combined U.S. Metropolitan Areas for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Thus, this analysis clearly shows that a person's identification with two different racial groups plays out quite differently depending on the specific racial groups involved. It also plays out differently across individual metropolitan areas and individual cities, which can be examined from the information on the Web sites listed above.

## U.S. Regions

Figures 6, 7, 8, and 9 show the same neighborhood comparisons shown in figure 2, but they are shown separately for the metropolitan populations in the Northeast, Midwest, South, and West regions. The average neighborhood composition at the regional level reflects the different racial composition of that region as well as the level of segregation that exists in that region.

Figure 6 shows that in the Northeast, whites live in neighborhoods that are 86 percent white, blacks live in neighborhoods that are 55 percent black, Asians live in neighborhoods that are 20 percent Asian, and Hispanics live in neighborhoods that are 40 percent Hispanic. The Northeast has a higher percentage of blacks and a lower percentage of Hispanics than the nation as a whole. For the most part, this is reflected in the average neighborhood composition of the different groups.

Figure 6. Average Neighborhood Race-Ethnic Composition for Each Racial Group for Northeast Metropolitan Areas for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Figure 7 shows a similar set of exposure indices for the Midwest. The results are not that much different from the Northeast. Whites live in neighborhoods that are 88 percent white, blacks live in neighborhoods that are 64 percent black, Asians live in neighborhoods that are 11 percent Asian, and Hispanics live in neighborhoods that are 34 percent Hispanic. The Midwest has somewhat fewer Asians and Hispanics than the Northeast, proportionately, and this is reflected in the lower exposure that other racial groups in the Midwest have to Asians and Hispanics.

Figure 7. Average Neighborhood Race-Ethnic Composition for Each Racial Group for Midwest Metropolitan Areas for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Figure 8 shows the race-ethnic compositions for metropolitan areas in the South. The biggest difference in the South is the greater presence of blacks in the average neighborhoods of most racial groups. For whites in the South, the average neighborhood is 10 percent black, for blacks it is 56 percent black, for Asians it is 15 percent black, and for Hispanics it is 12 percent black. It is interesting that although the South has a lower percentage of whites than the Northeast or the Midwest, the average exposure of blacks to whites in the South ( 32 percent) is higher than it is in the Midwest ( 27 percent) or the Northeast ( 23 percent).

Figure 8. Average Neighborhood Race-Ethnic Composition for Each Racial Group for Metropolitan Areas in the South for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Finally, figure 9 shows the same comparisons for the West, which is a much more racially and ethnically diverse region. Here, the percentage of whites in the average neighborhood for each of the major races is lower than in the other three regions. The contrast is greater, however, for Asians than for the other racial groups. In the West, the average neighborhood of an Asian person is only 40 percent white, compared with levels around 60 to 70 percent white in the other regions. It is also noteworthy that the average neighborhood for a white person in the West contains a fairly high ( 72 percent) proportion of whites, despite the greater diversity in the West.

Figure 9. Average Neighborhood Race-Ethnic Composition for Each Racial Group for Metropolitan Areas in the West for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

## The Cities of New York and Los Angeles

Moving from the national and regional comparisons, we now examine neighborhood racial exposure in two large and diverse cities: New York and Los Angeles. Figure 10 shows the overall race-ethnic compositions of the two cities. They have roughly comparable shares of white (35.0 percent for New York and 29.7 percent for Los Angeles) and Asian (nearly 10 percent in both cities) populations. They differ most in their relative shares of Hispanics, where Los Angeles has the higher proportion ( 46.5 percent versus 27.0 percent for New York), and of blacks, where New York has the higher proportion ( 24.5 percent versus 10.9 percent in Los Angeles).

Figure 10. Race-Ethnic Composition of the Cities of New York and Los Angeles for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Figures 11 and 12 show the neighborhood exposure indices for different racial groups in the two cities. In New York, the average white person's neighborhood is 67 percent white, the average black person's neighborhood is 62 percent black, the average Asian person's neighborhood is 30 percent Asian, and the average Hispanic person's neighborhood is 50 percent Hispanic. In Los Angeles, on the other hand, the same-group percentages are lower for whites, blacks, and Asians ( 58 percent, 37 percent, and 22 percent, respectively). Also, in Los Angeles, the average Hispanic person's neighborhood is 64 percent Hispanic, compared to only 50 percent in New York. However, this is more likely because of Los Angeles's much larger Hispanic population than the cities's relative segregation levels. (The white-Hispanic dissimilarity index in the city of New York is 70, compared with an index of 67 in Los Angeles.)

Figure 11. Average Neighborhood Race-Ethnic Composition for Each Racial Group in New York City for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

Figure 12. Average Neighborhood Race-Ethnic Composition for Each Racial Group in Los Angeles for the Year 2000


Source: Data from U.S. Bureau of the Census (2001).

## Residential Segregation for Cities

In this study, we calculated indices of dissimilarity for each major racial-ethnic minority group and for different combinations of multiracial groups. In all cases, we used the non-Hispanic, white-only population as the comparison group. We computed indices for each city with a Census 2000 population greater than 25,000 and with a minority group (e.g., blacks for the analysis of white-black segregation) population of at least 1,000 . The base population of 1,000 ensures that the minority population being examined is a minimally significant size.

## Overview: Regions and City Size Classes

Table 1 provides an overview of the overall segregation patterns for major race and ethnic groups. It shows mean indices of dissimilarity between non-Hispanic whites and the following groups: non-Hispanic blacks, non-Hispanic Asians, non-Hispanic American Indians and Alaskan natives, non-Hispanic Hawaiians and other Pacific Islanders, and non-Hispanic persons of other races, as well as for the combined Hispanic population. Each of these racial groups pertains to persons who identify themselves as one race alone in Census 2000. A separate dissimilarity index is computed between non-Hispanic whites and the combined population of non-Hispanic persons who report two or more races. Once again, we employ the terms "whites," "blacks," "Asians," "American Indians," "Hawaiians," "other," and "two or more" when referring to the various non-Hispanic racial groups.

Table 1 also shows the number of cities $(\mathrm{N})$ included in the analysis of each group. (Recall that only cities with at least 1,000 members of a given ethnic group are included in the calculations.) The numbers of cities included are 1,005 for Hispanics, 873 for blacks, 701 for Asians, 543 for those reporting two or more races, 114 for American Indians, 36 for other races, and only 26 for Hawaiians. The rankings discussed later in this paper are based on these numbers of cities for each race and ethnic group.

Table 1 shows that, overall, the highest levels of segregation from whites occur for Hawaiians and other races, with average dissimilarity indices of 53 and 51, respectively. Among the remaining groups, dissimilarity indices for blacks are, on the average, higher than those for Asians and Hispanics (a mean index of 45 for blacks in comparison to 32 and 35 for Asians and Hispanics, respectively). The lowest levels of segregation among the groups shown in Table 1 occur for persons reporting two or more races, who experience an average index of dissimilarity of only 27 .

## Table 1. Mean Indices of Dissimilarity between Non-Hispanic Whites and Major Race-Ethnic Groups for Cities Exceeding 25,000 Population, by Region and Size for the Year 2000

| City Category | Indices of Dissimilarity versus Non-Hispanic Whites |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Blacks | Asians | American |  | Hawaiians | Others | Two or More |
|  |  |  | Hispanics | Indians |  |  |  |
| All cities exceeding |  |  |  |  |  |  |  |
| 25,000 population |  |  |  |  |  |  |  |
| Mean Index | 45 | 32 | 35 | 39 | 53 | 51 | 27 |
| $N$ | 873 | 701 | 1005 | 114 | 26 | 36 | 543 |
| Region |  |  |  |  |  |  |  |
| Northeast | 49 | 38 | 43 | 60 | 83 | 54 | 38 |
| $N$ | 124 | 91 | 132 | 6 | 1 | 14 | 70 |
| Midwest | 47 | 35 | 35 | 45 | NA | 57 | 32 |
| $N$ | 210 | 160 | 206 | 24 | 0 | 5 | 95 |
| South | 49 | 34 | 36 | 33 | NA | 51 | 32 |
| $N$ | 321 | 158 | 292 | 30 | 0 | 7 | 128 |
| West | 36 | 27 | 31 | 37 | 52 | 44 | 20 |
| $N$ | 218 | 292 | 375 | 54 | 25 | 10 | 250 |
| Size of city |  |  |  |  |  |  |  |
| 100,00 and greater | 50 | 37 | 41 | 42 | 56 | 72 | 30 |
| $N$ | 232 | 228 | 239 | 80 | 21 | 30 | 232 |
| 50,000 to 99,999 | 44 | 30 | 34 | 33 | 41 | 50 | 26 |
| $N$ | 281 | 242 | 330 | 22 | 3 | 5 | 223 |
| 25,000 to 49,000 | 43 | 28 | 32 | 28 | 46 | 43 | 23 |
| $N$ | 360 | 231 | 436 | 12 | 2 | 1 | 88 |

Source: Data from U.S. Bureau of the Census (2001).
Notes: All cities included in this analysis had at least 1,000 members of the minority race-ethnic group. The race groups pertain to persons who reported themselves as one race alone, except for the category of Two or More Races. The names of the Census 2000 categories are shortened as follows: American Indian and Alaskan Native is shortened to American Indians, Native Hawaiian and Other Pacific Islander is shortened to Hawaiians, and Some Other Race is shortened to Other. All race groups except the Hispanic group contain only non-Hispanic members of that group. NA, not applicable.

