

Mapping California's Population Change

The maps for this presentation were prepared from census data acquired from Summary File 1 of Census 2000 and from the 2010 Redistricting File for California released in March 2011. The data for the dot maps were acquired for the 387 California census county divisions of Census 2000. Data for the 397 census county divisions of 2010 were adjusted to the older boundaries. ArcGIS software was used to create the dot maps with those CCDs gaining population represented with blue dots and those CCDs losing population represented with red dots. The dot value for Asians and Blacks is 500 persons per dot and the dot value for Hispanics and NonHispanic Whites is 1000 persons per dot. Because the software randomly places dots within a CCD, all government federal lands were excluded from the CCD polygons so that the dot locations more closely approximated the location of the populated areas.

Graph of California Population Growth

This graph illustrates the percent change in population each decade over the last one hundred years for the United States, all western states except California, and for just the State of California. For the U.S. as a whole the population has grown steadily each decade at around 15%. For the other western states the population initially grew about the same as the U.S., but then jumped to about twice the national average for the latter part of the 1900s. The State of California, however, initially grew around 50% each decade for the first half of the 1900s and then

dropped to the level of the other western states. Over the last two decades California has grown at a rate less than the other western states and in 2010 it grew at its slowest rate in the last one hundred years—around 10%. During the last decade this rate of growth was the same as for the U.S. as a whole.

Graph of Components of Population Change, 2000 – 2010

This graph illustrates the components that have contributed most to California's growth over the last decade. Natural increase represents the number of births minus the number of deaths. It has played the greatest role in the state's population growth over the last decade. Net immigration represents the number of persons migrating into the state from other countries minus those moving out to other countries. Although many Californians might assume that net immigration is the greatest factor in the state's growth, the data make clear that this has been less a factor than natural increase. Net migration represents the difference between the population coming to California from other states minus those leaving California for other states. Although the state experienced a net inflow from other states during the first half of the decade, more people left California for other states than came during the last half of the 2000-2010 decade. Thus, natural increase and foreign immigration have been the contributors to most population growth.

Table of Race and Hispanic Numbers

It's useful to have an idea of the relative numbers in the different groups in the state as defined by the Census Bureau. Clearly, Whites and Hispanics or Latinos are

the largest groups, with Asians and then Blacks next largest. Because the other groups are much smaller, they are not included in this presentation.

Ethnic or Race Group	Population 2010	Percent Change 2000 - 2010
NonHispanic Whites	14,956,253	- 5.4
Hispanics (Latinos)	14,013,719	27.8
Asians	4,861,007	31.5
Black (African-American)	2,227,072	1.6
American Indians or Alaska Natives	362,801	8.8
Native Hawaiian and Other Pacific Islanders	128,577	23.9
NonHispanic population reporting two or more races	968,696	7.3
Total California population	37,253,956	10.0

This presentation is based on the responses of residents of California to 2000 and 2010 decennial census questionnaires mailed to their homes and returned to the Census Bureau in April of those years. The race and Hispanic numbers are based on people's chosen self-identities as they reported them on the census questionnaires. Although some people identified themselves as having two or more (about 970,000 in California) races, the maps and tables we show include only NonHispanic people reporting a single race.

Explanations of the patterns of race and ethnic change you will be seeing are complex. However, they reflect mostly net residential movement, either local residential mobility or migration, rather than place differentials in birth or death rates of any one group. Rapid changes in numbers mean that some places have clearly become more or less attractive to members of a group. It might be possible

to uncover most of these perceptions by interviewing movers of the different groups.

Total Population Change and Median Home Value

One factor that we suspect does apply to the major residential shifts of all groups is the lower housing prices in the interior of the state as opposed to the coastal areas. This can be seen on the Map of Median Home Value, which is useful for showing the relative home prices in different areas. The actual median values in 1999 are less important because they are so much out of date. Home values in all areas increased substantially during the first seven or eight years since 1999, but then fell substantially beginning in 2008 due to the mortgage crisis and economic recession.

Most coastal areas had median home values that were higher than those in the interior sections of the state. For example, the areas near Los Angeles and San Diego on the coast had median values above \$150,000, whereas 70 or 80 miles to the interior homes were worth less. (The lower priced homes along the coast are in Pendleton Marine Base.) In many parts of the San Francisco Bay Area the median home value at that time was over \$350,000—still higher than the moderately priced homes in the large area around Sacramento that extends into the Sierra Nevada.

