

Indicators of Change: Exploring Trends in Socioeconomic and Demographic Characteristics across Los Angeles County (2000 to 2016)



These reports are a collaboration of CSUCI Sociology Capstone Students (Spring 2018) and the California Association of Human Relations Organizations (CAHRO)

Overview:

This report reflects a partnership between California State University Channel Islands Sociology and the California Association of Human Relations Organization (CAHRO). One of CAHRO’s stated goals is to “build the capacity of organizations addressing human relations issues through information sharing, training, and technical assistance.” To contribute to CAHRO, students analyzed social, demographic, and economic data to measure changes in various forms of inequality from 2000 to 2016 across various California counties.

Students completed reports for 11 counties that document changes taking place across four broad areas: 1) racial and ethnic change, 2) income inequality, 3) housing inequality and 4) age structure. The goal is that CAHRO, its network affiliates, and the general public can use these descriptive portraits to gain a better understanding of contemporary changes in their respective counties and identify particular areas of need.

The data from this report come from the 2000 U.S. Census and 2012-2016 American Community Survey, five-year estimates (herein afterwards referred to as “2016.”) We use a combination of county-level, census tract (neighborhoods), and individual-level data to create descriptive portraits of changes taking place across various California counties.

Section 1 – Racial and Ethnic Change

Racial-ethnic composition is one of the most profound factors to consider when studying neighborhood change. In this section, we demonstrate how racial demographics have changed in Los Angeles County between 2000 and 2016. We also extend beyond overall, county-level data to examine changes taking place at the neighborhood level. In particular, we analyze neighborhood typologies using a classification scheme to identify racially homogenous (one group more than 80%), no-majority (no group larger than 50%), and other types of compositions. Racial and ethnic neighborhood change is important to policymakers so they can work to implement educational programs, employment opportunities, health care resources, employment and housing opportunities at the local level as neighborhoods are undergoing demographic shifts.

Overall Racial-Ethnic Demographics: 2000 to 2016



Figure 1.

Figure 2.

Figures 5 and 6 demonstrate how the racial demographics of Los Angeles County have changed from 2000 to 2016. In 2000, the county was 44.6% Latino and experienced a marginal increase to 48.3% by 2016. Conversely, the non-Hispanic White population decreased throughout the years from 31.1% in 2000 to 26.7% in 2016. The county's non-Hispanic Asian population increased from 12.0% in 2000 to 14.3% in 2016. Los Angeles County's non-Hispanic Black population decreased from 9.5% in 2000 to 8.0% in 2016.

Neighborhood Racial-Ethnic Typologies: 2000 to 2016

Table 1. Typologies for Neighborhood Racial and Ethnic Structure in Los Angeles County

Neighborhood Types	2000	2016
Homogenous (> 80% of one group)		
White	146 (6.2%)	65 (2.8%)
Latino	365 (15.6%)	414 (17.6%)
Asian	5 (0.2%)	5 (0.2%)
Black	21 (0.9%)	4 (0.2%)
No Majority (all groups < 50%)	516 (22.0%)	506 (21.6%)
All Other Tracts	1,293 (55.1%)	1,352 (57.6%)
Total # of Tracts	2,346	2,346

Source: Census tract-level data from 2000 U.S. Census and 2012-2016 American Community Survey

Going beyond county-level data, we also examine racial-ethnic changes at the neighborhood level. Following previous research, we used a neighborhood classification scheme to identify homogenous neighborhoods (where one group constituted over 80% of the census tract) and “no-majority” communities where no group exceeded 50% of the neighborhood’s population. Los Angeles County has a total of 2,346 census tracts. In 2000, there were 146 non-Hispanic white homogenous neighborhoods but by 2016, that number had decreased to only 65 neighborhoods. Conversely, the number of Latino homogenous neighborhoods increased from 365 in 2000 to 414 in 2016. There were five non-Hispanic Asian homogenous neighborhoods in both 2000 and 2016. Although there were 21 non-Hispanic Black homogenous neighborhoods in Los Angeles County in 2000, there were only four such neighborhoods in 2016. Lastly, our results demonstrate that the prevalence of “no majority neighborhoods” remained stable between 2000 and 2016. There were 516 “no majority” census tracts in 2000 and 506 “no majority” tracts in 2016 (just over 20% of all neighborhoods for each observation point).

Section 2 – Income Inequality

In addition to demographic changes, we also provide data that measure overall income inequality and racial-ethnic disparities in median household income. Income inequality has been shown to be correlated with hate crime (see [FiveThirtyEight article](#)). When there is a growing income disparity between groups, there could also be a rise in resentment and misguided blame towards specific racial-ethnic groups. The analysis of racial income disparities compares data from 2000 to 2016 thus including the economic recession as a midpoint. This allows us to examine the extent to which income disparities shifted as a result of the national economic crisis.

Index of Income Inequality (Gini Index) - 2016

The Gini coefficient is a measure of inequality that systematically and objectively measures levels of inequality in any given society. Through the appropriate data, the Gini coefficient measures the income distribution and how it differs from a perfectly equal income distribution. It is used to compare levels of inequalities between geographic areas or to compare income inequality in a given place over time. The Gini coefficient is a number between 0 and 1. A score of 0 would signal total equality and a value of 1 would indicate total inequality. The closer a society's Gini is to 0 the less inequality there is and vice versa, the closer it is to one, the higher the inequality there will be. These results only report the Gini coefficient for 2016 since the data needed to calculate it for 2000 was unavailable.