Table 1 also includes mean indices for each region of the country. Generally, the West has lower levels of segregation than the other three regions. American Indians are the exception; they experience a somewhat lower level of segregation in the South than in the West. Also, the Northeast region tends to have the greatest levels of segregation for all groups except for the other races group, which displays a higher average level of segregation in the Midwest than in the Northeast.

The averages shown for each racial group by region camouflage the wide variations in segregation within each region. For example, indices of dissimilarity for blacks range between 22 and 85 in the Northeast, between 19 and 87 in the Midwest, between 8 and 84 in the South, and between 9 and 87 in the West. Indices of dissimilarity for Hispanics and Asians exhibit similarly wide ranges.

The ranges are more skewed for persons reporting two or more races. For multiple-race persons in the West, segregation ranges between 7 and 38. The range is skewed toward the higher end for this group in the Northeast and Midwest. In the Northeast, persons of two or more races have dissimilarity indices between 23 and 59; in the Midwest the indices are between 17 and 53. The range is widest in the South. In North Lauderdale, FL, this group has a dissimilarity index of 9 , but in Delray Beach, FL, the index rises to 72 .

Table 1 also shows variations by size of city in the year 2000, distinguishing among cities with populations exceeding 100,000; cities with populations between 50,000 and 99,999; and cities with populations between 25,000 and 49,999 . For almost all race-ethnic groups, cities in the largest size class exhibit higher levels of segregation from whites than cities in the two smaller size classes, which have similar average segregation levels.

## Blacks

Table 2 shows the 20 most-segregated and the 20 least-segregated cities in the United States with respect to blacks and whites. Chicago leads all cities in segregation, where 87 percent of blacks would have to change residence to be distributed in the same way as whites. The cities with the most white-black segregation include many places in the Sunbelt. Notable cities are Atlanta, with a segregation index of 83 ; Washington, DC, with an index of 81 ; and Fort Lauderdale and Miami, FL, with indices of 80. The small California city of Menlo Park ranks second in the nation after Chicago in white-black segregation. (Chicago's index of 87.3 is higher than Menlo Park's index of 87.2.)

# Table 2. Cities with Highest and Lowest Dissimilarity Indices for Non-Hispanic Whites versus Blacks 

|  | Highest <br> Dissimilarity, 2000 |  | Lowest <br> Dissimilarity, 2000 |  |
| :---: | :--- | ---: | :--- | ---: |
|  | City | Index | City | Index |
| 1 | Chicago | 87 | The Colony, TX |  |
| 2 | Menlo Park, CA | 87 | Murrieta, CA | 8 |
| 3 | New York | 85 | Cerritos | 9 |
| 4 | Atlanta | 83 | Deltona, FL | 9 |
| 5 | Riviera Beach, FL | 83 | Copperas Cove, TX | 12 |
| 6 | Franklin | 83 | Weston, FL | 12 |
| 7 | Washington | 81 | Flower Mound, TX | 13 |
| 8 | Newark, NJ | 81 | Victorville, CA | 13 |
| 9 | Pompano Beach, FL | 81 | Diamond Bar, CA | 13 |
| 10 | Garfield Heights, OH | 81 | Lake Elsinore, CA | 14 |
| 11 | Philadelphia | 81 | Rio Rancho, NM | 15 |
| 12 | Fort Lauderdale, FL | 80 | Hinesville, GA | 16 |
| 13 | Miami | 80 | Killeen, TX | 17 |
| 14 | Cleveland | 79 | Gilbert, AZ | 17 |
| 15 | Kearny, NJ | 79 | Blacksburg, VA | 17 |
| 16 | Delray Beach, FL | 79 | Suisun City, CA | 17 |
| 17 | Dayton, OH | 78 | West Hollywood, CA | 18 |
| 18 | Flint, Ml | 77 | Palm Coast, FL | 18 |
| 19 | St. Petersburg, FL | 77 | Goose Creek, SC | 18 |
| 20 | Saginaw, Ml | 76 | Newark, CA | 18 |
|  |  |  |  | 18 |

Source: Data from U.S. Bureau of the Census (2001).
Note: The race groups pertain to persons who reported themselves as one race alone.

Although Atlanta ranks high in segregation on this list of cities, it has shown a significant decline in its metropolitanwide white-black segregation in recent decades (Frey and Farley 1996). This suggests that black suburbanization is helping to create those declines, while black segregation within the city remains at fairly high levels.

Although the most-segregated cities include many Sunbelt cities, particularly in the South Atlantic division, the least-segregated cities, with respect to white-black dissimilarity, include only Sunbelt cities. Texas, California, and Florida dominate the list of cities with the least whiteblack segregation. The lowest segregation level belongs to The Colony, TX, a city of 26,000 population where blacks comprise only 5.1 percent of the total population.

Most of the cities on the least-segregated list are relatively small suburban areas with small black populations. One exception is Killeen, TX, a city of 28,000 population where blacks make up a full third of the total population. Yet, it is generally the case that cities that rank lowest on the index of white-black dissimilarity tend to be small places in the suburbs of Sunbelt metropolitan areas.

Table 3 shows the most- and least-segregated cities in three different size classes. High levels of segregation can be seen for each size category, but the lowest levels of segregation are observed in smaller places. Of all the cities exceeding 100,000 population, the lowest index of white-black dissimilarity is 21 , for Chandler, AZ. This stands in contrast to indices of 9 for Cerritos, CA, in the 50,000 to 99,999 category; and 8 for The Colony, TX, in the 25,000 to 49,999 category.

## Table 3. Cities with Highest and Lowest Dissimilarity Indices for Three Size Categories, Non-Hispanic Whites versus Blacks

| Highest Dissimilarity Indices |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100,000 and Greater |  | 50,000 to 99,999 |  | 25,000 to 49,999 |  |
| Rank | City | Index | City | Index | City | Index |
| 1 | Chicago | 87 | Pompano Beach, FL | 81 | Menlo Park, CA | 87 |
| 2 | New York | 85 | Delray Beach, FL | 79 | Riviera Beach, FL | 83 |
| 3 | Atlanta | 83 | Saginaw, MI | 76 | Franklin, WI | 83 |
| 4 | Washington | 81 | Monroe, LA | 76 | Garfield Heights, OH | 81 |
| 5 | Newark, NJ | 81 | Folsom, CA | 72 | Kearny, NJ | 79 |
| 6 | Philadelphia | 81 | Taylor, MI | 70 | Hallandale, FL | 75 |
| 7 | Fort Lauderdale, FL | 80 | Greenville, SC | 70 | Bradenton, FL | 74 |
| 8 | Miami | 80 | Sarasota, FL | 69 | Long Beach, NY | 73 |
| 9 | Cleveland | 79 | Mount Vernon, NY | 69 | Florence, SC | 73 |
| 10 | Dayton, OH | 78 | Trenton, NJ | 69 | Kirkwood, MO | 71 |
| Lowest Dissimilarity Indices |  |  |  |  |  |  |
| 100,000 and Greater |  |  | 50,000 to 99,999 |  | 25,000 to 49,999 |  |
| Rank | City | Index | City | Index | City | Index |
| 1. | Chandler, AZ | 21 | Cerritos, CA | 9 | The Colony, TX | 8 |
| 2. | Simi Valley, CA | 22 | Deltona, FL | 12 | Murrieta, CA | 9 |
| 3. | Moreno Valley, CA | 22 | Flower Mound, TX | 13 | Copperas Cove, TX | 12 |
| 4. | Thousand Oaks, CA | 23 | Victorville, CA | 13 | Weston, FL | 13 |
| 5. | Henderson, NV | 24 | Diamond Bar, CA | 14 | Lake Elsinore, CA | 15 |
| 6. | Palmdale, CA | 24 | Rio Rancho, NM | 16 | Hinesville, GA | 17 |
| 7. | Corona, CA | 25 | Killeen, TX | 17 | Blacksburg, VA | 17 |
| 8. | Eugene, OR | 25 | Hesperia, CA | 19 | Suisun City, CA | 18 |
| 9. | Hayward, CA | 25 | Tracy, CA | 18 | West Hollywood, CA | 18 |
| 10. | Carrollton, TX | 27 | Davis, CA | 19 | Palm Coast, FL | 18 |

Source: Data from U.S. Bureau of the Census (2001).
Note: The race groups pertain to persons who reported themselves as one race alone.

One finds a mixture of Snowbelt and Sunbelt areas among the nation's largest cities with higher levels of segregation. Although Chicago and New York rank first and second in segregation with indices of 87 and 85 , respectively, Atlanta and Washington, DC, follow close behind, ranking third and fourth. Absent from this list is Detroit, which registers a high metropolitan level of
segregation (ranking second at 87 percent) but a relatively low level of central-city segregation with an index of 63. Clearly, most of Detroit's metropolitanwide segregation is because of the extreme city-suburb segregation between whites and blacks.