Details on the map of total population change are what make this map interesting. Students of California geography should be able to identify most areas of substantial growth, which extend from the area near Redding in Shasta County to the intensely agricultural Imperial Valley in the desert east of San Diego. Small

localized declines in population were found near Lake Tahoe, Oakland, Monterey, and Los Angeles. Considering the high price of housing, these declines are surprising and may relate to people's departure because of homes lost in the foreclosure crisis.

Counties with Highest Percentage Increase in Total Population		
County	Pct. Chg.	2010 Pop.
Riverside	41.7	2,189,641
Placer	40.3	348,432
Kern	26.9	839,631
Imperial	22.6	174,528
Madera	22.5	150,865
Counties with Decrease or Lowest Increase in Total Population		
County	Pct. Chg.	2010 Pop.
Tuolumne	1.6	55,365
Siskiyou	1.4	44,900
Alpine	-2.7	1,175
Plumas	-3.9	20,007
Sierra	-8.9	3,240

Asians

This begins a series of four maps on which we show patterns of change of the three largest race groups plus Hispanics, which is considered an ethnic group. We also include tables showing the counties which had the highest percentage growth of the group during the decade and those with the lowest percentage growth or more rapid decline. In these tables only counties with at least 1,000 members of the group in 2010 are included.

The category of Asian includes people who reported themselves on the census's race question as Chinese, Japanese, Filipino, Asian Indian, Korean, or Vietnamese, or any of several smaller groups such as Afghan, Cambodian, and Indonesian.

With the 32 percent increase in Asians in the state since the year 2000 it is not surprising that the blue color designating growth dominates both maps. The dot map indicates the large increases in Asian numbers in the major population centers of the state—the San Francisco Bay Area and its extension eastward to Stockton and Sacramento, and much of Southern California. The choropleth map indicates specific localities where Asian growth has been especially rapid: Irvine in Orange County and in Riverside County's Temecula-Murrieta area near the I-15. The Central Valley foci of more rapid Asian growth appear to be where there is new residential development on former farm land. This can be seen in a large area west of Bakersfield in Kern County, in the Delta region, and north of the city of Sacramento, in and around Lincoln, in Placer County. Such residential expansion into agricultural areas has been going on for several decades.

The dot map also shows the expansion of smaller numbers of Asians into areas where there had not been many Asians, such as Shasta and Butte counties and around Santa Maria in northern Santa Barbara County. The line of dots in central Riverside County shows a similar Asian movement into the Coachella Valley and the Palm Springs area.

Areas of declining Asian numbers are very few. One area evident on the choropleth map is north of Sacramento. The area includes part of Yuba City, where

the localized decline may possibly result from residential shifts of the area's long-established Asian Indian community. The area with a greater percent decrease in Asians in the Bay Area is highlighted by the nature of the choropleth map design, though in this case the Asian decrease may not be very meaningful or illustrative of wider trends. This is a section of Contra Costa County called Briones, east of El Cerrito and Richmond, with a total population of 6,400 in the year 2000, with Asians and Whites each numbering about 2,300.

Asian Highest Percentage Growth Counties		
County	Pct. Chg.	2010 Pop.
Placer	179.3	20,435
Napa	149.7	9,223
Riverside	129.1	130,468
El Dorado	89.2	6,297
Madera	78.9	2,802
Asian Lowest Percentage Growth Counties		
County	Pct. Chg.	2010 Pop.
San Benito	13.0	1,443
San Francisco	11.8	267,915
Yuba	7.6	4,862
Monterey	4.2	25,258
Imperial	0.2	2,843

This first table accentuates the rapid Asian growth from relatively small base populations in the counties of Northern California that are on the fringe of major centers of population. But in Southern California, the more than doubling of Riverside County's Asians from an already large base of about one hundred

thousand in the year 2000 represents the single most important county change in Asian locations in the state.

As for counties with very low percentage increases, the 12 percent Asian growth in San Francisco is most significant because that county's Asian base population was so large. In fact, the largest increase in race group or Hispanic numbers in San Francisco is the growth of the Asian population.

Blacks

Although the statewide increase in Blacks was less than 2 percent, the maps portray substantial changes in distribution. Most dramatic are the declines in black population in the older cities of Los Angeles and Pasadena, San Francisco, and Oakland across the Bay. It is very clear that Blacks in California are moving out of older, often poorer central cities that have been the most important Black centers of population. This continues the loss of Black political power that had been based on Black geographical concentrations originating in days of ghettos and blatant housing discrimination. Also quite evident on the dot map are declines in the Monterey area and smaller declines in Oxnard and Santa Barbara and coastal communities of San Diego County. These are areas in which an immigrant Hispanic or Latino population has been growing. If Los Angeles County is an example, Black departures from former ghettos are related to those area's increasing Mexican and Central American population. Some Black renters who could afford to move out of such poor areas to better neighborhoods have left, while Black homeowners have often been able to sell to Hispanic immigrants, who are forming their own families and need housing.