Table 2. Overall Income Inequality

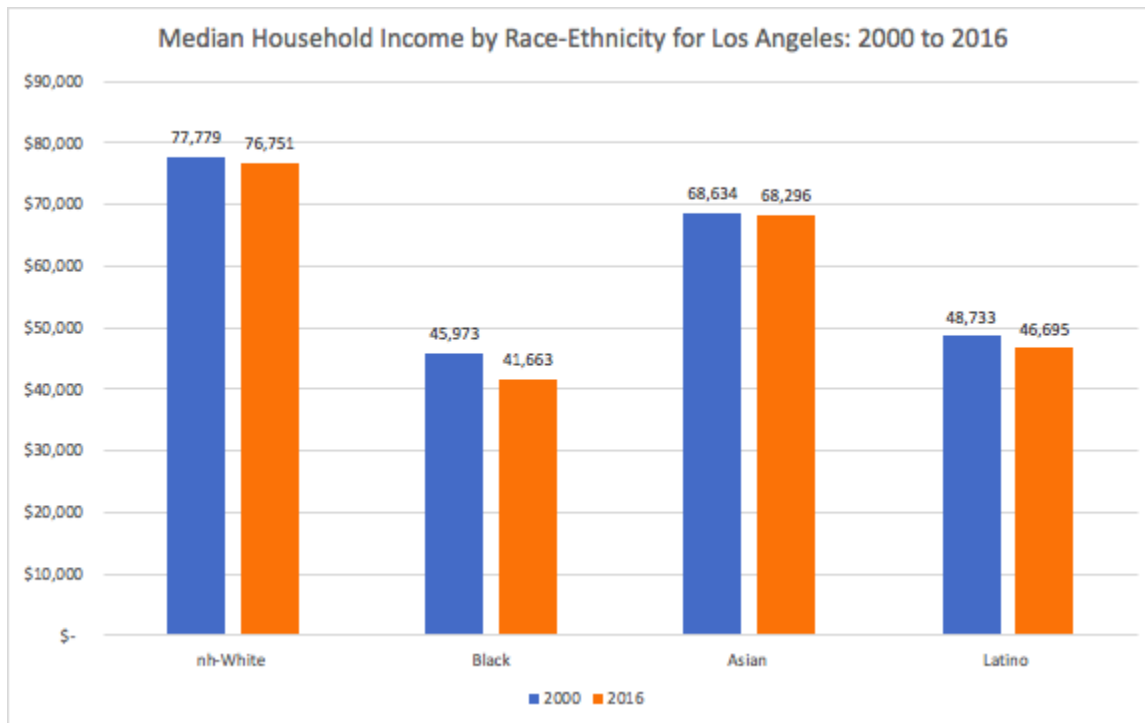
2016 Gini Coefficient for Los Angeles County – 0.50 (California = 0.49)

Data source: County-level and state-level measures from 2012-2016 American Community Survey (5-year estimates).

The Gini coefficient for Los Angeles County in 2016 was 0.50. This is slightly above the Gini coefficient for California as a whole which was 0.49. These results suggest that Los Angeles County has a slightly higher level of income inequality than California.

Median Household Income by Race-Ethnicity: 2000 to 2016

Figure 3. Racial-Ethnic Disparities in Household Income



Data Source: County-level measures from Census 2000 (adjusted for inflation in 2016 dollars); county-level measures from 2012-2016 American Community Survey (5-year estimates).

The chart above illustrates the unequal distribution of median household income by race-ethnicity in Los Angeles County in 2000 (blue) and 2016 (orange). Adjusting for inflation, the median household incomes remained stable or decreased for each racial-ethnic group. Still, there are stark income differences between groups. In both 2000 and 2016, Whites and Asians had higher median household incomes than Latinos and Blacks, a pattern reflected across the state. Specifically, in 2016, whites had the highest median household income (\$76,751) followed by Asians (\$68,296). On the other end, Latinos had the second lowest income in 2016 (\$46,695) while Black households exhibited the lowest median household income among the four groups (\$41,663). The data clearly depict how income varies across race-ethnicity in Los Angeles County in 2000 and 2016.

Racial and Ethnic Distribution Across Income Quintiles: 2000 to 2016

Income quintiles sort the data into five equal groups consisting of 20% each. They are used to display one's relative position in the income distribution. For example, a household that appears in Quintile 1 suggests that they are in the bottom 20% (poorest quintile) of the income distribution while households in Quintile 5 are in the top 20%, meaning they make more than 80% of all other households (richest quintile). We compare the proportion of each racial-ethnic

groups across quintiles to examine changes in the *relative* positioning among the income distribution.

Table 3. Breakdown of Income Quintiles for Los Angeles County, 2000 to 2016

Income Quintiles 2000	Income Quintiles 2016
Quintile 1: \$19,999 or less	Quintile 1: \$24,999 or less
Quintile 2: \$20,000 to \$34,999	Quintile 2: \$25,000 to \$44,999
Quintile 3: \$35,000 to \$59,999	Quintile 3: \$45,000 to \$74,999
Quintile 4: \$60,000 to \$99,999	Quintile 4: \$75,000 to \$124,999
Quintile 5: \$100,000 or more	Quintile 5: \$125,000 or more

Data Source: County-level measures from Census 2000; county-level measures from 2012-2016 American Community Survey (5-year estimates).

Description of Results for Los Angeles County (2000):

The chart below demonstrates Los Angeles County's relative positioning of racial-ethnic groups across income quintiles in the year 2000. If groups were equally dispersed across income quintiles, we would expect to find 20% of each racial-ethnic group sorted into each quintile. However, Figure 4 illustrates the uneven distribution of racial-ethnic groups across income categories. In 2000, black and Latino households were concentrated in the lower quintiles (Quintiles 1 and 2). For instance, 54% of black households fell into the lowest income groups while 51% of Latino households also fell into the lowest quintiles. White and Asian households tended to have more even distributions across income quintiles (each category closer to 20%).

