“Indicators of Change: Exploring Demographic, Social, and Economic Trends across California Communities”

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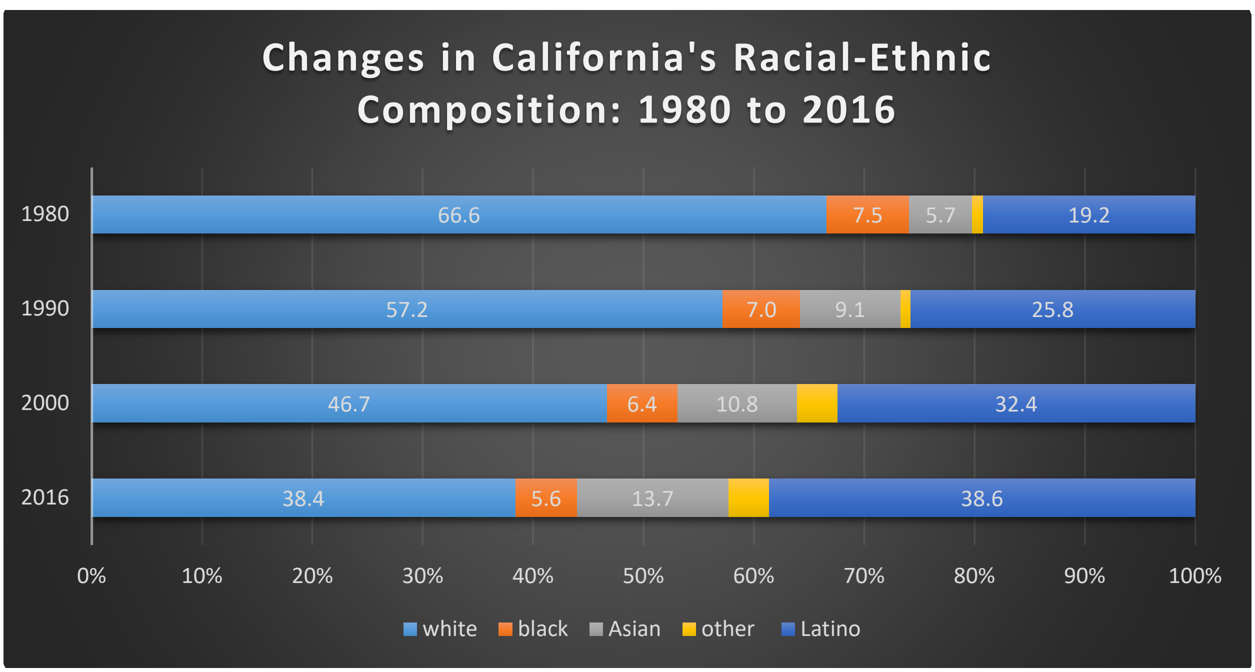
California Association of Human Resources Organizations (CAHRO) & Dr. Luis A. Sánchez of California State University Channel Islands Sociology Program

Executive Summary:

One of CAHRO's stated goals is to "build the capacity of organizations addressing human relations issues through information sharing, training, and technical assistance". This series of reports, a collaboration between CAHRO and CSU Channel Islands Sociology students, contributes to this goal by providing community stakeholders access to empirical results related to various forms of demographic, social, and economic changes taking place across select California counties from 2000 to 2016. Using data from the 2000 Census and 2012-2016 American Community Survey (ACS), we document trends taking place across four broad categories: racial and ethnic change, income inequality, housing inequality, and population aging. The goal is that CAHRO and its network affiliates can use these descriptive portraits to gain a better understanding of contemporary changes in their respective counties and identify particular areas of need. This series includes reports for the following counties:

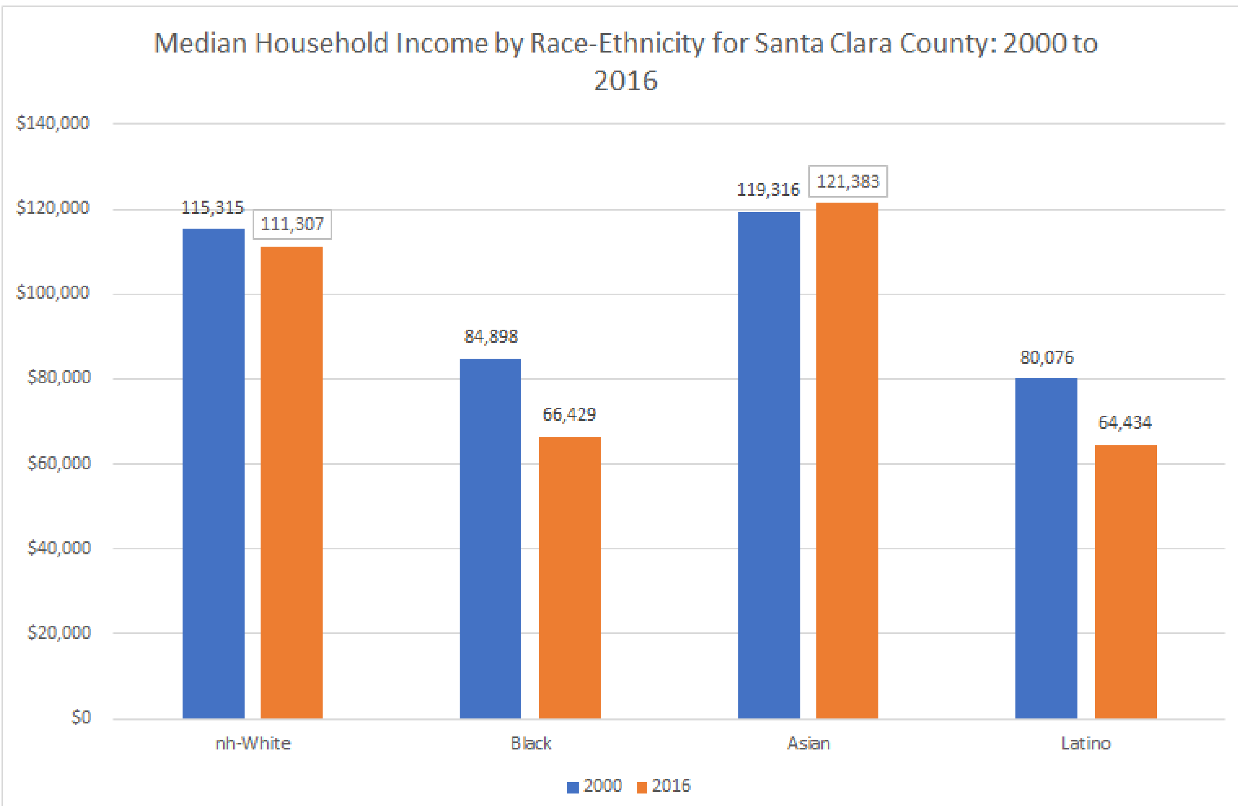
- Alameda
- Kern
- Los Angeles
- Orange
- Riverside
- San Bernardino
- San Diego
- San Francisco
- San Mateo
- Santa Clara
- Ventura



