2. Census 2000 Data

The information that is mapped in this book was collected by the U.S. Census Bureau in March and April, 2000. It is the latest in the series of censuses required every ten years by the federal constitution. Although it is not perfect, it is the most detailed and generally best data available on the American people. With advances in technology, these and a vast array of other data can be viewed or downloaded conveniently from the U.S. Census Bureau’s web site, http://www.census.gov. Because all the 2000 data in this book is 100-percent-count data, taken from the short-form of the census, our maps and tables do not have any sampling error.

Race and Hispanic data. In recent censuses respondents have indicated their ethnic identity on two separate questions—one with listed “race” categories and the other for Hispanic or Latino identity. Racial and Hispanic identities and populations are thus separated by the Census Bureau. Latinos and other people of Hispanic heritage can be of any race. However, we use cross tabulations of these data in order to distinguish the socially more important identities and, in some cases, to avoid double counting of persons.

We include as Whites only those who were not Latino or Hispanic. This is the group sometimes called “Anglos”. Our use of this “non-Hispanic White” group follows general practice among social scientists. Similarly, for Blacks we use data only for non-Hispanic Blacks. This is because, in our judgment, most people who are both Black and Hispanic have stronger identities as Hispanic.1 This procedure enabled all White Hispanics and Black Hispanics to be counted fully as part of the Hispanic or Latino population while avoiding double counting of individuals. On the other hand, for American Indians and Asian and Pacific Islanders who had some Hispanic heritage, we consider the Hispanic identity to be secondary. Thus, we avoid double counting by including Hispanic American Indians and Hispanic Asians and Pacific Islanders in their race group totals but subtracting them from the Hispanic totals.

Changes in Census Procedures

In this book we frequently compare 1990 and 2000 numbers to show change in different ethnic populations. For this reason, changes in Census Bureau procedures from one census to the next can affect apparent trends.

Hispanic or Latino nationalities. The total number of Hispanics or Latinos counted in Census 2000 appears to have been excellent and perhaps even a bit more complete than in the 1990 census. However, the 2000 counts of specific Latino groups were much lower than expected, prompting widespread discussion and concern.2 The discrepancy may well have resulted from changes in census questionnaire wording, the most important of which was the omission in Census 2000 of specific Hispanic nationality examples such as “Argentinean, Salvadoran” below the line on which respondents were asked to write in their specific identity.3 An analysis by the Census Bureau has shown that these changes were significant in some of the Hispanic nationality counts.4 Another possible factor behind the reduced counts could be a greater acceptance of a Hispanic or Latino identity, such that specific Hispanic nationality identities weakened during the 1990s. In California, where the word “Latino” is widely accepted, the fact that the word “Latino” was widely accepted, the fact that the word “Latino” was included with “Spanish” and “Hispanic” on the basic Hispanic question in Census 2000 may have increased acceptance of this broader identity.5 Whatever the cause, measuring trends for specific nationalities seem so low, the Pew Hispanic Center developed a methodology to produce estimates of Hispanic nationalities that we believe are superior to the Census counts.6 Accordingly, in Table 5.1 we supplement Census 2000 figures with those estimates. However, the Pew Center’s methodology was not intended to generate estimates for small areas like tracts.

The weakness of the 2000 tract data on Latino nationalities meant that maps of change for Mexicans and Central Americans would be less reliable. However, the map of Hispanic change 1990-2000 (Figure 5.1) is based on the total Hispanic count, which is widely accepted. Maps of percent Mexican and percent Central American (Figures 5.2 and 5.3) use the Census 2000 data because the relative patterns are well portrayed although percentage values are presumably too low.

New mixed-race data. For the first time in the history of the U.S. census, questionnaires permitted people to check more than one of the identities listed in the question concerning race. This is an appropriate change in that it recognizes the many Americans of mixed racial heritage and the rapidly increasing number of biracial children from racially mixed marriages. Nevertheless, only 4.7 percent of Californians marked more than one race.7

The new data pose difficulties in analysis. Measuring ethnic population change since 1990 is problematic because it is not clear whether each group should include only those who reported that identity alone or should also include those who reported both that identity and another. Also, some groups are much more multiracial. Nationwide about 40 percent of American Indians and over 50 percent of Pacific Islanders marked two or more races. Thus, the American Indian and Alaska Native population could be said to have grown by either 26 percent or 110 percent during the 1990s depending on whether people reporting some other race as well as American Indian are included for 2000.8

Many researchers face this problem of how best to “bridge” or make comparable the 1990 and 2000 race data sets. The federal government’s Office of Management and Budget has investigated carefully the options and presents these on its web site.8

We believe the best practical solution for bridging and mapping purposes is a fractional assignment or apportionment of the mixed-race populations into the appropriate single-race groups. Assigning mixed-race people in equal fractions to each of the race...
groups they marked is reasonable, and we do this with the mixed-American Indian populations. However, our research suggests an improvement is possible in some cases. For example, we determined that in California 67.1 percent of the mixed Black-White population identified their race as Black in 1990. Similarly, 32.8 percent of California’s mixed Asian-White population in 1990 identified their race as Asian. In this book we use those same percentages to apportion the mixed White-Black and White-Asian numbers in each tract to each of those race groups. This method for fractionally assigning the larger mixed-race populations ensures that our maps and tables of 1990-2000 change will minimize any possible bias due to the new mixed-race data in Census 2000. The effect of this fractional assignment is very small, but this procedure ensures that people of multiracial identity will not be forgotten or wrongfully assigned to only one of their identities.