Figure 4. Distribution of Income Quintiles by Race-Ethnicity, 2000

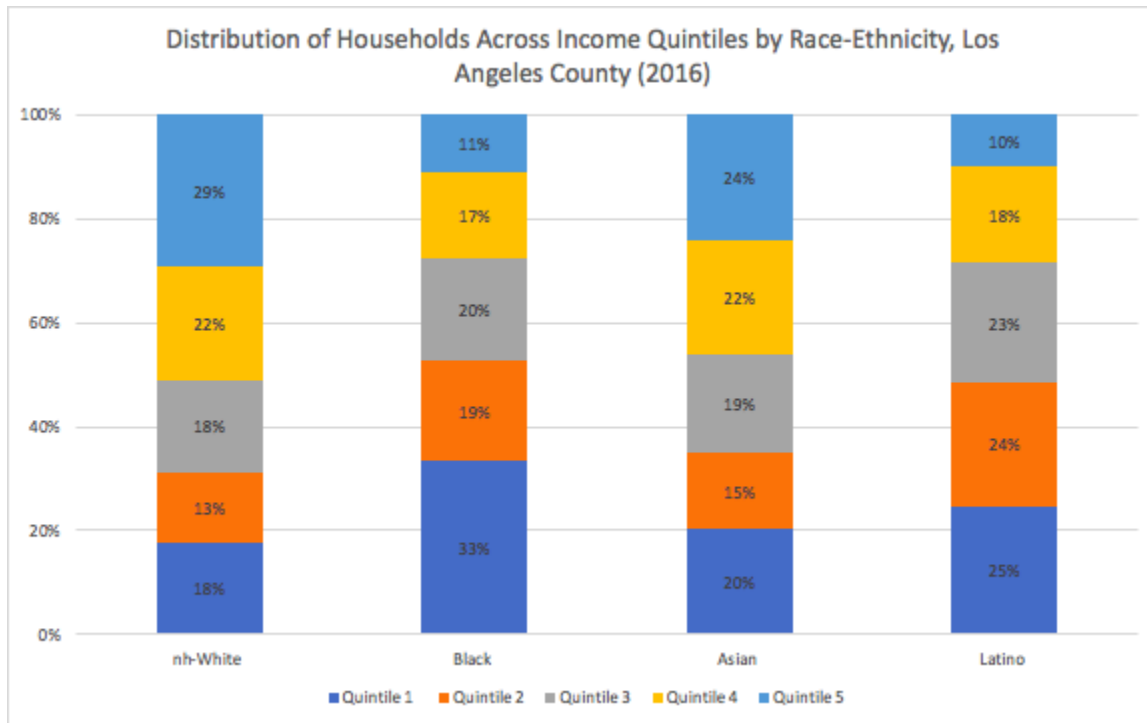


Data Source: County-level measures from 2000 U.S. Census.

Description of Results for Los Angeles County (2016):

We observe similar racial-ethnic patterns for group distribution across income quintiles in 2016. Figure 5 (below) shows that overall, black and Latino households still tend to be concentrated in the lower income groups (Quintiles 1 and 2) while white and Asian households remain overrepresented in the highest income groups (Quintiles 4 and 5). In 2016, roughly half of black (52%) and Latino (49%) households are represented in the lowest income quintiles while about half of white (51%) and Asian (46%) households fall into highest income categories. Furthermore, white and Asian households’ representation in the highest income quintile increased from 2000 to 2016. For example, 23% of white households were in the highest income quintile in 2000 but by 2016, nearly 30% of white households were represented in the highest income category.

Figure 5. Distribution of Income Quintiles by Race-Ethnicity, 2016



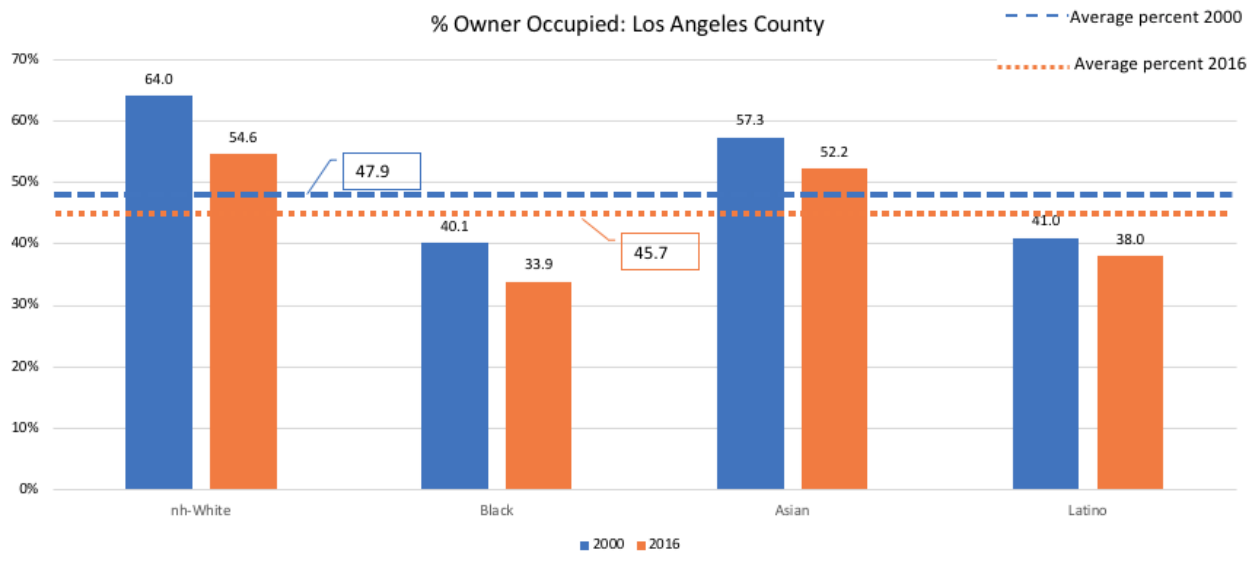
Data Source: County-level measures from the 2012-2016 American Community Survey (5-year estimates)

Section 3 – Housing Inequality

Housing characteristics are significant indicators of community well-being. At the individual-level, homeownership plays a key role in one’s wealth accumulation and strengthening the overall community. However, previous research on racial housing inequality demonstrate its relationship to racial wealth disparities. The observation period is significant (2000 to 2016) as the housing and subprime mortgage crisis took place in 2008.