The most dramatic increases in Black populations in northern California occurred in the suburbs, smaller cities, and new residential developments between the San Francisco Bay Area and Sacramento. To the south Stanislaus County, Fresno, and the Bakersfield area also show Black gains. Southern California's Black population grew especially rapidly near the expanding urban fringe in and around Lancaster, Victorville, and Hesperia in the Mojave Desert. This continues a trend from earlier decades in which the lower housing prices made those areas attractive despite typically long commutes to work in older cities and suburbs. Similarly, in Riverside County the most rapid Black increases were in Hemet, Perris, Sun City, Murrieta, and Moreno Valley, probably because of the relatively low prices of new residential developments and the attractive presence in the area of other Blacks who had arrived during the 1990s.

Black Highest Percentage Growth Counties		
County	Pct. Chg.	2010 Pop.
Placer	133.9	4,751
El Dorado	73.3	1,409
Napa	62.2	2,668
Yolo	52.1	5,208
Riverside	45.8	140,543
Black Highest Percentage Decline Counties		
County	Pct. Chg.	2010 Pop.
Los Angeles	- 8.0	856,874
Alameda	- 11.7	190,451
Monterey	- 15.0	12,785
San Mateo	- 17.7	20,436
San Francisco	- 19.2	48,870

The table of fastest growing Black populations makes clear the move of Blacks into counties in Northern California where not many Blacks had been living -- counties on the outskirts of large population centers. The in-movement of Blacks to Riverside County continues a trend begun in the 1990s.

The decline of Black numbers in Los Angeles and Alameda counties is an important change because these were the two largest centers of Black population in the state. Some of this probably represents net migration out of the state, but we suspect that most Blacks who left these counties indeed moved to suburbs and more distant places as we already discussed. The reduced numbers of Blacks in San Francisco and adjacent San Mateo County also appears to be an important change.

On the choropleth map we were surprised to see the Black decline in the northeastern part of the state, in Lassen County. We had known already that many Blacks there are in prison and we suspected that a decline of prison populations was the explanation. However, in the particular census county division of Madeleine Plain that shows the decline we found after analyzing census numbers from both 2000 and 2010 and state and federal prison statistics that there was no real decline in prisoners, Blacks or others. Instead, there never was a prison in this part of the county, which is almost unpopulated. Rather, the Census Bureau [most likely was their software] mislocated both the High Desert State Prison and the California Correctional Center in 2000 into this CCD, but the prisons were correctly located in and near Susanville in 2010. The net effect is that the number of Blacks, Hispanics, and Whites is falsely shown in the census data as declining. In other words, this is an error in the data provided by the Census Bureau. We suspect that a similar error lies

behind the Black decline shown in a small section of the San Joaquin Valley (the Huron CCD in southwestern Fresno County) because the Census Bureau in 2000 located the Pleasant Valley and Avenal prisons in Huron rather than in Coalinga and Avenal. These examples recall several similar errors of institutional location that Gene discovered in Census 2000 when we were preparing maps of race and ethnic neighborhood change in Southern California for our book *Changing Faces, Changing Places: Mapping Southern Californians*.

Hispanics

This category includes people of Spanish-language origin and their descendants. Some who reported themselves as Hispanic are descendants of people living in the area that became the U.S. in 1848, but a much larger group is those who migrated from Mexico, Central America, South America, the Caribbean, and Spain and their U.S.-born descendants. Note that the much larger numbers of Hispanics and NonHispanic Whites is the reason why each dot represents one thousand persons, not the 500 of the previous maps.

Hispanics constitute the largest group among the estimated 11 million people living in the U.S. without legal authorization, and demographic estimates indicate that in Census 2000 about half of all unauthorized residents were not counted in that census. Because of the wide distribution of people residing here illegally, we do not believe the absence of this group from the census data resulted in any significant error in our maps. This dot map shows how widespread are increases in Hispanics, most of whom are of Mexican or Central American origin. In Southern California one

can spot on the map all the population centers, such as the Imperial Valley, the Coachella Valley and Palm Springs area, Victorville and Hesperia, greater San Diego, Oxnard and the Santa Clara Valley -- not just the larger areas of Los Angeles and Riverside and San Bernardino Counties. (In Orange County the absence of dots identifies the Pendleton Marine base and the Santa Ana Mountains.)

A similar pattern of widespread Hispanic increases is found over much of the state, with exceptions primarily in less populous towns of the north, east of the Sierra, and the desert to the southeast.

