

Data Source and Map Design

U. S. Census data. All the maps and tables are based on the best recent data from the U.S. Census Bureau. The best data comes from the official count taken every ten years. In that count residents are asked to fill in a short questionnaire that includes questions on age, marital status, and whether they identify with various racial groups and Hispanic nationalities. Because this census aims to count all residents of the U.S., the resulting data are often referred to as the “100 percent data” and are the best possible for our purposes. This is true despite the fact that some people, often those residing in the U.S. illegally, choose not to answer the questionnaire and, despite Census Bureau efforts to reach everyone, are not counted.

We use the 1990 and 2010 decennial census data for statistical analyses and mapping distributions of different racial groups and Hispanic (Latino) nationality groups and changes between 1990 and 2010. Asian nationalities such as Chinese and Thai are specified in the Asian category of these data, so our maps of Asian ethnic groups are based on these excellent 100-percent data. We use the same high quality data for our maps of different Hispanic nationalities.

Because there are separate census questions on race and Hispanic identities, Hispanics in these data can be of any race. Researchers have a decision to make as to whether people identifying as Hispanic should be also counted in the racial group that they checked. It was our sense that a Hispanic identity was more important than a racial identity for most Hispanics. For this reason we included all people who reported themselves as Hispanic in our maps and tables. However, we did not include Hispanics in the White and Black maps and tables. Thus, those maps and tables include “Non-Hispanic” in the title. In contrast, we thought that most Hispanic Asians and Hispanic American Indians had stronger identities as Asians and American Indians than as Hispanics. This why we included Asians and American Indians who also identified as Hispanic in our maps and tables of Asian nationalities and American Indians.

Some people reported two or more racial identities, such as White and Japanese or White and American Indian. Only 2.6 percent of Non-Hispanic Californians checked more than one racial category. To keep our method as simple and straightforward as possible, we decided not to include at all those individuals were reported more than one race identity. We do not think that our presentations are significantly affected by not including multiracial people.

For ethnic identities within the larger White and Black populations, we made use of data on a person's ancestry or ethnic background, an identity that the individual completing the census questionnaire wrote in for later tabulation by the Census Bureau. Most of these data come from the annual American Community Survey and represent a sample. To increase the sample size as much as possible, we used the survey data from five years, 2008 through 2012. This produced a sample of approximately 5 percent of the total population. However, to represent the 1990 numbers for our change maps of ancestry groups, we used the larger sample of about 16 percent that was available from the long form of the decennial census that was used at that time. Thus, change maps for ancestry groups compare 1990 numbers with the combined samples from 2008, 2009, 2010, 2011, and 2012.

Most ethnic maps, including all Latino and all Asian nationalities, have a 2010 date in the subtitle. This indicates that the data are from the complete-counts of the 2010 decennial census, representing the best data possible for mapping by census tracts. These data are not based on a sample. On the other hand maps of ancestry groups have 2008-2012 in the subtitle as a reminder that these maps are based on a sample and that the reader should be cautious in interpreting a pattern where a single tract, with perhaps a small population of the group, differs in percentage category from most surrounding tracts.

Mapping by neighborhoods. All our maps are based on census tracts as the areal unit. Tracts are commonly used by scholars, planners, and other researchers to represent neighborhoods. The average tract contains about 4,000 people. However, some tracts have many more residents – a few up to 20,000 -- and some, especially in less populated areas, contain few inhabitants. Because some tract boundaries are changed with each new decennial census, our maps of change required a set of data adjusted to a common set of tract boundaries. John Logan and his colleagues at Brown University have created such a data set along with some formulae to adjust data values from one census to another. Through this resource we were able to adjust the data from the tracts of 1990 to those tracts of 2010. (<http://www.s4.brown.edu/us2010/Researcher/Bridging.htm>).¹

Maps of change. To portray change we show the actual numbers by which a group increased or decreased between 1990 and 2010. The number of red dots indicates the size of the decrease and blue dots show how much of an increase there has been in a group's numbers. Showing change by the actual numbers of people rather than some percentage value has seemed to work well in earlier publications because it is visually powerful and gives the reader a rough sense of how many people were involved in the change. At the same time, maps of change

introduce a possible small source of error in that they make use of the adjusted 1990 tract population counts to make them comparable to the 2010 population counts. Also, in a number of instances the Census Bureau in a later census shifted institutional populations to an adjacent tract that resulted in dramatic gains and losses in the adjacent tracts. For change maps, then, readers should probably focus on patterns of net gain or loss that appear over several tracts rather than just a single tract.

Maps of ethnic percentage. Ethnic group distributions are shown by the percentage that each group represents within the total population of any tract. To provide consistent treatment of the groups, frequency distributions of each group's tract percentages were created for all tracts with at least ten ethnic persons of the mapped ethnic population. These enabled us to select five or six percentage categories that emphasize the highest and lowest percentage categories of any group. That way the neighborhoods in which a group is especially strongly represented or especially poorly represented stand out on the map. Because our interest has been particularly in groups whose numbers have increased a great deal due to immigration, we include only two groups of European origin. We selected English ancestry to represent the White group that has been traditionally dominant culturally in the U.S. and Russian ancestry, which was in 1990 a good indicator of the Jewish population's distribution.

Maps of household income. These maps allow readers to see how this economic dimension of life varies from one place to another. Without maps such as these, residents would have few ways to see and understand the important geographical dimension of ethnicity and economy in Southern California. Relative levels of income vary across neighborhoods in a pattern that is quite similar to that of housing prices.

Although rental and homeowner prices vary primarily by neighborhood and much less by the predominant ethnic group, we have included income maps for each of the four largest ethnic groups: Whites, Blacks, Asians, and Hispanics. In this way the reader can see better where members of each group with high, low, and middle incomes are located. In this way readers can appreciate, for example, that many Whites are found in poor areas and that upper-income Blacks have favored certain neighborhoods.

Note

1. For those interested, the following presents more detail on the establishment of consistency in tract boundaries between censuses. A census tract for 2000 accumulated data based on the total 1990 block populations for completely contained blocks. For blocks split by a 2000 tract, the 2000 tract's share of the 1990 block's length of streets were used to estimate the fragment's share of the 1990 block population. Once the 1990 data were allocated to 2000 boundaries a Topological Faces layer of boundaries was used to pass the 2000 data to 2010 boundaries.

While the Brown University web site provided a number of census variables for 1990 data, not all desired population variables were available. To convert other 1990 tract data to 2010 boundaries the web site provides "crosswalk" files. These files contained 2010 fragments and multipliers for all 1990 tracts that enabled us to parse the 1990 data into the 2010 tracts. The maps of change for a number of smaller groups such as Cambodians, Samoans, Thais, Guatemalans, Hondurans, Nicaraguans, Colombians, Peruvians, Belizeans, Jamaicans, and Nigerians were created by using the crosswalk files to reallocate the 1990 populations to 2010 tracts.