Homeownership Rates by Race-Ethnicity: 2000 to 2016

Figure 6. Housing Tenure by Race-Ethnicity in Los Angeles County, 2000 to 2016

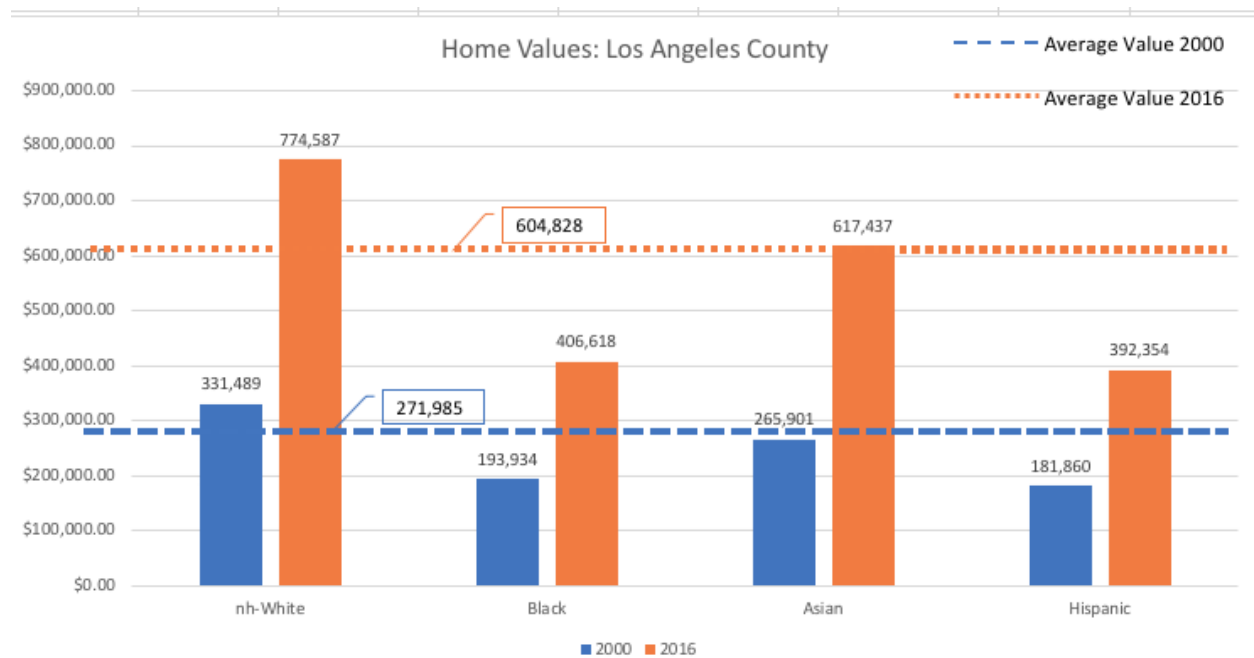


Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

Figure 6 compares homeowner rates across racial-ethnic groups in 2000 and 2016 in Los Angeles County. Homeownership rates declined for all groups across the observation period, likely due to the economic recession and national housing crisis. Overall, Los Angeles County homeowner rates decreased from 47.9% in 2000 to 45.7% in 2016. White and black household experienced the largest declines in ownership rates. The homeowner rates for white households declined from 64% to 54.6% while black households exhibited a decline from 40.1% to 33.9%. Still, non-Hispanic white and Asian homeownership rates remain higher than those for black and Latino households. Latino homeownership rates slightly decreased in Los Angeles County (41.0% in 2000 and 38.0%) and remained below the overall county averages.

Home Values by Race-Ethnicity: 2000 to 2016

Figure 7. Racial-Ethnic Disparities in Home Values



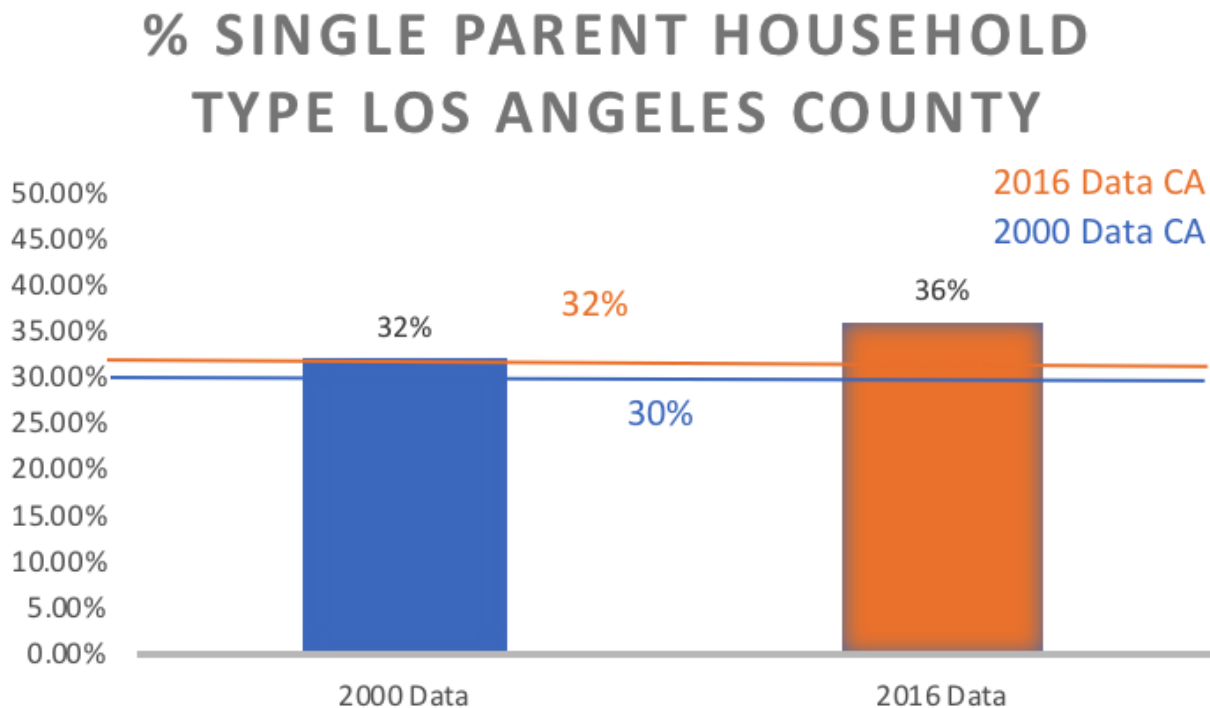
Data Sources: Individual-level data from the 2000 U.S. Census and 2012-2016 American Community Survey

Figure 7 compares the average home values by race in Los Angeles County from 2000 to 2016. The average home values for Los Angeles County have increased for all racial-ethnic groups across the observation period¹. The blue and orange horizontal dotted lines indicate the overall county averages in 2000 and 2016. Similar to homeownership rates, the results for both observation periods shows us that non-Hispanic whites and Asian households have the highest home values compared to black and Latino households. In 2016, the median home values for non-Hispanic white (\$774,587) and Asian (\$617,437) households far exceed those of black (\$406,618) and Latino (\$392,354) households. This is especially important to note given that the latter two groups, blacks and Latinos, also have lower homeownership rates.

¹ These values are not adjusted for inflation.