On the choropleth map the dark blue along the border with Mexico represents the Imperial Valley with its intensive irrigated agriculture, and the dark blue patches to the north in Riverside County are the Coachella Valley and the Perris-Murrieta-Hemet area, the latter already noted as a growth area for Asians and Blacks. West of Bakersfield the pattern of Hispanic increase is the same as found for both Asians and Blacks, likely due to new housing developments. In Northern California the largest dark blue area is around Los Banos, with other areas of more rapid growth also located farther north along Interstate 5, in the Patterson and Thornton CCDs.

Red dots showing decline are rare. In greater Los Angeles the red dots are in Burbank and in the San Gabriel Valley, which have seen continued growth of their respective Armenian and Chinese populations. Declines in Lassen and Fresno counties are again explained by probable census data errors of mislocated prison locations.

Hispanic Highest Percentage Growth Counties		
County	Pct. Chg.	2010 Pop.
Placer	86.1	44,710
Riverside	77.9	995,257
Yuba	72.8	18,051
Calaveras	70.1	4,703
Lake	67.0	11,088
Hispanic Lowest Percentage Growth Counties		
County	Pct. Chg.	2010
Santa Clara	18.8	75,809
San Mateo	18.0	27,794
Orange	15.7	137,394
San Francisco	11.2	12,270
Los Angeles	10.5	445,676

The first table shows that both Placer and Riverside counties were areas of especially rapid Hispanic growth, with other counties of rapid growth located on the fringe of larger population centers in Northern California—a pattern similar to that observed with Asians and Blacks. On the other hand, Hispanics grew more slowly in Los Angeles and San Francisco and counties adjacent to these major population centers than elsewhere. This, too, is somewhat similar to the shifts of Blacks, although Black numbers actually declined in these places.

NonHispanic Whites

Because the group most people think of as White does not generally include Hispanics, we measure Whites as including only those who identify on the census as racially White but ethnically not Hispanic.

The dot map shows the many parts of the state which have experienced a decline in Whites. This was true of a very large area in and around the San Francisco Bay Area and Monterey Bay. It was also the case along almost all of the coast from Santa Maria southward. Note, however, that Whites increased in Southern California's interior areas, most notably Riverside County, which includes the Palm Springs area.

White numbers increased in the small cities of Redding and Chico in the north and in small towns such as Paso Robles in San Luis Obispo County. All of these are places some distance away from major population centers. In the Central Valley the pattern is a very intricate one, with adjacent localities often experiencing different trends. White growth occurred, for example, in the Thornton area of San Joaquin County and the Rio Vista area of Solano County; in Marysville, Olivehurst and Wheatland in Yuba County; and around Lincoln in Placer County. We expect that most of these represent new residential developments on former farmlands.

The table of fastest growing White populations, with its county level data, obscures the more intricate pattern shown by the dot map. However, the rapid decline in Bay Area counties does reflect the dominant trend over nearly all that area.

The map patterns as a whole indicate that Whites are leaving older towns and cities that are part of major metropolitan areas and relocating to newer developments closer to the urban fringe or well outside major population centers. This continues a trend seen in the 1990s and even earlier.

White Highest Percentage Growth Counties		
County	Pct. Chg.	2010 Pop.
Placer	28.0	265,294
Riverside	10.2	869,068
El Dorado	9.0	144,689
Yuba	7.9	42,416
Calaveras	7.4	38,074
White Highest Percentage Decline Counties		
County	Pct. Chg.	2010
San Benito	- 13.7	21,154
San Mateo	- 13.8	303,609
Santa Clara	- 15.8	626,909
Monterey	- 15.8	136,435
Imperial	- 16.8	23,927

Conclusion

What we have seen in all these maps is a clear geographical shift of all groups from large older coastal cities and towns to smaller places in the interior of the state. Such a change increases racial and ethnic diversity in the interior towns, and we expect there has been some convergence of housing prices between the more expensive coast and the less expensive interior. Places of rapid growth, epitomized by Riverside and Placer counties, should gain in greater political representation with the new districts now being created on the basis of the 2010 census.

These patterns suggest to us that Los Angeles and other large, older coastal centers that have traditionally been major centers of separate White, Black, Hispanic, and Asian cultures and political power will be slowly challenged by the

suburban and less urbanized counties that have recently received populations of several different race groups and mixed-race people. More and more the state is becoming mixed residentially and socially, and the massive metropolitan areas of the coast that have dominated perceptions of the state must begin to recede in the face of population shifts into the smaller, more mixed places we identified on our maps.