Sources: 1980, 1990, 2000 U.S. Censuses; 2012-2016 American Community Survey

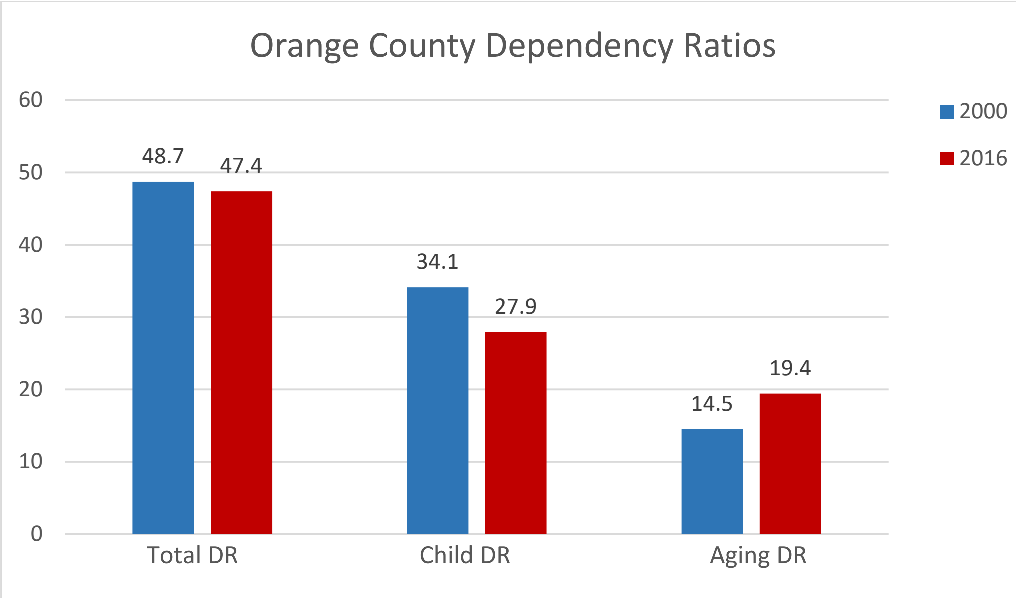
California is currently a majority-minority state. Since 1980, the state's Latino and Asian population continued to increase while the non-Hispanic white population substantially declined. Latinos (38.6%) and non-Hispanic whites (38.4%) currently represent California's two largest racial-ethnic groups followed by non-Hispanic Asians (13.7%) and non-Hispanic blacks (5.6%). Despite the state's increasing level of racial-ethnic diversity, our findings illustrate the persistence of income and housing inequalities faced by the state's minority population.

We find robust evidence that California's black and Latino populations experience lower household incomes, homeownership rates, home values, and are severely underrepresented in the highest income groups (as measured by income quintiles). Although these racial-ethnic differences somewhat varied across the counties included in the study, we find that black and Latinos' socioeconomic standing fell below that of the non-Hispanic white population. Still, we find numerous counties where the Asian population fares better than non-Hispanic whites in terms of median household income and homeownership rates (see example below for Santa Clara County).



Source: 2000 U.S. Census and 2012-2016 American Community Survey

Concerning age structure, we generally find that most counties experienced increases in the proportion of their population comprised of those ages 65 years and older. We specifically measure these, and other age structure, trends using dependency ratios to compare the amount of youth (defined as those younger than 15 years old) and elderly (ages 65+) *relative* to those in the working-age population (ages 15-64 years old). In most cases, counties exhibited increases in the elderly-dependency ratio while demonstrating decreases in their youth-dependency ratio, the latter reflecting statewide trends in declining birth rates (see example below for Orange County). Lastly, we construct population pyramids as an alternative way to visualize the widespread population aging taking place across California counties.



Sources: 2000 U.S. Census and 2012-2016 American Community Survey

In sum, our "Indicators of Change" reports work to educate community leaders and stakeholders about recent population shifts so they are aware of contemporary and emerging issues so they might work to enact policies to improve human relations and promote equitable opportunities for their respective communities. We hope these reports serve as important contextual resources so that various organizations and groups can have a better understanding of their local communities. Many of these demographic and economic trends have profound influences on social interaction and shape numerous life outcomes.

Indicators of Change: Exploring Trends in Socioeconomic and Demographic Characteristics across Ventura 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 Ventura 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

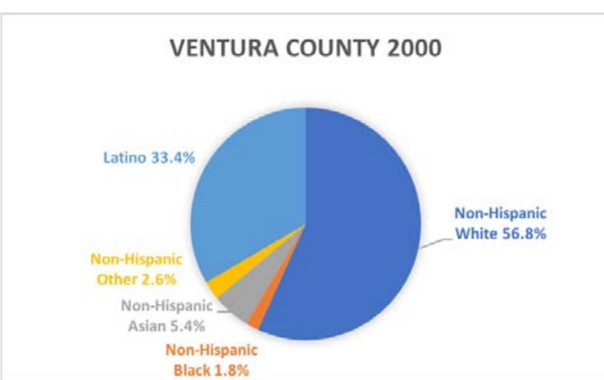


Figure 1.

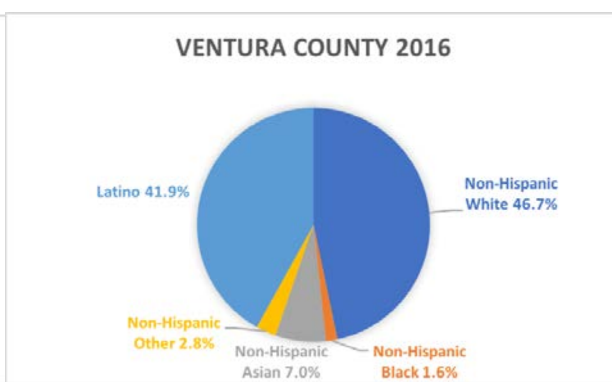


Figure 2.