Households with Children Headed by Single Parents: 2000 to 2016

Figure 8. Trends in Single-Parent Households



Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

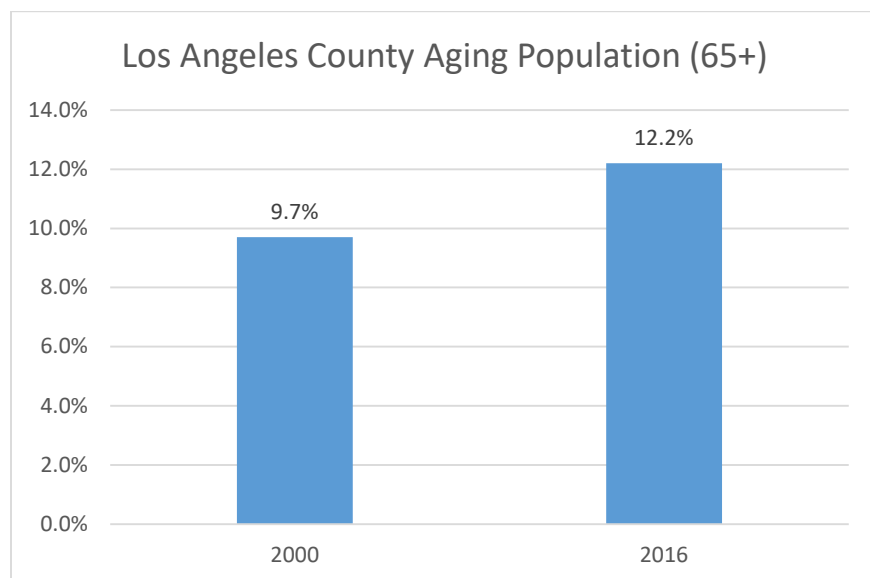
Figure 8 illustrates change in the percentage of families with children (defined as families with at least one child under the age of 18 present in the household) headed by a single parent from 2000 to 2016. The horizontal lines depict the statewide averages from 2000 (blue) and 2016 (orange). The bar chart demonstrates that Los Angeles County exhibits a slightly above average rate of households that are headed by a single parent. In 2000, 32% of households in Los Angeles County that had children under the age of 18 were led by a single parent. However, by 2016, 36% of the households in Los Angeles County were led by a single parent, a 4% increase from the 2000 Census data.

Section 4 – Age Structure

By looking at age structure, we can further our understanding of population dynamics and better respond to a community's needs. For example, since baby boomers continue to transition to retirement age, government (and other) agencies needing to better prepare for an aging population with proper resources and services. These trends can influence changes in policies related to housing, community outreach, and health services. Age structure can also have a large impact on the labor market and economy. For example, a community with a large youth population might evaluate that adequate education and training is available to the future workforce while also ensuring job opportunities for their working-age population.

Changes in the Elderly Population (Ages 65+): 2000 to 2016

Figure 9: Changes in Los Angeles County's Elderly Population, 2000 to 2016



Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

The elderly population in Los Angeles County increased from 9.7% in 2000 to 12.2% in 2016. This increase occurred for all 11 counties analyzed in the larger CAHRO project. The remaining analyses in this section demonstrate other approaches of measuring and visualizing Los Angeles County's aging population.

Trends in Age Structure: Dependency Ratios, 2000 to 2016

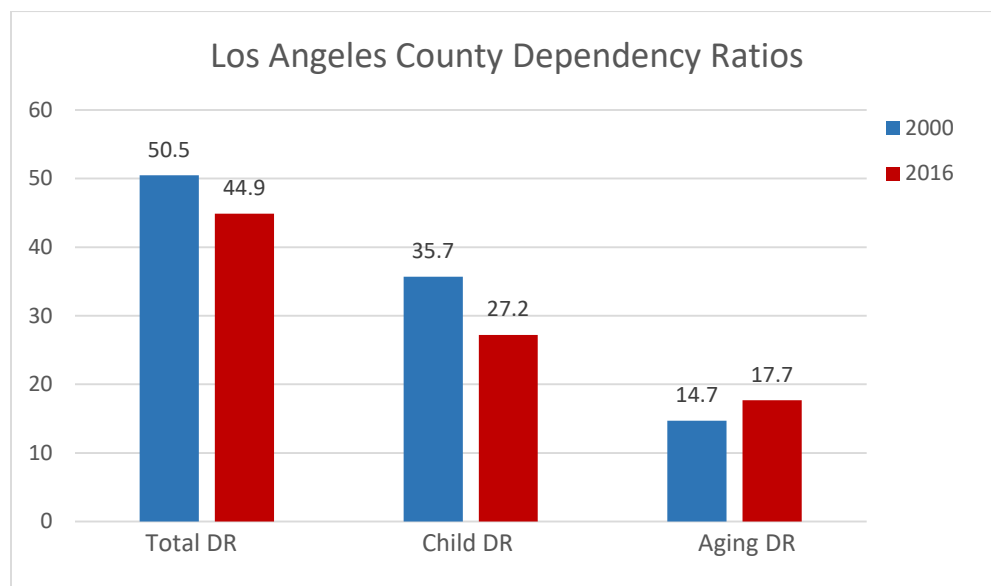
The total dependency ratio examines the share of those not in the labor force (the dependent ages are 0 to 14 years old and 65 years and older) to those typically in the labor force (ages 15 to 64). This measure indicates the amount of people who are of non-working ages compared to those of working age. Dependency ratios are used to compare the percentage of the working age population that will support the rest of the non-working age population. These ratios can provide information for community leaders to track shifts in the population's age dynamics. There are three different dependency ratios used in this report. The equations for each measure are listed below:

$$\text{Total Dependency Ratio} = \left(\frac{\text{population ages 0 to 14} + \text{population ages 65 and older}}{\text{population ages 15 to 64}} \right) * 100$$

$$\text{Child Dependency Ratio} = \left(\frac{\text{population ages 0 to 14}}{\text{population ages 15 to 64}} \right) * 100$$

$$\text{Elderly/Aging Dependency Ratio} = \left(\frac{\text{population ages 65 and older}}{\text{population ages 15 to 64}} \right) * 100$$