A review of the regional locations of the cities that have high white-black dissimilarity indices reveals a mixture of Sunbelt and Snowbelt cities in each size category. Yet, a review of the cities with the lowest indices shows the dominance of Sunbelt cities, especially in California, in all three size categories. Among cities exceeding 100,000 population with the lowest white-black segregation are many suburban cities, such as Thousand Oaks, CA, or Henderson, NV. Eugene, OR, a college town, also appears on this list.

Table 4 shows segregation levels of those cities with more than 100,000 blacks, according to Census 2000. Apart from Los Angeles, and Oakland, CA, these cities are located in the Northeast, Midwest, and South, reflecting past black migration patterns. The most segregated of these large cities are located in the Northeast, where three of the five cities have white-black dissimilarity indices higher than 80 . Only three other cities in the rest of the country have indices that high: Chicago, in the Midwest; and Atlanta and Washington, DC, in the South. At the other extreme, the lowest segregation levels are shown for many "New South" cities. Jacksonville, FL, with a dissimilarity index of 56 , has the lowest white-black segregation of all of these cities. Norfolk, VA, and Nashville-Davidson, TN, also have indices in the 50s. In all regions, cities with large black populations tend to have higher segregation levels than some of the smaller cities discussed earlier. The dispersal of blacks to the suburbs and to recently growing parts of the country suggests that a focus on these large cities alone distorts the overall picture of whiteblack segregation.

## Table 4. Non-Hispanic White versus Black Indices of Dissimilarity for Cities with the Largest Black Populations, by Region for the Year 2000

| Region and City | Black <br> Population <br> Size | Black Percent <br> of Total <br> Population | White-Black <br> Index of <br> Dissimilarity |
| :--- | ---: | ---: | ---: |
| Northeast |  |  |  |
| New York | $1,962,154$ | 25 | 85 |
| Philadelphia | 646,123 | 43 | 81 |
| Newark, NJ | 142,083 | 52 | 81 |
| Boston | 140,305 | 24 | 76 |
| Buffalo, NY | 107,066 | 37 | 74 |
| Midwest |  |  |  |
| Chicago | $1,053,739$ | 36 | 87 |
| Detroit | 771,966 | 81 | 63 |
| Cleveland | 241,512 | 50 | 79 |
| Milwaukee | 220,432 | 37 | 71 |
| Indianapolis | 198,252 | 25 | 67 |
| St. Louis | 177,446 | 51 | 72 |
| Columbus, OH | 172,750 | 24 | 61 |
| Cincinnati | 141,534 | 43 | 63 |
| Kansas City, MO | 136,921 | 31 | 71 |
| South |  |  |  |
| Houston | 487,851 | 25 | 75 |
| Baltimore | 417,009 | 64 | 75 |
| Memphis, TN | 397,732 | 61 | 69 |
| Washington, DC | 340,088 | 59 | 81 |
| New Orleans | 323,392 | 67 | 71 |
| Dallas | 304,824 | 26 | 72 |
| Atlanta | 254,062 | 61 | 83 |
| Jacksonville, FL | 211,252 | 29 | 56 |
| Birmingham, AL | 177,709 | 73 | 66 |
| Charlotte, NC | 175,661 | 32 | 61 |
| Nashville-Davidson, TN | 145,483 | 27 | 58 |
| Jackson, MS | 129,609 | 70 | 68 |
| Baton Rouge, LA | 113,478 | 50 | 75 |
| Richmond, VA | 112,455 | 57 | 68 |
| Fort Worth, TX | 106,988 | 20 | 63 |
| Norfolk, VA | 102,268 | 44 | 57 |
| Shreveport, LA | 101,218 | 51 | 71 |
| West |  |  |  |
| Los Angeles | 401,986 | 11 | 74 |
| Oakland, CA | 140,139 | 35 | 60 |
|  |  |  |  |
|  |  |  |  |

Source: Data from U.S. Bureau of the Census (2001).
Note: Cities included in this table have a population of at least 100,000 non-Hispanic blacks. The race groups pertain to persons who reported themselves as one race alone.

## Asians

White-Asian segregation varies from a low of 9 for Morgan Hill, CA, to a high of 69 for Inkster, MI (table 5). Neither of these cities has a large Asian population (1,966 and 1,023, respectively), yet they have extremely different segregation levels. As was the case for black populations, there is a clear Snowbelt versus Sunbelt distinction between areas with the very highest indices of dissimilarity and those with the very lowest. Northeast and Midwest cities such as Camden, NJ; Detroit; Newark, NJ; Buffalo, NY; Pittsburgh; Philadelphia; and New York; have white-Asian dissimilarity indices that are well above 50. A few Southern and Western cities also have high levels, such as New Orleans, with an index of 66; Oakland, CA, with an index of 56; and Long Beach, CA, with an index of 54. Yet, among those areas with the lowest levels of white-Asian segregation, California cities heavily dominate. Most of these cities are relatively small, with even smaller Asian populations. Still, Temple City, CA, has an Asian population exceeding 12,000 that constitutes 39 percent of its total population and registers a very low segregation index of 11 .

Table 5. Cities with Highest and Lowest Dissimilarity Indices for Non-Hispanic Whites versus Asians

|  | Highest <br> Dissimilarity, <br>  <br>  <br> Rank |  | City | Lowest <br> Dissimilarity, 2000 |  |
| ---: | :--- | ---: | :--- | ---: | :---: |
|  |  | Index | City | Index |  |
| 1 | Inkster, MI | 69 | Morgan Hill, CA | 9 |  |
| 2 | Camden, NJ | 66 | Temple, CA | 11 |  |
| 3 | New Orleans | 66 | Foster, CA | 11 |  |
| 4 | Detroit | 63 | Murrieta, CA | 11 |  |
| 5 | Newark, NJ | 63 | Cooper, FL | 12 |  |
| 6 | Amarillo, TX | 62 | Woodbury, MN | 12 |  |
| 7 | Troy, NY | 59 | West Hollywood, CA | 12 |  |
| 8 | Buffalo, NY | 58 | Novato, CA | 12 |  |
| 9 | Pittsburgh | 58 | Dublin, CA | 12 |  |
| 10 | Philadelphia | 58 | Citrus Heights, CA | 13 |  |
| 11 | Sayreville, NJ | 57 | Weston, FL | 13 |  |
| 12 | Glen Ellyn, IL | 56 | Rocklin, CA | 14 |  |
| 13 | Garden City, KS | 56 | Santee, CA | 14 |  |
| 14 | Oakland, CA | 56 | Moorpark, CA | 14 |  |
| 15 | St. Paul, MN | 55 | Culver, CA | 14 |  |
| 16 | Columbus, IN | 55 | Bergenfield, NJ | 14 |  |
| 17 | Bryan, TX | 55 | Redondo Beach, CA | 14 |  |
| 18 | Long Beach, CA | 54 | Los Altos, CA | 15 |  |
| 19 | New York | 54 | Coral Springs, FL | 15 |  |
| 20 | Revere, MA | 54 | Paramus, NJ | 15 |  |
|  |  |  |  |  |  |

Source: Data from U.S. Bureau of the Census (2001).
Note: The race groups pertain to persons who reported themselves as one race alone.

It should be noted that the broad Asian population mentioned here includes many different nationality groups (Barnes and Bennett 2002; Logan 2001b; Pollard and O'Hare 1999). The largest groups are Chinese, Filipinos, and Indians, followed by Koreans, Vietnamese, and Japanese. These groups differ in terms of their geographic distributions as well as their social and economic status. In California cities, there is a large presence of Chinese, Filipinos, and Vietnamese. In the city of New York, Vietnamese, Indians, and Koreans comprise the largest group, and in Texas cities, Vietnamese and Indians outrank other groups. Indians and Vietnamese rank at opposite ends of the socioeconomic spectrum. As a group, Indians are the most highly educated of all groups, and Vietnamese are the least educated and lowest paid of all groups. Asian segregation patterns reflect, in part, the concentrations of different groups in different areas.

Table 6 breaks down white-Asian segregation patterns by city size category. As was the case in the black population segregation analysis, each of the three size categories contains cities with high levels of Asian segregation. When looking at areas with the lowest white-Asian dissimilarity indices, the smaller areas tend to have lower values. Among the largest cities, New Orleans leads all others with a white-Asian dissimilarity index of 66. Aside from the northern cities discussed earlier, we find Amarillo, TX, and Oakland, CA, as non-northern cities with high levels of white-Asian segregation. Across all three size categories, California cities are heavily represented among the cities with the lowest levels of white-Asian segregation.