Figures 1 and 2 demonstrate how the racial demographics of Ventura County have changed from 2000 to 2016. In both observation periods, the county is comprised mostly of non-Hispanic white and Latino residents. In 2000, Ventura County was 33.4% Latino but increased to 41.9% in 2016. Conversely, the county's non-Hispanic white population decreased from 56.8% in 2000 to 46.7% in 2016. Between 2000 and 2016, the county's Asian population increased from 5.4% to 7.0%. During the same period, Ventura County's non-Hispanic black population remained relatively stable at just under 2%.

Neighborhood Racial-Ethnic Typologies: 2000 to 2016

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

Neighborhood Types	**2000**	**2016**
Homogenous (> 80% of one group)		
White	44 (25.3%)	10 (5.7%)
Latino	11 (6.3%)	24 (13.8%)
Asian	0 (0.0%)	0 (0.0%)
Black	0 (0.0%)	0 (0.0%)
No Majority (all groups < 50%)	12 (6.9%)	16 (9.2%)
All Other Tracts	107 (61.5%)	124 (71.2%)
Total # of Tracts	174	174

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. Ventura County has a total of 174 census tracts. In 2000, there were 44 non-Hispanic white homogenous neighborhoods but by 2016, that number had decreased to only 10 neighborhoods. Conversely, the number of Latino homogenous neighborhoods more than doubled from 11 in 2000 to 24 in 2016. In both observation periods, Ventura County did not have any homogenous black or Asian neighborhoods. This finding largely reflects the smaller Asian and Black population in the county (relative to state averages). Lastly, our results demonstrate that the prevalence of "no majority neighborhoods" slightly increased between 2000 and 2016. There were 12 "no majority" census tracts in 2000 and 16 "no majority" tracts in 2016.

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

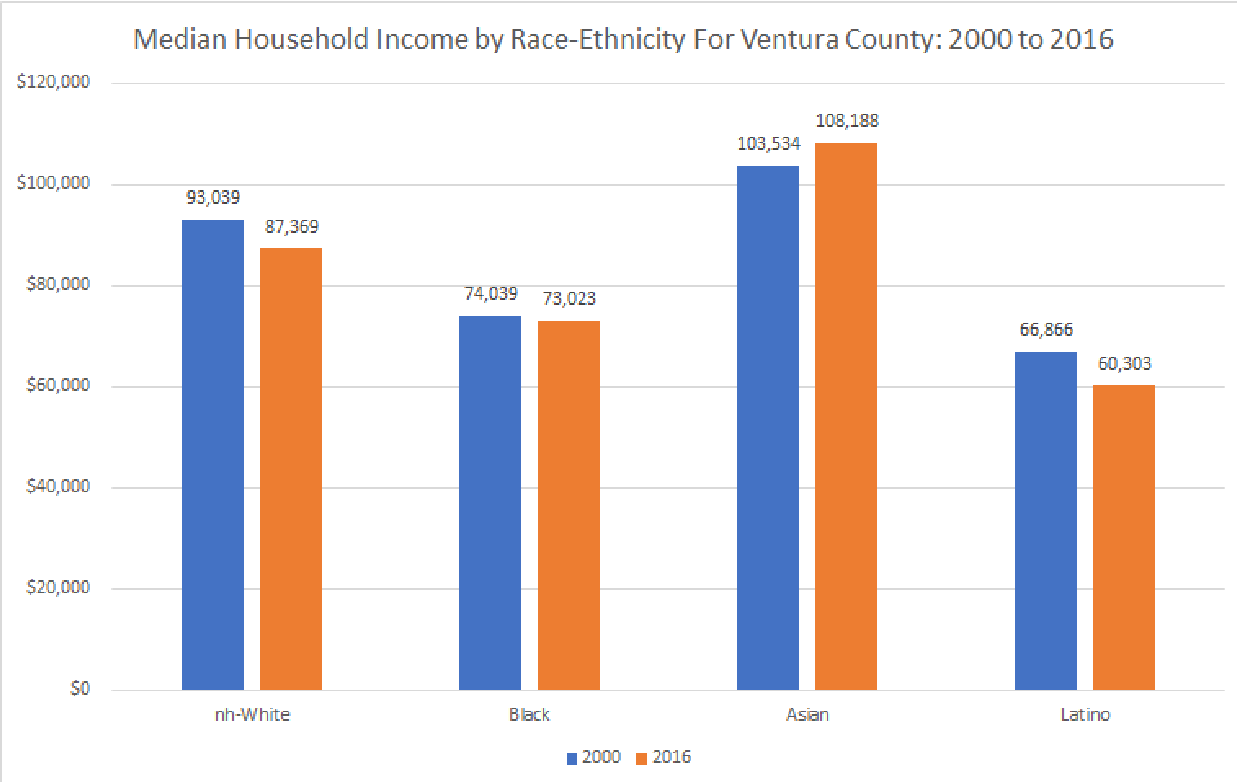
2016 Gini Coefficient for Ventura County - 0.45 (California = 0.49)

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

The Gini Coefficient for Ventura County is 0.45, which falls below the value measured at the state level of 0.49. This figure indicates that there is less measured inequality within Ventura County compared to the state.

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).

Figure 3 (above) illustrates the median household income by race-ethnicity in Ventura County in 2000 (blue) and 2016 (orange). Overall, Ventura County has a high median household income relative to the state average (Ventura County - $78,593; California - $63,783) yet our data reveal striking differences between racial-ethnic groups. Asian households reported the highest median income among all groups in 2000 ($103,534) and 2016 ($108,188). While Asians households experienced a slight increase in median income, other groups' incomes declined. White households reported the second highest median income but it decreased from $93,039 in 2000 to $87,369 in 2016. Latino households, the second largest group in Ventura County, exhibit the lowest median household income. Latino income declined by nearly $7,000 from 2000 to 2016. In 2016, the income gap between Latino ($60,303) and Asian ($108,188) households was nearly $50,000. The data clearly depict how income varies across race-ethnicity in Ventura 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 Ventura County, 2000 to 2016