Figure 10. Changes in Dependency Ratios, 2000 to 2016



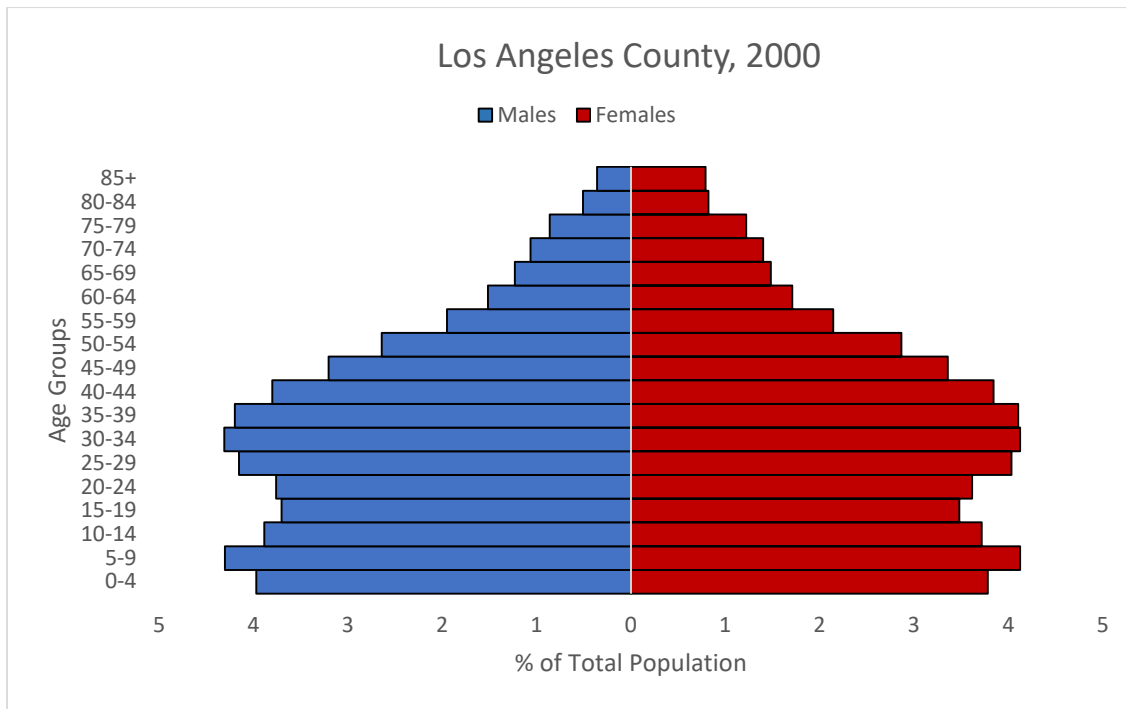
Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

Figure 10 displays the total, child, and aging dependency ratios for Los Angeles County in 2000 and 2016. We find that the dependency ratio for the total and child dependency ratios have decreased over the observation period. The total dependency ratio (non-working age to working age) declined from 50.5 in 2000 to 44.9 in 2016 while the child dependency ratio (ages 0-14 to working age) declined from 35.7 to 27.2 during the same period. For the latter, this indicates that the child population (0-14) has become less dependent on the working age (15-64). On the other hand, the aging dependency ratio (elderly population to working age) increased from 14.7 in 2000 to 17.7 in 2016. By 2016, for every 100 people in the working age group, there were 17.7 residents age 65 years or older. This reflected the large state-wide trends related to declining birth rates and continual transition of baby boomers into retirement ages.

Visualizing Age Structure: Population Pyramids, 2000 to 2016

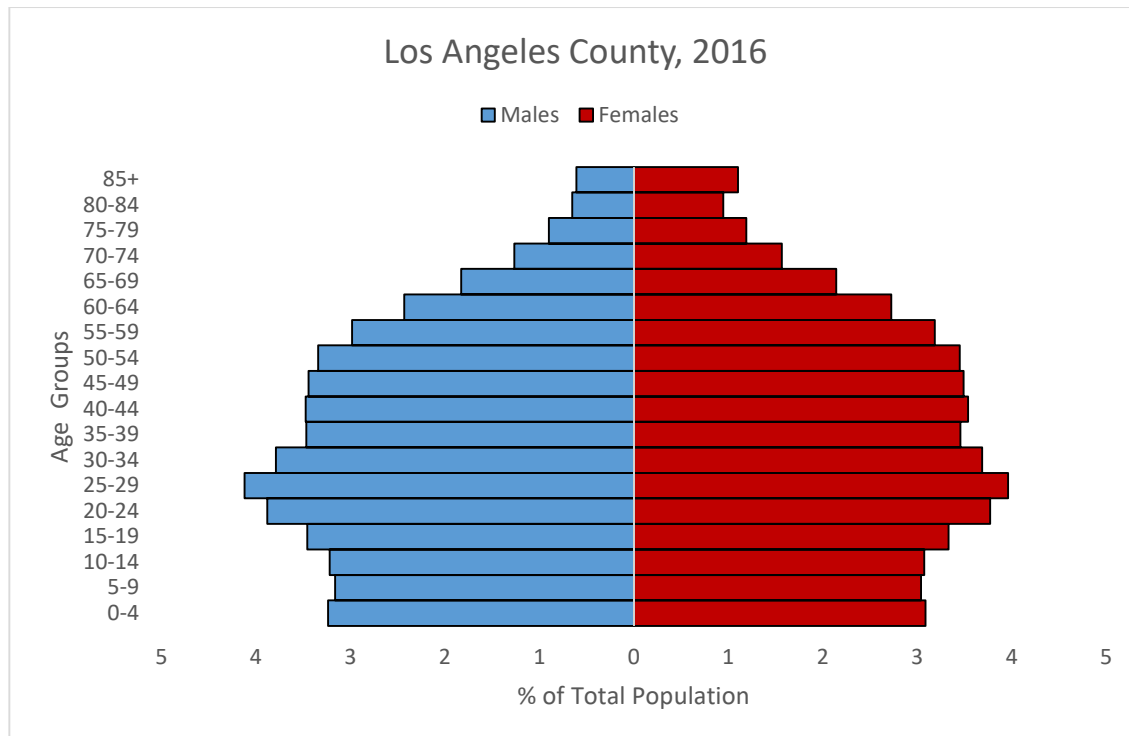
A population pyramid is a graph that shows the distribution of various age groups in the population. The shape of the pyramid on the graph represents whether the population is youthful (large base) or aging (declining base, wider bars towards the top). This is an important tool that examines current and future age dynamics. The population size is broken down by sex and displayed on the X-axis (measured in percentages) while the age groups are illustrated on the y-axis in five-year intervals. The oldest group appears at the top which represents county residents who are 85 years of age and older. We constructed population pyramids for the years 2000 and 2016 to visually demonstrate Los Angeles County's changing age structure.