# Table 6. Cities with Highest and Lowest Dissimilarity Indices for Three Size Categories, Non-Hispanic Whites versus Asians 

| Highest Dissimilarity Indices |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | 100,000 and Greater |  | 50,000 to 99,999 |  | 25,000 to 49,999 |  |
|  | City | Index | City | Index | City | Index |
| 1 | New Orleans | 66 | Camden, NJ | 66 | Inkster, MI | 69 |
| 2 | Detroit | 63 | Bryan, TX | 55 | Troy, NY | 59 |
| 3 | Newark, NJ | 63 | Lynn, MA | 53 | Sayreville, NJ | 57 |
| 4 | Amarillo, TX | 62 | Fall River, MA | 53 | Glen Ellyn, IL | 56 |
| 5 | Buffalo, NY | 58 | Sioux City, IA | 52 | Garden City, KS | 56 |
| 6 | Pittsburgh | 58 | Mount Prospect, IL | 52 | Columbus, IN | 55 |
| 7 | Philadelphia | 58 | Utica, NY | 51 | Revere, MA | 54 |
| 8 | Oakland, CA | 56 | Passaic, NJ | 51 | Lombard, IL | 51 |
| 9 | St. Paul, MN | 55 | Visalia, CA | 50 | Madison Heights, MI | 50 |
| 10 | Long Beach, CA | 54 | Merced, CA | 50 | Stillwater, OK | 49 |
| Lowest Dissimilarity Indices |  |  |  |  |  |  |
|  | 100,000 and Grea |  | 50,000 to 99,999 |  | 25,000 to 49,999 |  |
| Rank | City | Index | City | Index | City | Index |
| 1 | Coral Springs, FL | 15 | Citrus Heights, CA | 13 | Morgan Hill, CA | 9 |
| 2 | Downey, CA | 15 | Santee, CA | 14 | Temple City, CA | 11 |
| 3 | Simi Valley, CA | 17 | Redondo Beach, CA | 14 | Foster City, CA | 11 |
|  | Burbank, CA | 17 | Cerritos, CA | 15 | Murrieta, CA | 11 |
| 5 | Moreno Valley, CA | 19 | Killeen, TX | 15 | Cooper City, FL | 12 |
| 6 | Santa Clarita, CA | 19 | Carlsbad, CA | 15 | Woodbury, MN | 12 |
| 7 | Lancaster, CA | 20 | Temecula, CA | 15 | West Hollywood, CA | 12 |
| 8 | North Las Vegas, NV | 20 | Victorville, CA | 16 | Novato, CA | 12 |
| 9 | Escondido, CA | 20 | Cupertino, CA | 16 | Dublin, CA | 12 |
| 10 | Scottsdale, AZ | 20 | Bellflower, CA | 16 | Weston, FL | 13 |

Source: Data from U.S. Bureau of the Census (2001).
Note: The race groups pertain to persons who reported themselves as one race alone.

Table 7 shows the segregation levels of cities with Asian populations that exceeded 50,000 in the year 2000. All of these cities except for New York, Philadelphia, Chicago, and Houston are in the West, and most of them are located in California. Among these large cities, Philadelphia, with a dissimilarity index of 58, has the highest level of white-Asian segregation, and all of the non-Western cities have indices above 50. In the West, only Oakland, CA; Long Beach, CA; San Diego; Seattle; and San Jose, CA; have indices of 50 or more. At the other extreme, cities with large Asian populations and indices of dissimilarity below 40 are: Daly City, CA, with a segregation index of 26 ; Fremont, CA, with an index of 31 ; Garden Grove, CA, with an index of 39; and Honolulu, with an index of 39 . As was the case for blacks, the cities with large Asian populations are not the cities with the lowest levels of white-Asian segregation.

# Table 7. Non-Hispanic White versus Asian Indices of Dissimilarity for Cities with the Largest Asian Populations, by Region for the Year 2000 

| Region and City | Asian <br> Population <br> Size | Asian <br> Percent <br> of Total <br> Population | White-Asian <br> Index of <br> Dissimilarity |
| :--- | ---: | ---: | ---: |
| Northeast |  |  |  |
| New York | 780,229 | 10 | 54 |
| Philadelphia | 67,119 | 4 | 58 |
|  |  |  |  |
| Midwest |  | 4 | 52 |
| Chicago | 124,437 |  |  |
|  |  | 5 | 50 |
| South |  |  |  |
| Houston | 102,706 | 10 | 49 |
| West |  | 27 | 50 |
| Los Angeles | 364,850 | 31 | 44 |
| San Jose, CA | 238,378 | 55 | 39 |
| San Francisco | 238,173 | 13 | 52 |
| Honolulu CDP | 205,563 | 37 | 31 |
| San Diego | 164,895 | 13 | 52 |
| Fremont, CA | 74,773 | 16 | 48 |
| Seattle | 73,512 | 15 | 56 |
| Sacramento, CA | 66,598 | 12 | 54 |
| Oakland, CA | 60,393 | 50 | 26 |
| Long Beach, CA | 54,937 | 52,154 |  |
| Daly City, CA | 50,803 |  | 39 |
| Garden Grove, CA |  |  |  |

Source: Data from U.S. Bureau of the Census (2001).
Note: Cities included in this table have a population of at least 50,000 non-Hispanic Asians. The race groups pertain to persons who reported themselves as one race alone.

## Hispanics

The fast-growing Hispanic population also shows a wide range in its segregation levels across cities (table 8). It is noteworthy that among the 20 cities with the highest white-Hispanic dissimilarity indices are several cities in North Carolina and Georgia that are attracting new waves of Hispanic immigrants. Wilson, NC, with a population of 44,000 and slightly more than 3,000 Hispanics, leads with a white-Hispanic dissimilarity index of 77. The large northern cities New York and Philadelphia, as well as Sunbelt cities such as Los Angeles and Dallas that have long-established Hispanic populations, also have high white-Hispanic dissimilarity indices.

# Table 8. Cities with Highest and Lowest Dissimilarity Indices for Non-Hispanic Whites versus Hispanics 

| Rank | Highest Dissimilarity, 2000 |  | Lowest Dissimilarity, 2000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | City | Index | City | Index |
| 1 | Wilson, NC | 77 | Copperas Cove, TX | 8 |
| 2 | Menlo Park, CA | 75 | Rocklin, CA | 9 |
| 3 | Oakland, CA | 71 | Cerritos, CA | 9 |
| 4 | Tyler, TX | 70 | Santee, CA | 9 |
| 5 | New York, NY | 70 | Foster City, CA | 10 |
| 6 | Surprise, AZ | 68 | Moore, OK | 10 |
| 7 | Hilton Head Island, SC | 68 | Benicia, CA | 10 |
| 8 | Philadelphia | 67 | Martinez, CA | 10 |
| 9 | Los Angeles | 67 | San Ramon, CA | 10 |
| 10 | Dallas | 65 | Paradise, CA | 10 |
| 11 | Winston-Salem, NC | 65 | Redding, CA | 10 |
| 12 | Atlanta | 65 | Cooper City, FL | 10 |
| 13 | New Brunswick, NJ | 64 | Aventura, FL | 11 |
| 14 | Mount Prospect, IL | 64 | Northglenn, CO | 11 |
| 15 | Durham, NC | 64 | Deltona, FL | 11 |
| 16 | San Rafael, CA | 62 | Diamond Bar, CA | 12 |
| 17 | Grand Rapids, Ml | 62 | Murrieta, CA | 12 |
| 18 | Long Beach, CA | 62 | San Dimas, CA | 12 |
| 19 | Milwaukee | 62 | Danville, CA | 12 |
| 20 | Gainesville, GA | 62 | Maywood, CA | 12 |

Source: Data from U.S. Bureau of the Census (2001).
Note: The race groups pertain to persons who reported themselves as one race alone.

It should be understood that the Hispanic population comprises a variety of different Spanishorigin groups (Grieco and Cassidy 2001; Guzmán 2001; Singer et al. 2001). The largest Hispanic group is of Mexican origin ( 58 percent); Puerto Ricans, Cubans, and a growing number of Central and South American groups make smaller representations. Nonetheless, New York and other East Coast cities are more heavily dominated by Puerto Ricans and non-Mexican Hispanic groups. Puerto Ricans, in particular, have higher levels of segregation that may account for the overall higher levels of Hispanic segregation in northern and East Coast cities.

In contrast to the most-segregated cities, the least-segregated cities tend to be smaller ones, mostly located in California. The city with the lowest white-Hispanic dissimilarity index, of 8 , is Copperas Cove, TX, a city with a population of nearly 30,000 where Hispanics comprise almost 12 percent of the population. Most of the other low-segregation cities have small populations as well. One exception is Maywood, CA, where Hispanics comprise 96 percent of the city's 28,000 people. The low segregation index in Maywood indicates that the city's small numbers of whites are well integrated with Hispanics.

Table 9 shows the white-Hispanic segregation rankings for the three city size classes. In each size class, the most-segregated cities have indices that range from the high 50 s or low 60 s to the 70s. Segregated cities in each size class also reflect a mixture of Snowbelt and Sunbelt cities. Oakland, CA, has the highest segregation level of all the large cities on the list; whereas Tyler, TX, and Wilson, NC, lead segregation in the other two size classes. Northern cities such as New York; Philadelphia; and Grand Rapids, MI; are among the large, highly segregated cities for Hispanics. In the second size category, one finds Mount Prospect, IL; Palatine, IL; Bethlehem, PA; and Hempstead, NY. The cities of New Brunswick, NJ; Englewood, NJ; Spring Valley, NY; and Highland Park, IL; are in the smallest size category.