The method of fractional assignment could not be used to apportion mixed-race people in specific Asian groups, such as Chinese or Japanese, because census tabulations did not specify the other race of those individuals. Thus, maps of Asian groups represent a small degree of undercount because they are based on only those individuals who checked a single race.

Changes in census tract boundaries. For over half a century the Census Bureau has used the census tract as the areal unit designed to represent the neighborhood. Difficulties occur, however, in mapping change over time because some tract boundaries are shifted between censuses.

Inconsistencies in tract boundaries must be dealt with one at a time. We resolved these matters by aggregating 1990 blocks into 2000 tracts so that 1990 populations could be calculated for the more numerous 2000 tracts. Where 2000 tracts split 1990 blocks, the boundaries were examined in detail to determine which tract should receive the block population.

Census errors in specific tracts. What can be significant, however, are any census errors that affect some neighborhoods or tracts much more than others. Such errors can be particularly noticeable when total population change between 1990 and 2000 is mapped.

The most egregious Census Bureau errors involved the misplacement of certain group-quarters populations in tracts adjacent to their correct location. Group-quarters populations are people who live, not in households, but rather in prisons, college dorms, mental hospitals, or similar group settings.

After investigation to determine which group-quarters losses were real and which resulted from misplacement, we corrected the erroneous group-quarter locations in our digital files. These involved 7,113 prisoners in the Peter Pitchess Detention Center in Castaic (tract 9202); 918 patients at the Metropolitan State Hospital in Norwalk (tract 5500); 2,500 college students in dorms at the University of Southern California (tract 2227); 1,200 students at California State Polytechnic University, Pomona (tract 4024-04); and the 1990 misplacement of 1,400 students at California State University, Northridge (tract 1152-02). Such errors were widespread nationally.

There may have been other tract-level errors. After investigation we found one tract with such a serious error that it deserves mention here. Tract 2742, the upper-income Venice Beach peninsula in Los Angeles City (adjacent to Marina del Rey), did not, in fact, lose population during the 1990s despite the fact that the count from Census 2000 was lower by about 1,600 housing units and 2,500 persons. Because we did not have the information to correct this error completely, it appears on the map of White population change as wrongly indicating a large White population decrease.

It appears that the net undercount in 2000 was much less than in 1990, both for Blacks and for non-Blacks. Rates of net undercount estimated by the Census Bureau for the five counties of the Los Angeles CMSA ranged from a low of 1.07 percent in Ventura County to a high of 1.81 percent in Los Angeles County. However, the methods of estimating undercount are fraught with assumptions and data quality problems so that net undercount estimates can be only approximations.

The total population of various counties and cities is affected by any undercount, but in small areas like census tracts the problem becomes much less significant. The people who were omitted in the census were presumably widely distributed across many neighborhoods.

The undercount and map patterns. Although the Census Bureau attempted to count all residents of the United States, some people are always missed. It is clear that minorities are more likely than Whites to be missed. The ethnic differential in rates of census coverage has been very disturbing to the Bureau and to many Americans.

For over half a century the Los Angeles CMSA ranged from a low of 1.07 percent in Ventura County to a high of 1.81 percent in Los Angeles County. However, the methods of estimating undercount are fraught with assumptions and data quality problems so that net undercount estimates can be only approximations.

1. The view expressed by Nancy Foner, Professor of Anthropology at the State University of New York at Purchase, in personal conversation. Foner is an expert on West Indian migrations to New York City. Although we recognize that most Americans view Black Hispanics as essentially Black rather than Hispanic, self-identification as Hispanic seems more important in this case.


3. The 1990 census questionnaire asked Hispanic-origin people for their specific national origin, Mexican, Cuban, and Puerto Rican identities were specifically listed so that people with any of those identities could check the appropriate circle. For other national identities, the questionnaire asked people to write this under the category “other Spanish/Hispanic", and the names of six groups were given to encourage respondents to fill in that space with their nationality if appropriate.

On the Census 2000 questionnaire, the word “Latino” was added as an equivalent to “Spanish/Hispanic” and the word “origin” was omitted. Thus, in 2000 respondents were asked “Is Person 1 Spanish/Hispanic/Latino?” instead of the 1990 version, “Is this person of Spanish/Hispanic origin?” In addition, in Census 2000 no examples of other Hispanic nationalities were provided as prompts to encourage nationality write-ins. Where the directions said to “Print group”, some people might not have realized that the Census Bureau wanted specific nationality groups.


5. In Los Angeles the adoption of a Latino identity on the part of many children of Salvadoran and Guatemalan immigrants is explained in Hamilton and Chinchilla (2001), 56.


7. U.S. Census Bureau (2010).


9. Allen and Turner (2001), Table 9. Our research was based on separate nationwide and California analyses of race and ancestry identities of individuals using the Public Use Microdata Sample File of the 1990 census. Individuals whose race and write-in ancestry identities represented different races were considered biracial. The identity chosen for the race question was considered the primary identity of mixed-race people. We calculated the percentage of each mixed-race group that chose one, as opposed to the other, as their primary identity. We then applied these percentages to the 2000 mixed-race populations in Southern California.


11. U.S. Census Bureau (2001g).