Figure 11: Population Pyramid (Age Distribution by Sex), 2000



Data Source: 2000 U.S. Census

Figure 12: Population Pyramid (Age Distribution by Sex), 2016



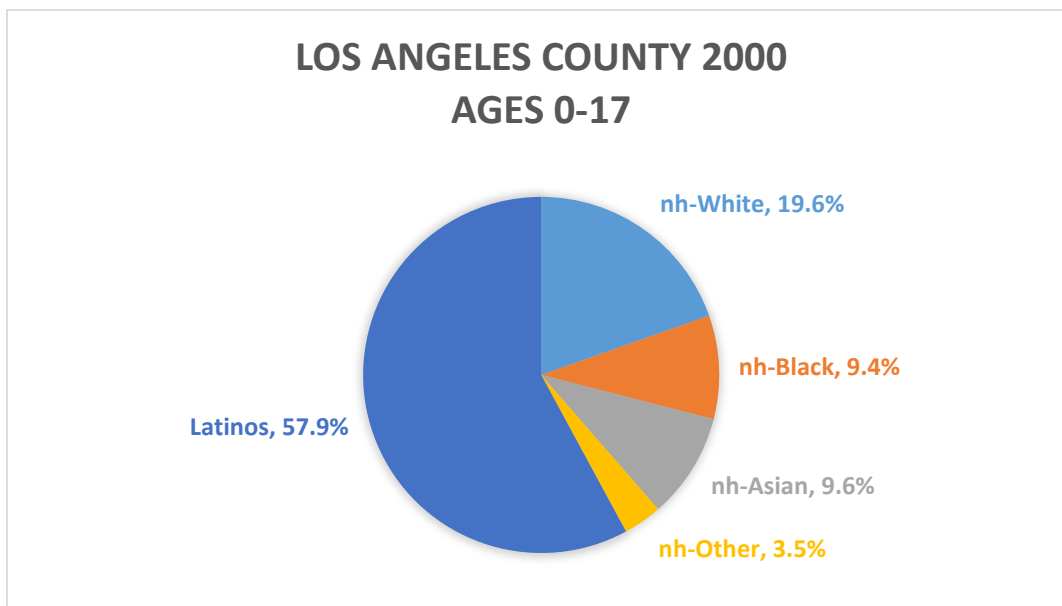
Data Source: 2012-2016 American Community Survey (5-year estimates)

The comparison of the population pyramids from 2000 to 2016 illustrates the common trend found across California counties: the population is aging. In particular, the base of the pyramid (youth) is narrowing while the width of bars in older ages continue to increase. The underlying factors of this changing age structure are related to declining birth rates in addition to longer life expectancies. As birth rates remain low, Los Angeles County's future age structure (as visualized through population pyramids) will continue to experience an increased percentage of its population that is located in older age groups.

Age Structure by Race: The Demographic Divide, 2000 to 2016

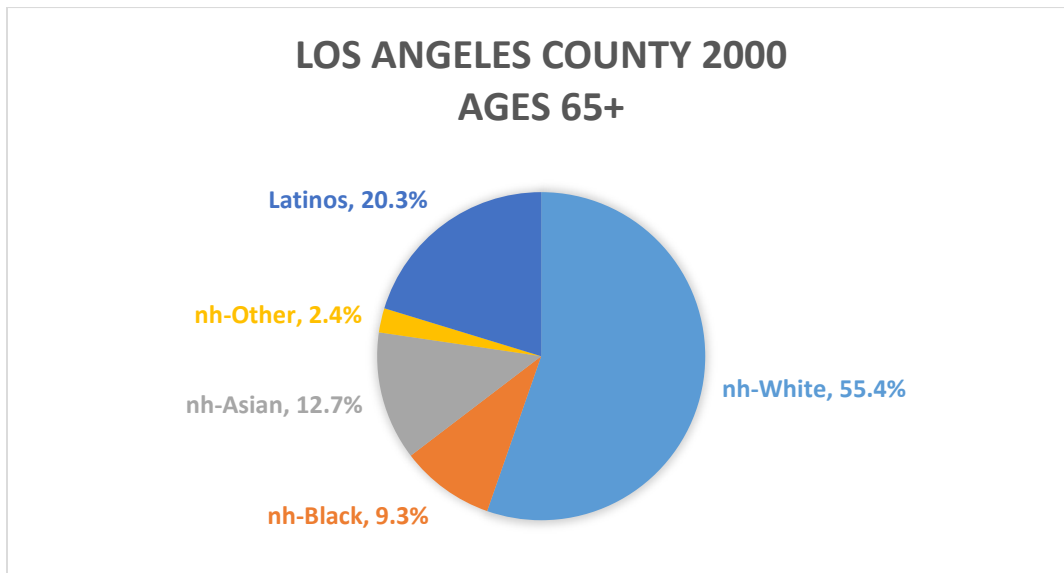
The demographic divide refers to the contrast of a diverse youth population (less than 18 years old) and a community's relatively white elderly population (ages 65+). The implication of this divide is that there may be few opportunities for people of a different race-ethnicity to interact, as they inhabit different social spaces (e.g. schools versus other environments). Consequently, the disconnect between racial-ethnic groups might be more magnified due to age structure. For instance, are elderly white populations less likely to support local initiatives for county's youth population if they are of a different race-ethnicity?