## Table 9. Cities with Highest and Lowest Dissimilarity Indices for Three Size Categories, Non-Hispanic Whites versus Hispanics

| Highest Dissimilarity Indices |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100,000 and Greater |  | 50,000 to 99,999 |  | 25,000 to 49,999 |  |
| Rank | City | Index | City | Index | City | Index |
| 1 | Oakland, CA | 71 | Tyler, TX | 70 | Wilson, NC | 77 |
| 2 | New York | 70 | Mount Prospect, IL | 64 | Menlo Park, CA | 75 |
| 3 | Philadelphia | 67 | San Rafael, CA | 62 | Surprise, AZ | 68 |
| 4 | Los Angeles | 67 | Wilmington, DE | 61 | Hilton Head Island, SC | 68 |
| 5 | Dallas | 65 | Marietta, GA | 61 | New Brunswick, NJ | 64 |
| 6 | Winston-Salem, NC | 65 | Palatine, IL | 61 | Gainesville, GA | 62 |
| 7 | Atlanta | 65 | Hoover, AL | 60 | Englewood, NJ | 61 |
| 8 | Durham, NC | 64 | Bethlehem, PA | 59 | Spring Valley, NY | 60 |
| 9 | Grand Rapids, MI | 62 | Roswell, GA | 58 | Highland Park, IL | 60 |
| 10 | Long Beach, CA | 62 | Hempstead, NY | 58 | San Juan Capistrano, CA | 60 |
| Lowest Dissimilarity Indices |  |  |  |  |  |  |
| 100,000 and Greater |  |  | 50,000 to 99,999 |  | 25,000 to 49,999 |  |
| Rank | City | Index | City | Index | City | Index |
| 1 | Hialeah, FL | 17 | Cerritos, CA | 9 | Copperas Cove, TX | 8 |
| 2 | Gilbert, AZ | 17 | Santee, CA | 9 | Rocklin, CA | 9 |
| 3 | West Covina, CA | 19 | Redding, CA | 10 | Foster City, CA | 10 |
| 4 | Coral Springs, FL | 19 | Deltona, FL | 11 | Moore, OK | 10 |
| 5 | Livonia, Ml | 19 | Diamond Bar, CA | 12 | Benicia, CA | 10 |
| 6 | Henderson, NV | 19 | Killeen, TX | 12 | Martinez, CA | 10 |
| 7 | Cape Coral | 20 | Flower Mound, TX | 13 | San Ramon, CA | 10 |
| 8 | Mesquite, TX | 21 | Yorba Linda, CA | 14 | Paradise, CA | 10 |
| 9 | Sterling Heights, MI | 21 | Victorville, CA | 14 | Cooper City, FL | 10 |
| 10 | Downey, CA | 22 | Rio Rancho, NM | 15 | Aventura, FL | 11 |

Source: Data from U.S. Bureau of the Census (2001).
Note: The race groups pertain to persons who reported themselves as one race alone.

Among the cities with the lowest segregation indices, California is well represented in the two smaller size classes. Among the least-segregated Hispanic cities in the larger size class are three Florida cities (Hialeah, Coral Springs, and Cape Coral) and two Michigan cities (Livonia and Sterling Heights), both with small Hispanic populations. In the two smaller size classes, cities with low white-Hispanic segregation are located mostly in California and Texas and in many cases have more substantial Hispanic populations than cities in the larger size class.

Table 10 shows the segregation measures for cities with Hispanic populations greater than 100,000 . Most of these cities are in the South and West, with three exceptions: New York, Philadelphia, and Chicago. New York tops all of the cities on this list with a white-Hispanic dissimilarity index of 70. Chicago and Philadelphia both have indices at the upper end of the range. Other cities with segregation indices in the 60s include Houston and Dallas, in the South; and Los Angeles; Phoenix; San Diego; and Long Beach, CA, in the West. At the other end of the spectrum is Hialeah, FL, with a segregation index of only 17. Its population is substantially Hispanic ( 98 percent), as is the population of Laredo, TX ( 94 percent), which has a low segregation index of 31 .

Overall, cities with large Hispanic populations in the West and South exhibit a broad range of segregation values in the $40 \mathrm{~s}, 50 \mathrm{~s}$, and 60 s . It is the large northern cities that stand out with their high segregation values.

## American Indians, Hawaiians, and Two or More Races

We now examine segregation rankings among cities for two smaller race-ethnic groups: American Indians and Hawaiians (table 11). Both of these groups have far fewer cities with the required minimum 1,000 population of the minority group. By this criterion, 114 areas are ranked on the white-American Indian segregation index. Among these, the most highly segregated areas tend to be large cities located primarily in the Northeast, Midwest, and eastern seaboard. The highest segregation for American Indians is shown in the city of New York with an index of 75. Close behind is Philadelphia with a segregation index of 71. Chicago, Boston, and Washington, DC, all have segregation indices of 61 or higher. At the other extreme are several smaller cities located in states where American Indians represent a bigger share of the population. Seven Oklahoma cities have extremely low levels of segregation; for example, Moore, OK, has a white-American Indian dissimilarity index of 12. American Indians show a wide range of segregation, but it is skewed more heavily toward the low end, especially in areas where this population has a larger presence.

Table 10. Non-Hispanic White versus Hispanic Indices of Dissimilarity for Cities with the Largest Hispanic Populations, by Region for the Year 2000

| Region and City | Hispanic <br> Population Size | Hispanic Percent of Total Population | WhiteHispanic Index of Dissimilarity |
| :---: | :---: | :---: | :---: |
| Northeast |  |  |  |
| New York | 2,160,554 | 27 | 70 |
| Philadelphia | 128,928 | 8 | 67 |
| Midwest |  |  |  |
| Chicago | 753,644 | 26 | 61 |
| South |  |  |  |
| Houston | 730,865 | 37 | 61 |
| San Antonio | 671,394 | 59 | 53 |
| El Paso, TX | 431,875 | 77 | 46 |
| Dallas | 422,587 | 36 | 65 |
| Miami | 238,351 | 66 | 46 |
| Hialeah, FL | 204,543 | 90 | 17 |
| Austin, TX | 200,579 | 31 | 53 |
| Laredo, TX | 166,216 | 94 | 31 |
| Fort Worth, TX | 159,368 | 30 | 58 |
| Corpus Christi, TX | 150,737 | 54 | 47 |
| Brownsville, TX | 127,535 | 91 | 43 |
| West |  |  |  |
| Los Angeles | 1,719,073 | 47 | 67 |
| Phoenix | 449,972 | 34 | 60 |
| San Diego | 310,752 | 25 | 61 |
| San Jose, CA | 269,989 | 30 | 55 |
| Santa Ana, CA | 257,097 | 76 | 54 |
| Albuquerque, NM | 179,075 | 40 | 41 |
| Denver | 175,704 | 32 | 59 |
| Tucson, AZ | 173,868 | 36 | 51 |
| Fresno, CA | 170,520 | 40 | 46 |
| Long Beach, CA | 165,092 | 36 | 62 |
| Anaheim, CA | 153,374 | 47 | 46 |
| Las Vegas | 112,962 | 24 | 50 |
| Oxnard, CA | 112,807 | 66 | 45 |
| San Francisco | 109,504 | 14 | 54 |

Source: Data from U.S. Bureau of the Census (2001).
Note: Cities included in this table have a population of at least 100,000 Hispanics. The race groups pertain to persons who reported themselves as one race alone.

# Table 11. Cities with Highest and Lowest Dissimilarity Indices for Non-Hispanic Whites versus American Indians, Hawaiians, and Two or More Races 

| Highest Dissimilarity Indices |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| American Indians |  |  | Hawaiians |  | Two or More Races |  |
| Rank | City | Index | City | Index | City | Index |
| 1 | New York | 75 | New York | 83 | Delray Beach, FL | 72 |
| 2 | Philadelphia | 71 | Oakland, CA | 73 | Miami | 71 |
| 3 | Chicago | 64 | Seattle | 69 | Fort Lauderdale, FL | 67 |
| 4 | Boston | 61 | Long Beach, CA | 68 | Pompano Beach, FL | 61 |
| 5 | Washington, DC | 61 | San Francisco | 67 | Spring Valley, NY | 59 |
| 6 | Providence, RI | 59 | Salt Lake City | 65 | New York | 54 |
| 7 | Sioux City, IA | 57 | Los Angeles | 62 | Gary, IN | 53 |
| 8 | Baltimore | 56 | Phoenix | 61 | Fort Myers, FL | 53 |
| 9 | Oakland, CA | 56 | San Mateo, CA | 59 | Philadelphia | 52 |
| 10 | Minneapolis, MN | 54 | Sacramento, CA | 58 | Atlanta | 52 |

Lowest Dissimilarity Indices

| American Indians |  | Hawaiians |  | Two or More Races |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rank City | Index | City | Index | City | Index |


| 1 | Moore, OK | 12 | Carson, CA | 25 | Cerritos, CA | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| 2 | Broken Arrow, OK | 14 | West Valley City, UT | 29 | Rocklin, CA | 8 |
| 3 | Muskogee, OK | 14 | Vallejo, CA | 37 | North Lauderdale, FL | 9 |
| 4 | Midwest City, OK | 14 | Lakewood, WA | 39 | Copperas Cove, TX | 10 |
| 5 | Edmond, OK | 16 | Hayward, CA | 39 | Novato, CA | 10 |
| 6 | Norman, OK | 18 | Oceanside, CA | 43 | Santee, CA | 10 |
| 7 | Stillwater, OK | 18 | Las Vegas | 44 | Benicia, CA | 10 |
| 8 | Rio Rancho, NM | 18 | East Palo Alto, CA | 45 | San Ramon, CA | 10 |
| 9 | Eureka, CA | 21 | San Bruno, CA | 47 | Rancho Santa Margarita, | 10 |
| 10 | Redding, CA | 22 | Portland, OR | 51 | Victorville, CA | 11 |

Source: Data from U.S. Bureau of the Census (2001).
Notes: The race groups pertain to persons who reported themselves as one race alone, except for the category of Two or More Races. The names of the Census 2000 categories are shortened as follows: American Indian and Alaskan Native is shortened to American Indians, and Native Hawaiian and Other Pacific Islander is shortened to Hawaiians.