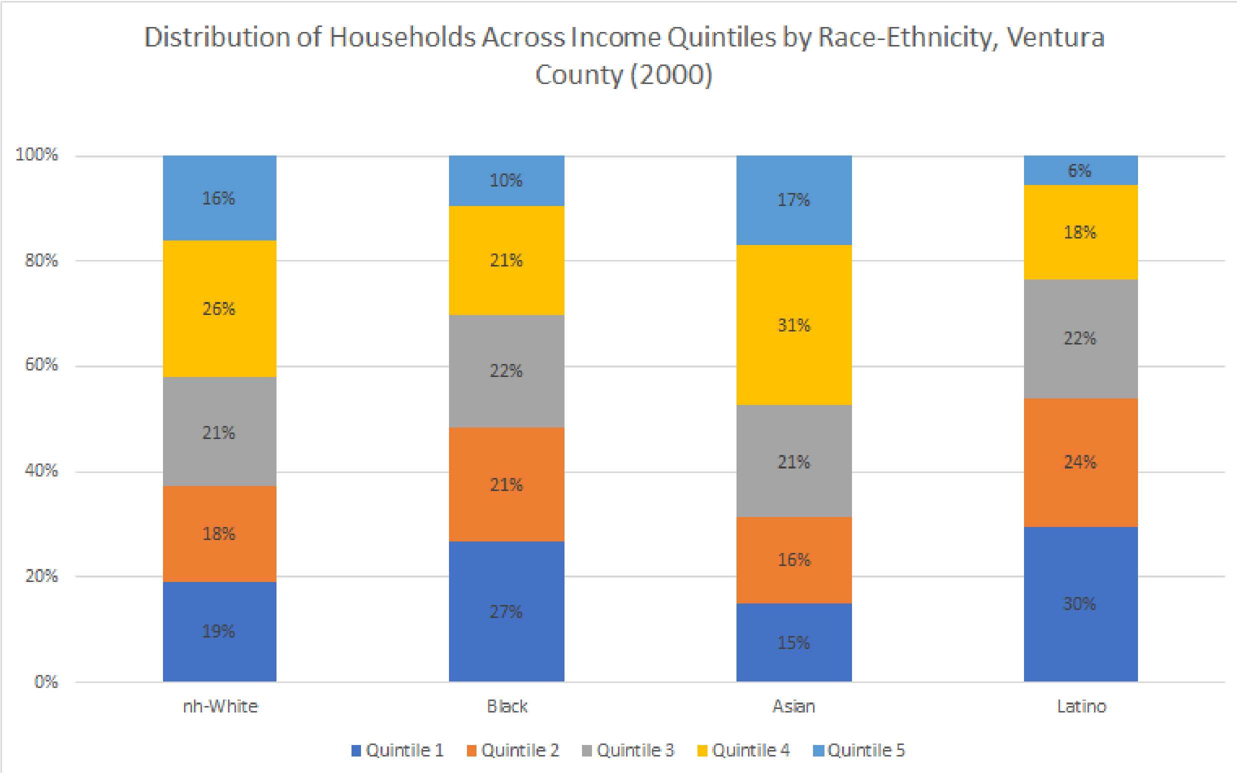
Income Quintiles 2000	**Income Quintiles 2016**
Quintile 1: $29,999 or less	**Quintile 1**: $34,999 or less
Quintile 2: $30,000 to $49,999	**Quintile 2**: $35,000 to $74,999
Quintile 3: $50,000 to $74,999	**Quintile 3**: $75,000 to $99,999
Quintile 4: $75,000 to $124,999	**Quintile 4**: $100,000 to $149,999
Quintile 5: $125,000 or more	**Quintile 5**: $150,000 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 Ventura County (2000):

Figure 4 (below) demonstrates Ventura 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, the chart illustrates the uneven distribution of racial-ethnic groups across income categories. In 2000, black and Latino households were concentrated in the lowest income groups (Quintiles 1 and 2) while white and Asian households were concentrated in the highest ones (Quintiles 4 and 5). For example, over 54% of Latino households are represented in quintiles 1 and 2, signifying earnings of less than $50,000 while 51% of Asian households are in the highest quintiles (4 and 5) which represent households earning more than $75,000.

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

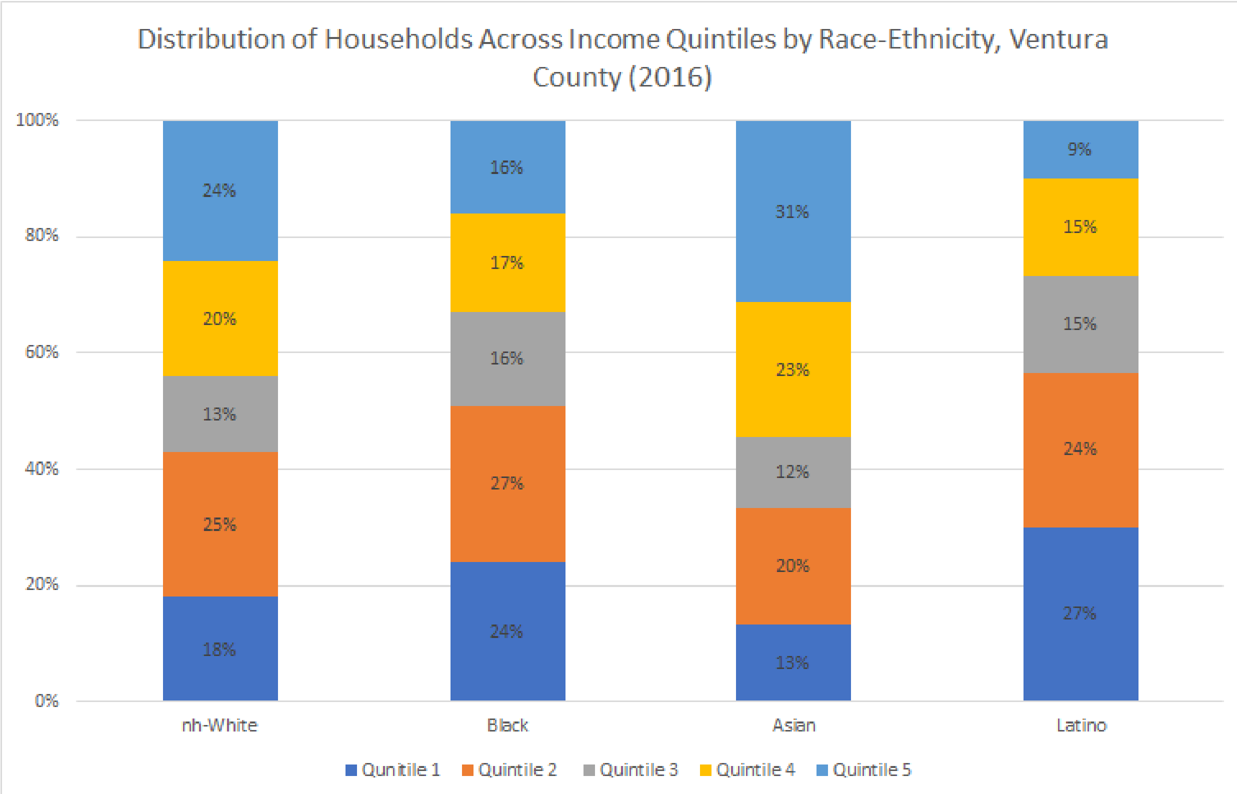


Data Source: County-level measures from 2000 U.S. Census.