Figure 13. Racial-Ethnic Profile of Los Angeles County's Youth Population, 2000



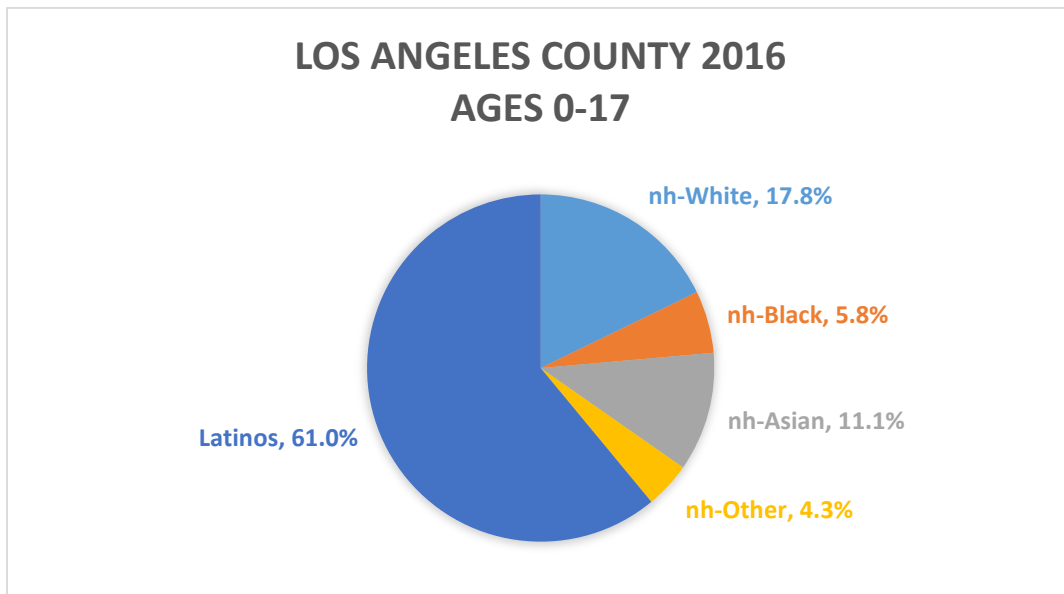
Data Source: 2000 U.S. Census

Figure 14. Racial-Ethnic Profile of Los Angeles County’s Elderly Population, 2000



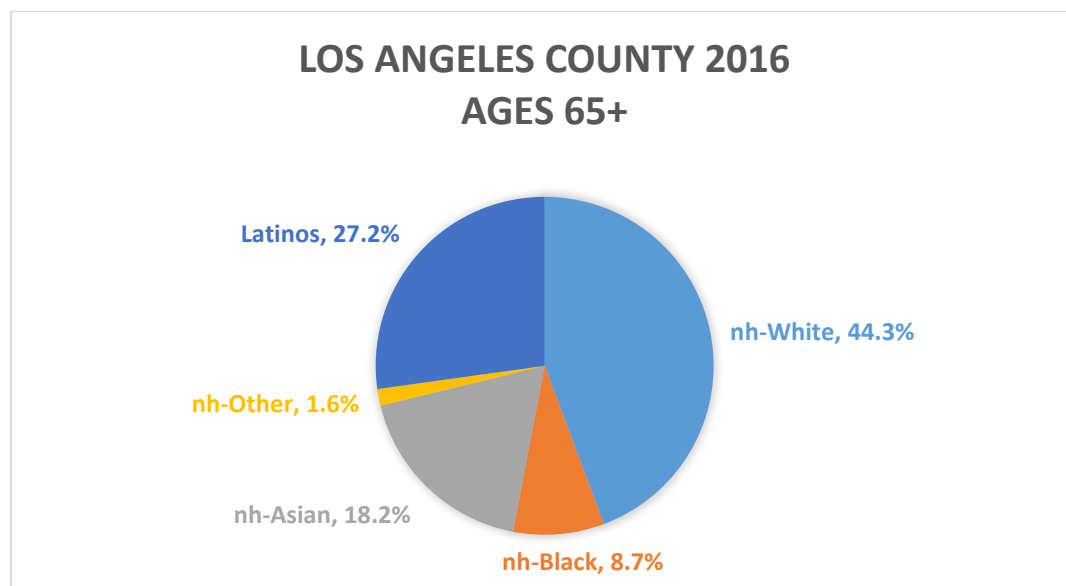
In 2000, Los Angeles County’s youth (ages 0-17), population was majority Latino (57.9%). The next largest group was non-Hispanic white, comprising just under 20% of the county’s youth population. Black and Asian youth each represented about 10%. When examining the county’s elderly population in 2000, the majority were non-Hispanic white (55.4%) while Latinos (who represented the majority of the youth population) only comprised 20% of Los Angeles County’s elderly population. Similar to their representation among the youth population, blacks and Asians represent roughly 10% of the county’s elderly residents.

Figure 15. Racial-Ethnic Profile of Los Angeles County’s Youth Population, 2016



Data Source: 2012-2016 American Community Survey (5-year estimates)

Figure 16. Racial-Ethnic Profile of Los Angeles County’s Elderly Population, 2016



Figures 15 and 16 reveal a similar pattern in 2016. Latinos remain the largest youth group, accounting for 61% of the population under the age of 18. The next largest youth groups were non-Hispanic whites (17.8%) and Asians (11.1%). Notably, the share of black residents among the county’s youth population decreased from 9.4% in 2000 to only 5.8% in 2016.

Among the elderly population (ages 65+) in 2016, whites still represent the largest group (44.3%) but not the majority. The share of Latinos among Los Angeles County’s elderly population increased from 20.3% in 2000 to 27.2% in 2016. There was a similar pattern among Asians, whose share among the elderly population grew from 12.7% in 2000 to 18.2% in 2016.

Despite being a racially-ethnically diverse county overall, these pie charts illustrate the profound differences in diversity across age groups and illuminate stark differences in the racial-ethnic profile of the county’s youth and elderly population. However, the data also suggest an increasing share of the Latino youth population while Los Angeles County’s elderly population is becoming increasingly diverse. Community leaders might consider new policies that better serve a more multicultural elderly population.

Section 5 - Technical Notes

This report employs data from the [2000 U.S. Census](#) and 2012-2016 [American Community Survey](#) (5-year estimates). Although most sections reflect county-wide summary statistics, in some sections we use data measured at the census tract (neighborhood) or individual-level. For instance, our analysis of changes in neighborhood racial-ethnic typologies use tract-level data. In order to account for racial-ethnic differences in median home values, we aggregated individual-level results to create county averages. We took this approach because the American Community

Survey and U.S. Census does not provide aggregate-level results for home values by race-ethnicity. Although our results on home values might differ slightly from other county-level analyses, the general patterns remain similar.

In our discussion of racial-ethnic groups, we combine data on race and ethnicity ([which are treated as two separate concepts](#)) to classify the following groups: non-Hispanic whites, non-Hispanic blacks, non-Hispanic Asians, and Latinos. Due to smaller sample size, we do not report data on non-Hispanic others (which would include American Indians, multi-racial, and other groups not otherwise listed).