Our segregation analysis for the Hawaiian population includes only 26 cities with the requisite 1,000 Hawaiians. As was the case for American Indians, larger cities show the highest segregation levels for Hawaiians. The city of New York again leads with a white-Hawaiian index of 83. Other large cities with high white-Hawaiian dissimilarity indices are in the West. These include the large California cities of Oakland, San Francisco, and Los Angeles, as well as other large western cities such as Seattle, Salt Lake City, and Phoenix. For all of these cities, whiteHawaiian segregation indices range from the high 50s to the low 70s.

Western cities are also well represented at the lower end of the segregation scale for Hawaiians. Carson City, CA, has the lowest segregation index for Hawaiians, at 25. Other small cities such as West Valley City, UT; Vallejo, CA; and Lakewood, WA; also have segregation indices below 40. On the whole, Hawaiian segregation is higher than most of the other groups examined in this study.

Finally, we examine the segregation of persons identifying with two or more races in Census 2000. (As with the other race-ethnic groups, we examine only non-Hispanic members of this group.) Nationally, such persons constitute only 1.6 percent of the U.S. population, but they represent a larger share in Hawaii and other melting pot states such as California. Overall, segregation for this group is lower than it is for the other groups we have examined, although some cities still display high levels of segregation. Delray Beach, FL, leads all cities with an index of dissimilarity of 72. It is followed closely by the other Florida cities of Miami, Fort Lauderdale, and Pompano Beach. Other areas on the most-segregated list for these mixed-race persons include New York; Gary, IN; Philadelphia; and Atlanta.

Cities where mixed-race persons show the lowest levels of segregation are in those states with larger numbers of such persons. Hence, California cities dominate among the areas with the lowest indices of dissimilarity. The cities with the lowest levels of segregation have indices that range between 7 (Cerritos, CA) and 11 (Victorville, CA).

## Residential Segregation for Metropolitan Areas

We now change the geographic focus from cities to metropolitan areas. Indices of dissimilarity were computed for the 318 U.S. metropolitan areas (metropolitan statistical areas, primary metropolitan statistical areas, and New England county metropolitan areas). Again, we restrict our focus to those metropolitan areas where the minority race-ethnic group being analyzed has a population of at least 1,000 .

Table 12 provides an overview of average segregation levels for the groups of interest. In general, the segregation levels for metropolitan areas are somewhat higher than the counterparts for cities. This is because typically there is more heterogeneity across a metropolitan area's population than a city's population. Nonetheless, a similar ordering of segregation levels for the different race-ethnic groups is observed for metropolitan areas and for cities. Hawaiians show the highest level of segregation for metropolitan areas, with a white-Hawaiian mean dissimilarity index of 61. However, for metropolitan areas, blacks are the second most-segregated group (with an average dissimilarity index of 59). Segregation levels for blacks are well above those for Asians, Hispanics, and American Indians, consistent with the city comparisons. Those identifying themselves as other races also had high segregation indices, but the level is not as high as it is for blacks. Consistent with the city analysis, persons identifying themselves as being of two or more races had the lowest level of segregation.

# Table 12. Mean Indices of Dissimilarity with Non-Hispanic Whites for Combined Major Metropolitan Areas for the Year 2000 

|  | American |  |  |  | Two or |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Blacks | Asians | Hispanics | Indian | Hawaiian | Other More Races |  |
| All metropolitan |  |  |  |  |  |  |  |
| areas mean |  |  |  |  |  |  |  |
| index | 59 | 45 | 43 | 43 | 61 | 57 | 33 |
| $N$ | 298 | 262 | 305 | 178 | 44 | 66 | 293 |

## Source: Data from U.S. Bureau of the Census (2001).

Notes: The race groups pertain to persons who reported themselves as one race alone, except for the category of Two or More Races. The names of the Census 2000 categories are shortened as follows: American Indian and Alaskan Native is shortened to American Indians, Native Hawaiian and Other Pacific Islander is shortened to Hawaiians, and Some Other Race is shortened to Other. All race groups except the Hispanic group contain only nonHispanic members of that group.

## Blacks, Asians, and Hispanics

Table 13 shows the highest and lowest segregation levels for the three largest minority groups: blacks, Asians, and Hispanics. Among these groups, blacks have the highest segregation levels. Each of the 10 most-segregated metropolitan areas for blacks has an index of dissimilarity greater than that of any of the 10 most-segregated metropolitan areas for Asians and Hispanics. Gary, IN, leads all other metropolitan areas in white-black segregation with a dissimilarity index of 88 , followed by nine other metropolitan areas located in the Northeast and Midwest. The high levels of segregation shown here are consistent with earlier studies (Frey and Farley 1996) and suggest that the history of segregation in these areas has not diminished significantly.

# Table 13. Metropolitan Areas with Highest and Lowest Dissimilarity Indices for Non-Hispanic Whites versus Blacks, Asians, and Hispanics 

| Blacks |  |  | Asians |  | Hispanics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Metro Area | Index | Metro Area | Index | Metro Area | Index |
| 1 | Gary, IN PMSA | 88 | Ann Arbor, MI PMSA | 64 | Reading, PA MSA | 73 |
| 2 | Detroit, MI PMSA | 87 | Terre Haute, IN MSA | 63 | Providence-Fall River-Warwick | 71 |
| 3 | Milwaukee-Waukesha, WI PMSA | 84 | Beaumont-Port Arthur, TX MSA |  | New York, NY PMSA | 69 |
| 4 | New York, NY PMSA | 84 | Amarillo, TX MSA | 62 | Springfield, MA NECMA | 68 |
| 5 | Chicago, IL PMSA | 84 | Lafayette, IN MSA | 62 | Newark, NJ PMSA | 66 |
| 6 | Newark, NJ PMSA | 83 | Fort Smith, AR-OK MSA | 61 | Hartford, CT NECMA | 66 |
| 7 | Flint, MI PMSA | 81 | Atlantic-Cape May, NJ PMSA | 60 | Chicago, IL PMSA | 65 |
| 8 | Buffalo-Niagara Falls, NY MSA | 80 | Pittsburgh, PA MSA | 59 | Lancaster, PA MSA | 65 |
| 9 | Cleveland-Lorain-Elyria, OH PMSA | 80 | Charleston, WV MSA | 59 | Los Angeles-Long Beach, CA | 64 |
| 10 | Saginaw-Bay City-Midland, MI MSA | 79 | Buffalo-Niagara Falls, NY MSA | 58 | Allentown-Bethlehem-Easton, PA | 64 |


|  | Blacks |  | Asians |  | Hispanics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Metro Area | Index | Metro Area | Index | Metro Area | Index |
| 1 | Jacksonville, NC MSA | 32 | Fort Walton Beach, FL MSA | 27 | Redding, CA MSA | 14 |
| 2 | Yolo, CA PMSA | 32 | Melbourne-Titusville-Palm Bay, | 27 | Missoula, MT MSA | 21 |
| 3 | Lawrence, KS MSA | 34 | Punta Gorda, FL MSA | 28 | Lawton, OK MSA | 23 |
| 4 | Santa Cruz-Watsonville, CA PMSA | 34 | Jacksonville, NC MSA | 29 | Lawrence, KS MSA | 23 |
| 5 | Lawton, OK MSA | 35 | Lawton, OK MSA | 30 | Burlington, VT NECMA | 24 |
| 6 | Boulder-Longmont, CO PMSA | 37 | Naples, FL MSA | 30 | Gainesville, FL MSA | 24 |
| 7 | Redding, CA MSA | 37 | Medford-Ashland, OR MSA | 30 | Pocatello, ID MSA | 24 |
| 8 | Boise City, ID MSA | 37 | Colorado Springs, CO MSA | 31 | St. Joseph, MO MSA | 26 |
| 9 | Fayetteville, NC MSA | 38 | Tucson, AZ MSA | 32 | Panama City, FL MSA | 26 |
| 10 | Eugene-Springfield, OR MSA | 38 | Fort Pierce-Port St. Lucie, FL MSA | 33 | Fort Walton Beach, FL MSA | 26 |

Source: Data from U.S. Bureau of the Census (2001).
Notes: The race groups pertain to persons who reported themselves as one race alone. MSA, metropolitan statistical area; NECMA, New England county metropolitan area; PMSA, primary metropolitan statistical area.