Description of Results for Ventura County (2016):

In Figure 5 (below), we observe similar racial-ethnic patterns for group distribution across income quintiles in 2016. White and Asian households are overrepresented in the top income quintiles while Latino and black households remain concentrated in the lower ones. In 2016, over half (51%) of Latino households earned less than $75,000 (Quintiles 1 and 2) while over half (54%) of Asian households earned more than $100,000 (Quintiles 4 and 5).

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



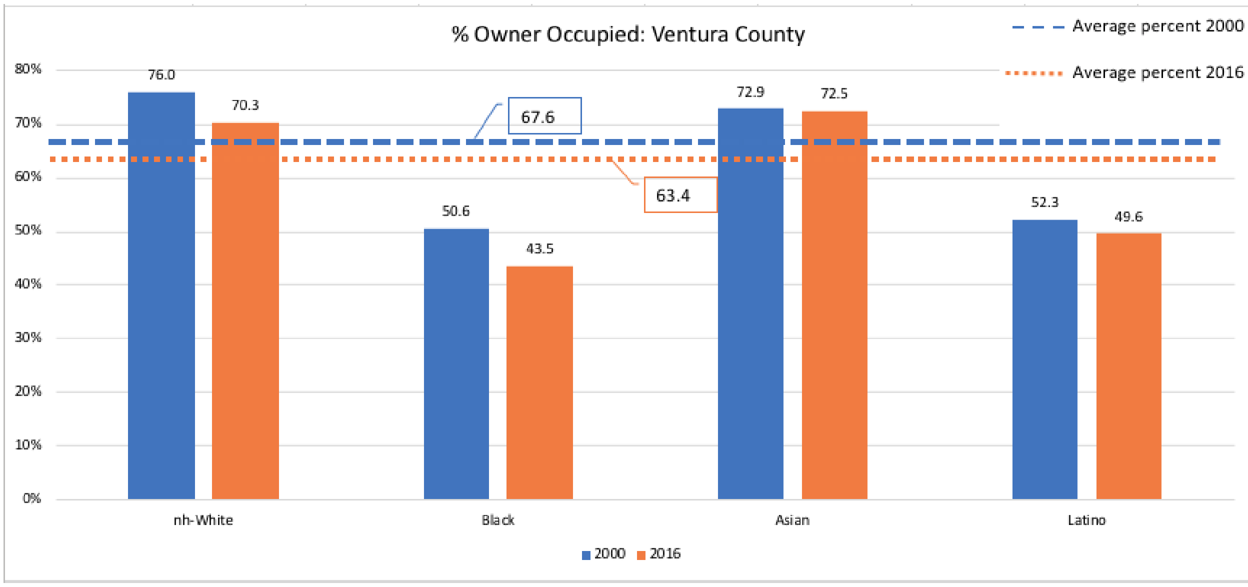
Data Source: County-level measures from the 2012-2016 American Community Survey (5-year estimates)

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 Ventura County, 2000 to 2016

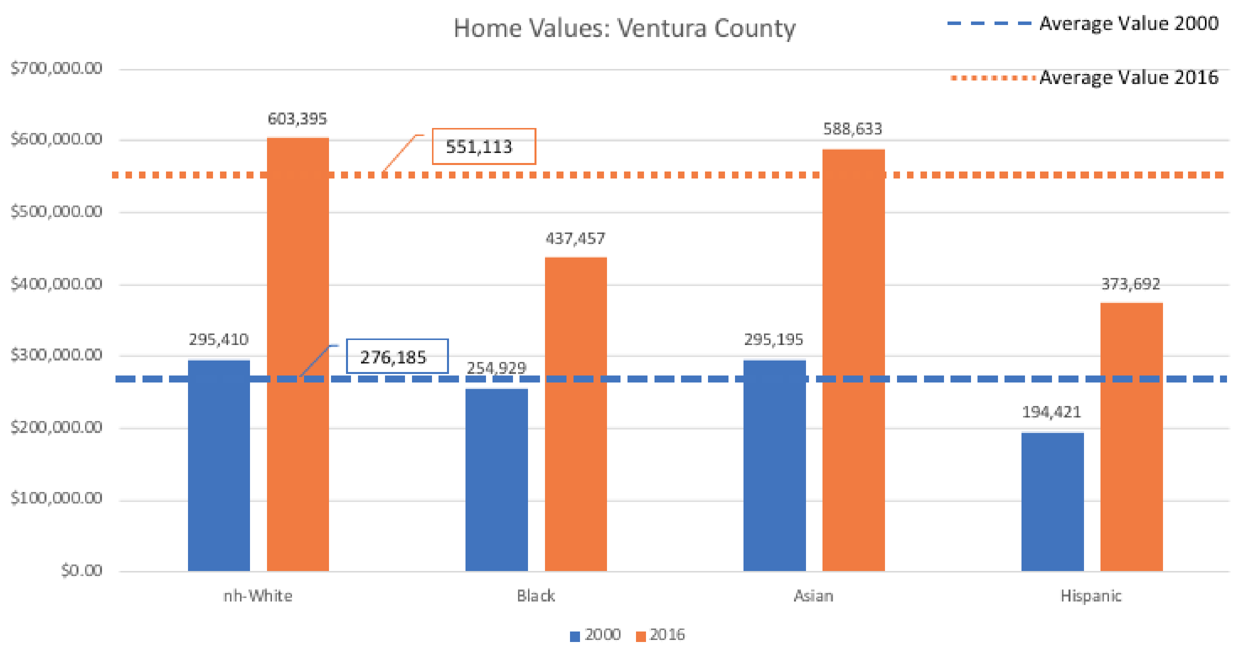


Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

Figure 6 (above) compares homeowner rates across racial-ethnic groups in 2000 and 2016 in Ventura County. Homeownership rates declined for all groups across the observation period, likely due to the economic recession and national housing crisis. Overall, Ventura County homeowner rates decreased from 67.6% in 2000 to 63.4% in 2016. White and black household experienced the largest declines in ownership rates. The homeowner rates for white households declined from 76% in 2000 to 70% in 2016 while black households exhibited a decline from 50.6% to 43.5% during the same period. Still, non-Hispanic white and Asian homeownership rates remain substantially higher than those for black and Latino households. Latino homeownership rates slightly decreased in Ventura County (52.3% in 2000 and 49.6% in 2016) 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 Ventura County from 2000 to 2016. The average home values for Ventura County have increased for all racial-ethnic groups across the observation period[1]. 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 show 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 ($603,395) and Asian ($588,633) households far exceed those of black ($437,457) and Latino ($373,692) 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