At the lower end of the spectrum of white-black segregation are smaller metropolitan areas located outside of the Northeast and Midwest. Jacksonville, NC, has the lowest segregation with a white-black dissimilarity index of 32 . A few metropolitan areas with college towns also are among the least-segregated areas for blacks, including Lawrence, KS; Santa Cruz, CA; Lawton, OK; Boulder, CO; and Eugene, OR.

When examining results for Asians, the highest levels of segregation are not found in areas that are typically associated with large Asian settlements. Ann Arbor, MI, has the highest level of segregation for Asians, perhaps because of the segregation of college students.

One does not find a consistent pattern among the metropolitan areas with the lowest levels of Asian segregation. Many of these areas are not necessarily associated with large Asian populations. One such metropolitan area is Fort Walton Beach, FL, which has the lowest dissimilarity index of 27. No California metropolitan area is among either the most-segregated or least-segregated metropolitan areas for Asians.

For Hispanics, metropolitan areas with the highest segregation indices are located mostly in the Northeast. Metropolitan areas with the lowest levels of Hispanic segregation are a mixed group. Only one of these areas, Redding, is located in California. Others areas, such as Missoula, MT; Lawrence, KS; Burlington, VT; and Gainesville, FL; tend to contain university towns with a sprinkling of Hispanic residents.

## American Indians, Hawaiians, and Two or More Races

We also examine segregation at the metropolitan level for smaller racial groups. Segregation levels for American Indians were ranked among the 178 metropolitan areas that had more than 1,000 American Indians or native Alaskans (table 14). The most-segregated metropolitan areas are found in a mixture of states, including Arizona, New York, Pennsylvania, and Illinois. As is the case for many other race-ethnic groups, high levels of segregation are more prevalent in northern metropolitan areas, whereas low levels are more prevalent in southern and western areas. The least-segregated area is Panama City, FL, with a white-American Indian dissimilarity index of 20.

Table 14. Metropolitan Areas with Highest and Lowest Dissimilarity Indices for Non-Hispanic Whites versus American Indians, Hawaiians, and Two or More Races

|  | American Indians |  | Hawaiians |  | Two or More Races |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Metropolitan Area | Index | Metropolitan Area | Index | Metropolitan Area | Index |
| 1 | Flagstaff, AZ-UT MSA | 75 | Chicago, IL PMSA | 88 | New York, NY PMSA | 55 |
| 2 | New York, NY PMSA | 75 | Philadelphia, PA-NJ PMSA | 86 | Newark, NJ PMSA | 55 |
| 3 | Bergen-Passaic, NJ PMSA | 72 | New York, NY PMSA | 84 | Naples, FL MSA | 54 |
| 4 | Yakima, WA MSA | 72 | Boston, MA-NH NECMA | 83 | Miami, FL PMSA | 49 |
| 5 | Nassau-Suffolk, NY PMSA | 72 | Minneapolis-St. Paul, MN-WI MSA | 81 | West Palm Beach-Boca Raton, FL | 48 |
| 6 | Newark, NJ PMSA | 72 | Atlanta, GA MSA | 75 | Buffalo-Niagara Falls, NY MSA | 47 |
| 7 | Tucson, AZ MSA | 68 | Dallas, TX PMSA | 74 | Providence-Fall RiverWarwick, RI-MA MSA | 47 |
| 8 | Pittsburgh, PA MSA | 67 | Fort Worth-Arlington, TX PMSA | 73 | Erie, PA MSA | 46 |
| 9 | Middlesex-SomersetHunterdon, NJ PMSA | 64 | Kansas City, MO-KS MSA | 73 | Philadelphia, PA-NJ PMSA | 46 |
| 10 | Chicago, IL PMSA | 64 | Houston, TX PMSA | 71 | Bridgeport, CT NECMA | 46 |
| Lowest Dissimilarity Indices |  |  |  |  |  |  |
|  | American Indians |  | Hawaiians |  | Two or More Races |  |
| Rank | Metropolitan Area | Index | Metropolitan Area | Index | Metropolitan Area | Index |
| 1 | Panama City, FL MSA | 20 | Bremerton, WA PMSA | 43 | Medford-Ashland, OR MSA | 15 |
| 2 | Enid, OK MSA | 22 | Las Vegas, NV-AZ MSA | 44 | Redding, CA MSA | 16 |
| 3 | Medford-Ashland, OR MSA | 23 | Provo-Orem, UT MSA | 48 | Santa Cruz-Watsonville, CA PMSA | 17 |
| 4 | Redding, CA MSA | 24 | Stockton-Lodi, CA MSA | 49 | Yuba City, CA MSA | 17 |
| 5 | Eugene-Springfield, OR MSA | 25 | Modesto, CA MSA | 50 | San Luis Obispo-Atascadero-Paso Robles, CA MSA | 17 |
| 6 | Pensacola, FL MSA | 25 | Portland-Vancouver, OR-WA PMSA | 50 | Missoula, MT MSA | 18 |
| 7 | Yuba City, CA MSA | 25 | Vallejo-Fairfield-Napa, CA PMSA | 51 | Yolo, CA PMSA | 18 |
| 8 | San Luis Obispo-Atascadero-Paso Robles, CA MSA | 27 | San Diego, CA MSA | 51 | Corvallis, OR MSA | 18 |
| 9 | Modesto, CA MSA | 27 | Salem, OR PMSA | 51 | Eugene-Springfield, OR MSA | 19 |
| 10 | Oklahoma City, OK MSA | 28 | Honolulu, HI MSA | 52 | Lawton, OK MSA | 20 |

Source: Data from U.S. Bureau of the Census (2001).
Notes: The race groups pertain to persons who reported themselves as one race alone. The names of the Census 2000 categories are shortened as follows: American Indian and Alaskan Native is shortened to American Indians, and Native Hawaiian and Other Pacific Islander is shortened to Hawaiians. MSA, metropolitan statistical area; NECMA, New England county metropolitan area; PMSA, primary metropolitan statistical area.

We also rank the 44 metropolitan areas with at least 1,000 Hawaiians, the race-ethnic group with the highest level of segregation. The Midwest and northeastern metropolitan areas of Chicago, Philadelphia, New York, and Boston are the most-segregated areas for Hawaiians. These areas have relatively few native Hawaiians who tend to be clustered in enclaves. Larger western metropolitan areas such as Las Vegas, NV; Portland, OR; and San Diego, CA; have lower levels of segregation for Hawaiians. Yet, segregation indices for Hawaiians in these metropolitan areas are not nearly as low as the indices observed for the other race-ethnic groups in this study. Honolulu, HI, home for the most Hawaiians of all the metropolitan areas in this study, has a white-Hawaiian segregation index of 52 .

Finally, we look at the 293 metropolitan areas that have at least 1,000 persons identifying with two or more races. The segregation rankings for mixed-race persons in metropolitan areas are comparable to the rankings for cities. That is, areas with the highest levels of segregation for mixed-race persons tend to be located in the Northeast, with the exception of three Florida areas, Naples, Miami, and West Palm Beach. Metropolitan areas with the lowest levels of segregation tend to be on the West Coast, led by Medford, OR, where the dissimilarity index for mixed-race persons is only 15 . California and Oregon tend to dominate the least-segregated metropolitan areas for mixed-race residents.

## Residential Segregation for Single-Race and Two-Race Groups

In this section, we examine dissimilarity indices to determine if segregation for a mixed-race group (e.g., white and black) is less than that for the single-race group (e.g., black). As in the preceding analyses of dissimilarity, we use non-Hispanic whites as the comparison group. Table 15 shows this comparison for mixed-race persons reporting themselves as white and black, white and Asian, white and American Indian, or white and other. Relevant mean indices of dissimilarity are shown separately for metropolitan areas and for cities with populations exceeding 25,000.

# Table 15. Mean Indices of Dissimilarity for Non-Hispanic Whites versus Single-Race Groups and Selected Two-Race Combinations for All Metropolitan Areas and Cities Exceeding 25,000 Population for the Year 2000 

| Mean <br> Race-Ethnic Group <br> Index of <br> Dissimilarity |  | N |
| :--- | ---: | ---: |
| Metropolitan Areas, dissimilarity between whites and: |  |  |
| Blacks | 59 | 298 |
| Asians | 45 | 262 |
| American Indians | 43 | 178 |
| Others | 57 | 76 |
| White and black | 51 | 298 |
| White and Asian | 45 | 262 |
| White and American Indian | 37 | 178 |
| White and Other | 53 | 76 |
| Cities exceeding 25,000 population, dissimilarity between whites and: |  |  |
| Black | 45 | 873 |
| Asian | 32 | 701 |
| American Indian | 39 | 114 |
| Other | 51 | 36 |
|  |  |  |
| White and Black | 43 | 873 |
| White and Asian | 33 | 701 |
| White and American Indian | 34 | 114 |
| White and other | 47 | 36 |

Source: Data from U.S. Bureau of the Census (2001).
Notes: Cities and metropolitan areas in this table have a population of at least 1,000 members of the minority raceethnic group. All race groups include only non-Hispanic members of that group. The names of the Census 2000 categories are shortened as follows: American Indian and Alaskan Native is shortened to American Indians, Native Hawaiian and Other Pacific Islander is shortened to Hawaiians, and Some Other Race is shortened to Other.

The results tend to show a slight decline in segregation for mixed-race persons as compared to single-race persons. For example, at the metropolitan area level, a person identifying as white and black has an index of dissimilarity of 51, compared to an index of 59 for the person who identifies as black alone. Similar results are obtained at the city level, where the mixed-race white and black index of dissimilarity is 43 , compared to an index of 45 for blacks alone. One of the larger declines in segregation occurs among persons identifying themselves as white and American Indian. The metropolitan area index of dissimilarity declines from 43 for American Indians alone to 37 for mixed-race white and American Indians. The index of dissimilarity for this same group comparison for cities declines from 39 to 34 . Dissimilarity indices for individual metropolitan areas and individual cities can be found on the Web site www.CensusScope.org.

## Summary

This report accompanies the release of detailed racial segregation indices for 1,246 individual U.S. cities with populations exceeding 25,000 and for the 318 metropolitan areas. It differs from previous Census 2000 segregation studies in the following respects: (1) it analyzes segregation of persons who identify with one race alone, as well as for persons who identify with two or more racial groups, (2) it includes all individual cities with Census 2000 populations exceeding 25,000 in addition to all the metropolitan areas, and (3) it calculates segregation and exposure indices using data for block groups, which are smaller than census tracts and more consistent with the concept of neighborhood.

For the first time in Census 2000, the decennial census identifies persons of different race combinations and therefore provides an opportunity to determine if mixed-race persons are more residentially integrated than those who identify with a single race alone. Our analysis, in fact, shows that mixed-race persons are more likely to live in integrated neighborhoods than persons of one race only. Measures of neighborhood exposure and segregation for different mixed-race combinations have been computed for each area (city or metropolitan area) in this study. The analysis demonstrates that identification with two different racial groups plays out quite differently depending on the specific groups involved. For example, a person who identifies as white and black lives, on average, in a neighborhood that more closely approximates the racial composition of the average white person's neighborhood than that of the average black person's neighborhood. On the other hand, the racial composition of the average neighborhood of a person who identifies as white and Asian is roughly midway between that of a person identifying as Asian only and that of a person identifying as white only. Further, among the cities and metropolitan areas in our study, persons identifying with two or more races show, on average, less segregation from whites than minority persons identifying with a single race.

Our analysis of cities with populations exceeding 25,000 suggests that studies that focus only on segregation in large cities or on cities that have the largest minority populations overstate the level of racial segregation that exits in most cities with a minority presence. A focus on both large and small cities shows wide variation in segregation levels for each race-ethnic group. In our study, even among cities with populations exceeding 100,000, segregation of blacks from whites ranges from indices of dissimilarity of 21 to 87 , Asian segregation from whites ranges from indices of 15 to 66, and Hispanic segregation from whites ranges from indices of 17 to 71 .

City segregation indices differ from metropolitan area segregation indices because the former reflect local patterns that can vary within the same metropolitan area. Our analyses of dissimilarity for both cities and metropolitan areas indicate that segregation levels are higher for metropolitan areas than for cities. Among the cities in our study, the average segregation indices for blacks, Asians, and Hispanics are 45, 32, and 35, respectively. Average segregation indices in metropolitan areas for these same three groups are 59, 45, and 43, respectively. Hawaiians have the highest average segregation levels with indices of 53 for cities and 61 for metropolitan areas. Persons identifying themselves as two or more races have the lowest average segregation levels, with indices of 27 for cities and 33 for metropolitan areas. American Indian segregation levels are in-between, with average indices of 39 for cities and 43 for metropolitan areas.

Moreover, cities within the same metropolitan area can have quite different segregation measures, and segregation within a principal city can differ substantially from the metropolitan area as a whole. For example, although Detroit ranks second among all areas on white-black metropolitan segregation (index of 87), the City of Detroit ranks 55th (index of 63) among cities exceeding 100,000 population. As the Detroit case illustrates, metropolitan area segregation indices do not easily translate into the segregation levels of large or small cities within that metropolitan area.

An additional refinement of this study, as compared to other studies conducted subsequent to Census 2000, is the use of block groups rather than census tracts as proxies for neighborhood. The use of block groups in estimating segregation indices tends to increase the average level of segregation in most areas (on average, metropolitan white-black segregation increases by 5.8 points). Segregation levels measured using block groups are higher in smaller metropolitan areas, or in areas where the minority group is smaller, because it is in these areas that segregation might be camouflaged when the larger census tracts are used. As Hispanic and Asian groups have increasingly dispersed to smaller places within and across metropolitan areas, and as blacks have increasingly moved toward the suburbs and smaller communities, the block group statistics released with this study provide a nuanced view of racial segregation at the local level.

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## References

Barnes, Jessica S., and Claudette E. Bennett. 2002. The Asian Population, 2000. Census 2000 Brief (March):1-12.

Frey, William H. 2001. Melting Pot Suburbs: A Census 2000 Study of Suburban Diversity. Census 2000 Series. Washington, DC: Brookings Institution, Center on Urban and Metropolitan Policy.

Frey, William H. 2002. Metro Magnets for Minorities and Whites: Melting Pots, The New Sunbelt, and the Heartland. Research Report No. 02-496. University of Michigan, Population Studies Center.

Frey, William H., and Reynolds Farley. 1996. Latino, Asian, and Black Segregation in U.S. Metropolitan Areas: Are Multiethnic Metros Different? Demography 33(1):35-50. (Supplementary data for individual areas available from Frey, William H., and Reynolds Farley. 1993. Latino, Asian and Black Segregation in Multi-ethnic Metro Areas: Findings from the 1990 Census. Research Report No. 93-278, University of Michigan, Population Studies Center.)

Frey, William H., and Elaine Fielding. 1995. Changing Urban Populations: Regional Restructuring, Racial Polarization and Poverty Concentration. Cityscape: A Journal of Policy Development and Research 1(2):1-66.

Glaeser, Edward L., and Jacob L. Vigdor. 2001. Racial Segregation in the 2000 Census: Promising News. Census 200 Series. Washington, DC: Brookings Institution, Center on Urban and Metropolitan Policy.

Grieco, Elizabeth M., and Rachel C. Cassidy. 2001. Overview of Race and Hispanic Origin: 2000. Census 2000 Brief. (March):1-11.

Guzmán, Betsy. 2001. The Hispanic Population. Census 2000 Brief. (May):1-8.
Logan, John. 2001a. Ethnic Diversity Grows, Neighborhood Integration Lags Behind. Unpublished report. State University of New York, University at Albany, Lewis Mumford Center. December.

Logan, John. 2001b. From Many Shores: Asians in Census 2000. Unpublished report. State University of New York, University at Albany, Lewis Mumford Center. October.

Massey, Douglas S., and Nancy A. Denton. 1987. Trends in the Residential Segregation of Blacks, Hispanics, and Asians. American Sociological Review 52(6):802-25.

Massey, Douglas S., and Nancy A. Denton. 1993. American Apartheid: Segregation and the Making of the Underclass. Cambridge, MA: Harvard University Press.

Myers, Dowell. 1992. Analysis with Local Census Data: Portraits of Change. New York: Academic Press.

Myers, Dowell. 1999. Demographic Dynamism and Metropolitan Change: Comparing Los Angeles, New York, Chicago, and Washington, DC. Housing Policy Debate 10(4):919-54.

Myers, Dowell. 2001. Demographic Futures as a Guide to Planning: California's Latinos and a Compact City. Journal of the American Planning Association 66(4):383-97.

Myers, Dowell, and Julie Park. 2001. Racially Balanced Cities in Southern California, 1980-2000. Race Contours 2000 Series, Public Research Report No. 2001-05. University of Southern California, School of Policy Planning and Development, Population Dynamics Group.

Pollard, Kelvin, and William P. O'Hare. 1999. America's Racial and Ethnic Minorities. Population Bulletin. Volume 54, Issue 3. Washington, DC: Population Reference Bureau.

Singer, Audrey, Samantha Friedman, Ivan Chung, and Marie Price. 2001. The World in a Zip Code: Greater Washington, DC, as a New Region of Immigration. Survey Series. Washington, DC: Brookings Institution, Center on Urban and Metropolitan Policy.

Sorensen, Annemette, Karl Taeuber, and Leslie J. Hollingsworth Jr. 1975. Indexes of Racial Residential Segregation for 109 Cities in the United States: 1940 to 1970. Sociological Focus 8(1):125-42.

Suro, Roberto. 1999. Mixed Doubles. American Demographics 21(11):56-62.
Taeuber, Karl D, and Alma F. Taeuber. 1965. Negroes in Cities. Chicago: Aldine.
U.S. Bureau of the Census. 2001. Census 2000 Redistricting Data (Public Law 94-171) Summary Files. Washington, DC.

Van Valey, Thomas L., Wade Clark Roof, and James E. Wilcox. 1977. Trends in Residential Segregation: 1960-1970. American Journal of Sociology 82(4):826-44.

White, Michael J. 1986. Segregation and Diversity Measures in Population Distribution. Population Index 52(2):198-221.