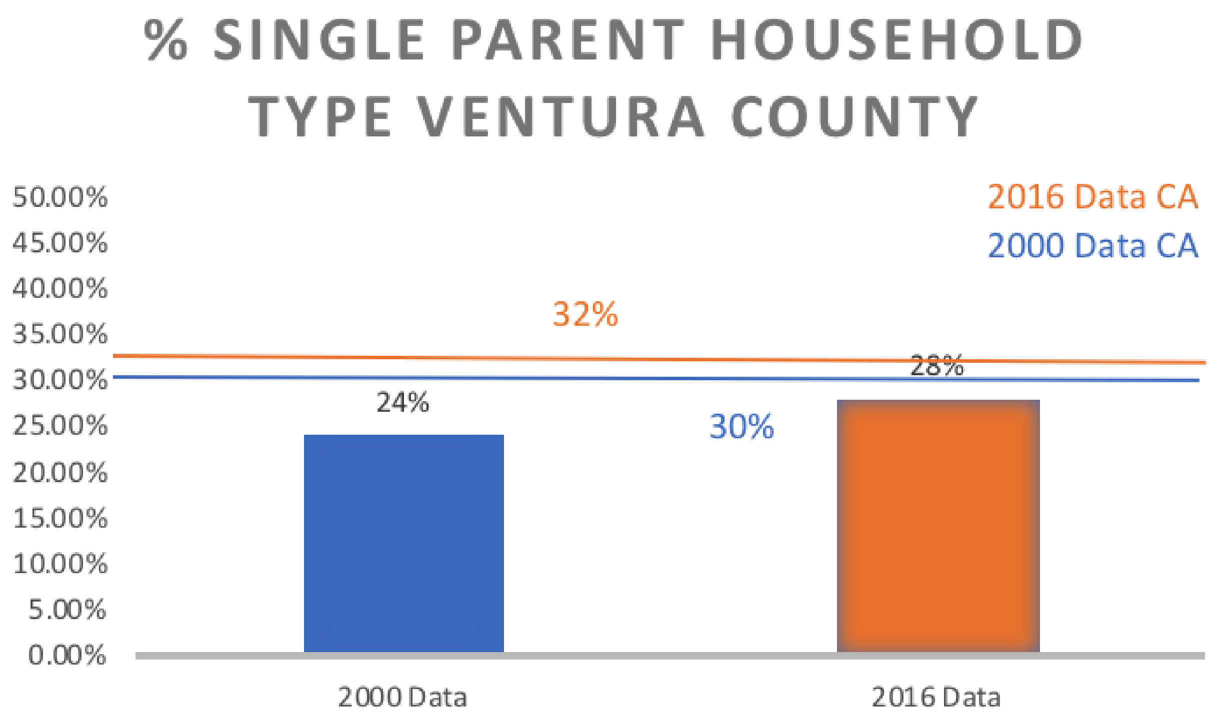


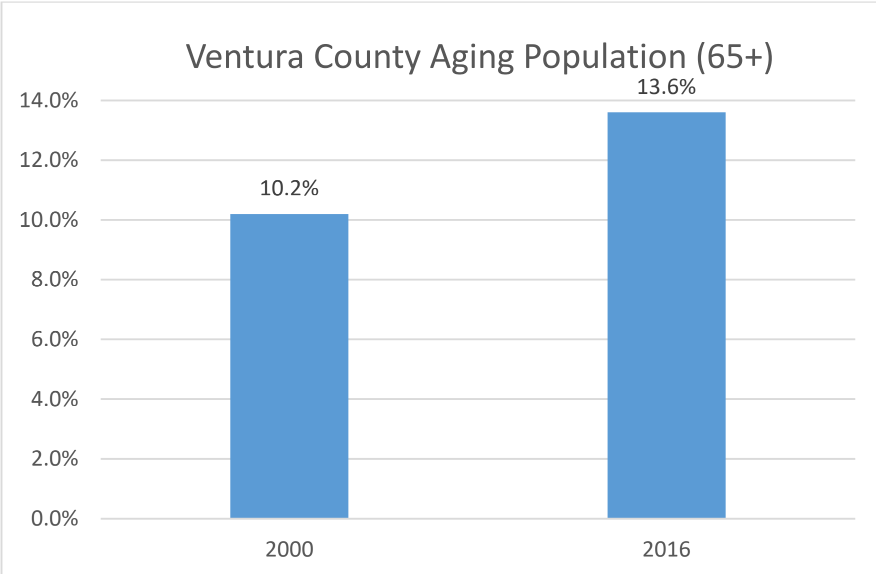
Figure 8 illustrates change in the percentage of families with children (defined as families with at least one child under the age of 18 present in the household) headed by a single parent from 2000 to 2016. The horizontal lines depict the statewide averages from 2000 (blue) and 2016 (orange). The bar chart demonstrates that Ventura County exhibits slightly below average rates of family households that are headed by a single parent. In 2000, 24% of households in Ventura County that had children under the age of 18 were led by a single parent. However, by 2016, 28% of family households in Ventura County were headed by a single parent.

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 Ventura County's Elderly Population, 2000 to 2016



The elderly population in Ventura County increased from 10.2% in 2000 to 13.6% 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 Ventura 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:

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

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

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

Figure 10. Changes in Dependency Ratios, 2000 to 2016

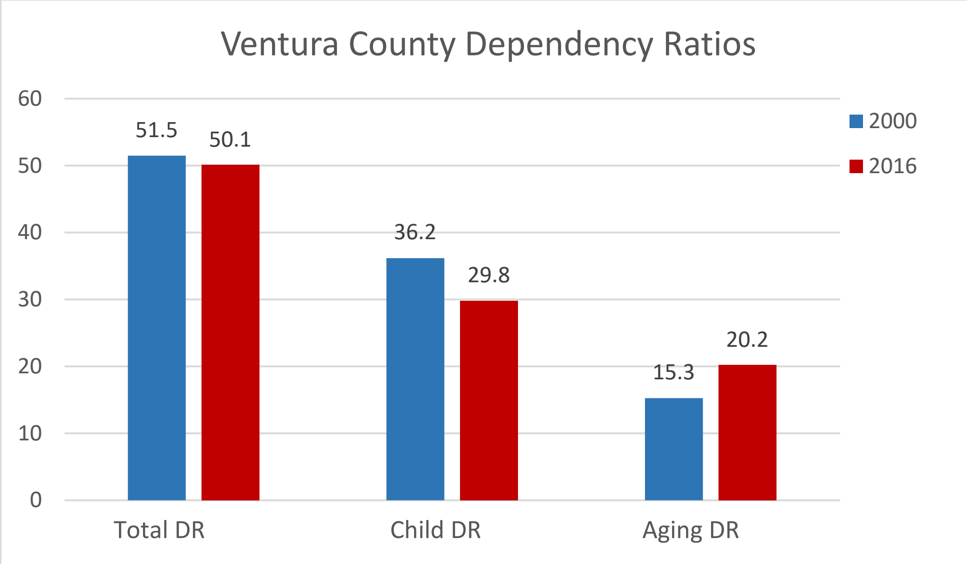
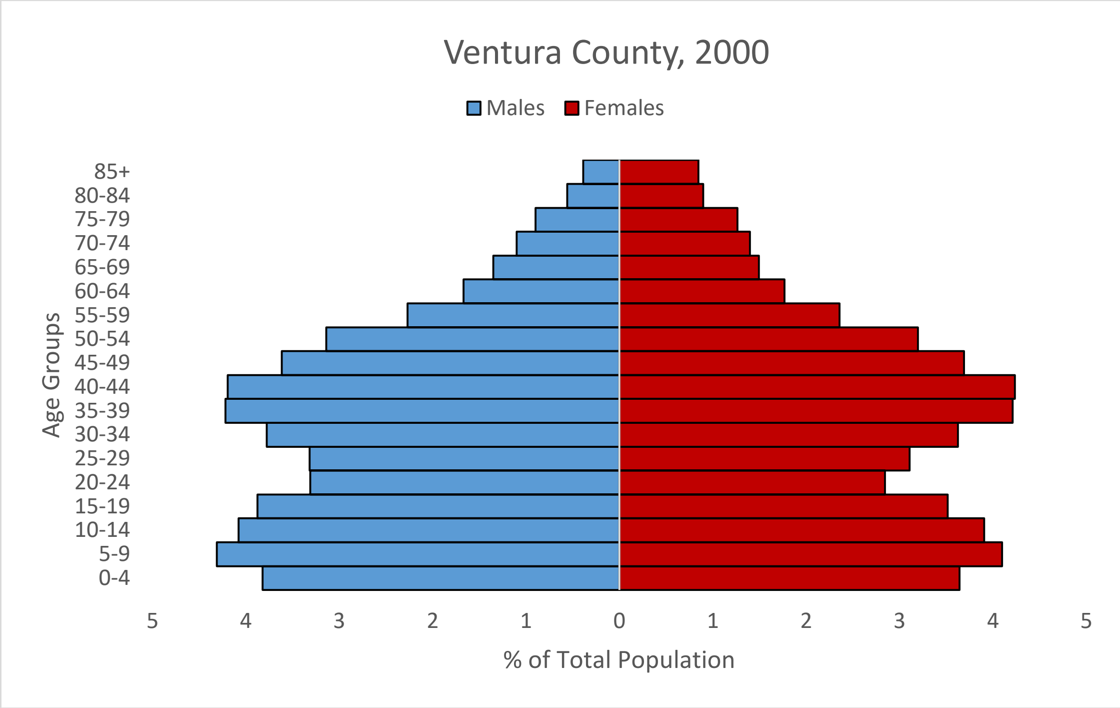


Figure 10 (above) displays the total, child, and aging dependency ratios for Ventura County in 2000 and 2016. Interestingly, the total dependency ratio (total non-working age to total working age) remained relatively stable (51.5 in 2000 and 50.1 in 2016) but this measure masks transitions taking place separately for the youth and elderly population. For example, the child dependency ratio (ages 0-14 to total working age population) 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). Conversely, the aging dependency ratio (elderly population to total working age population) 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 larger 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

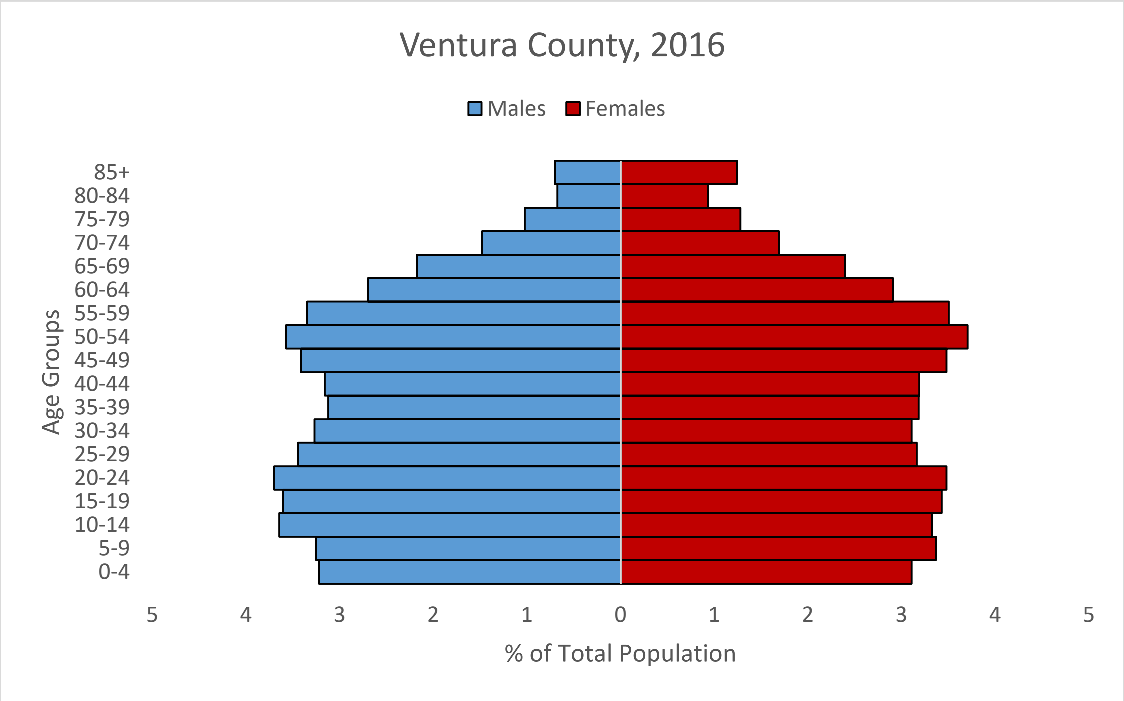
A population pyramid is a graph that shows the distribution of various age groups in the population. The shape of the pyramid on the graph represents whether the population is youthful (large base) or aging (declining base, wider bars towards the top). This is an important tool that examines current 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 Ventura 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



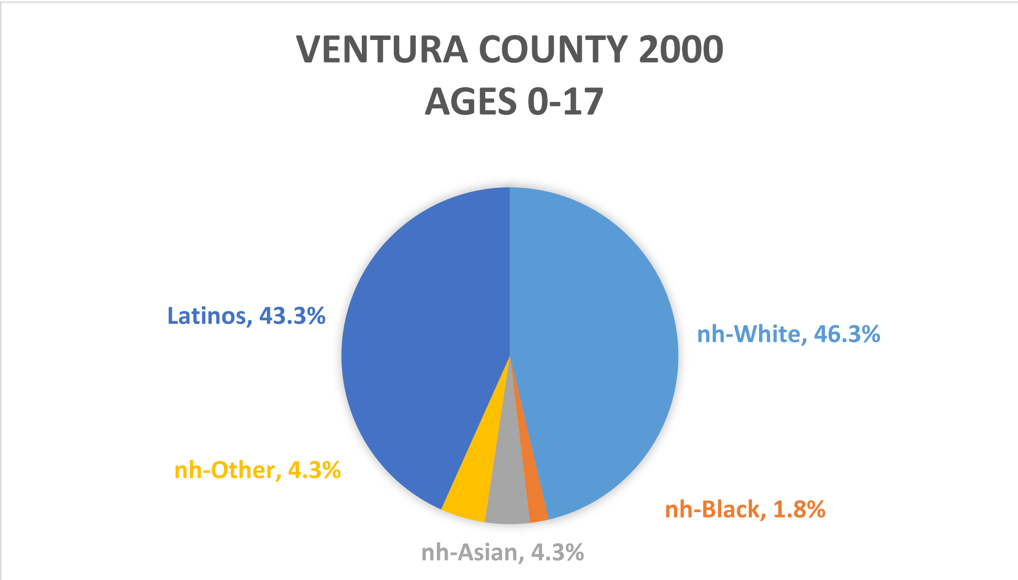
Data Source: 2012-2016 American Community Survey (5-year estimates)

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, Ventura 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

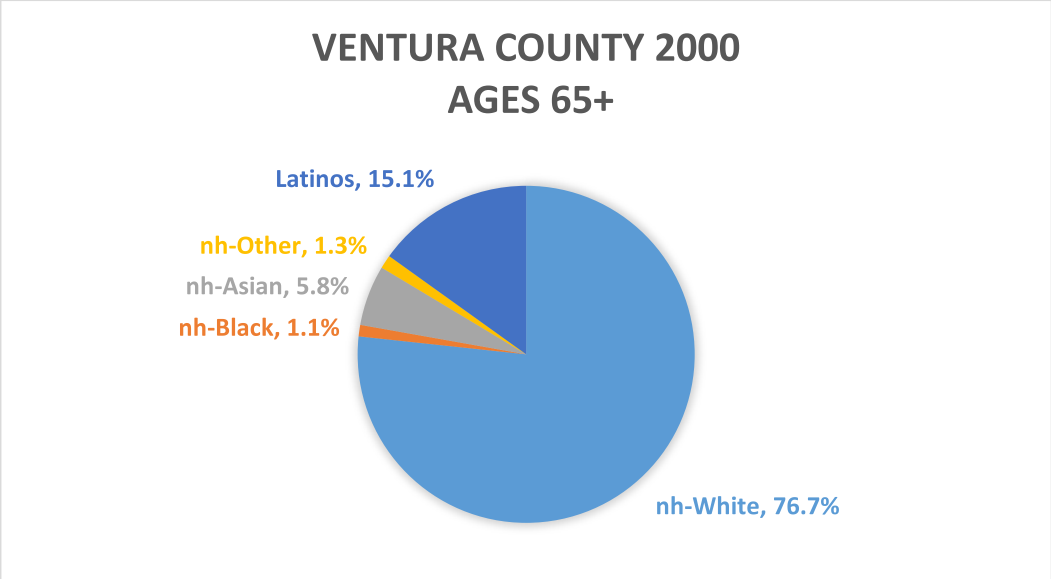
The demographic divide refers to the contrast of a diverse youth population (less than 18 years old) and a community's relatively white elderly population (ages 65+). The implication of this divide is that there may be few opportunities for people of a different race-ethnicity to interact, as they inhabit 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 Ventura County's Youth Population, 2000



Data Source: 2000 U.S. Census

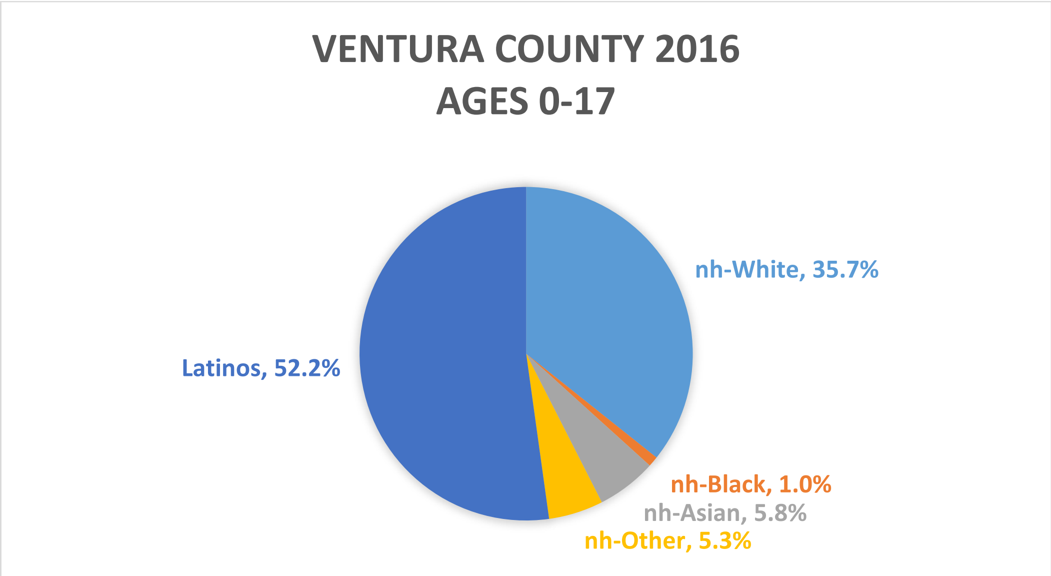
Figure 14. Racial-Ethnic Profile of Ventura County's Elderly Population, 2000



Data Source: 2000 U.S. Census

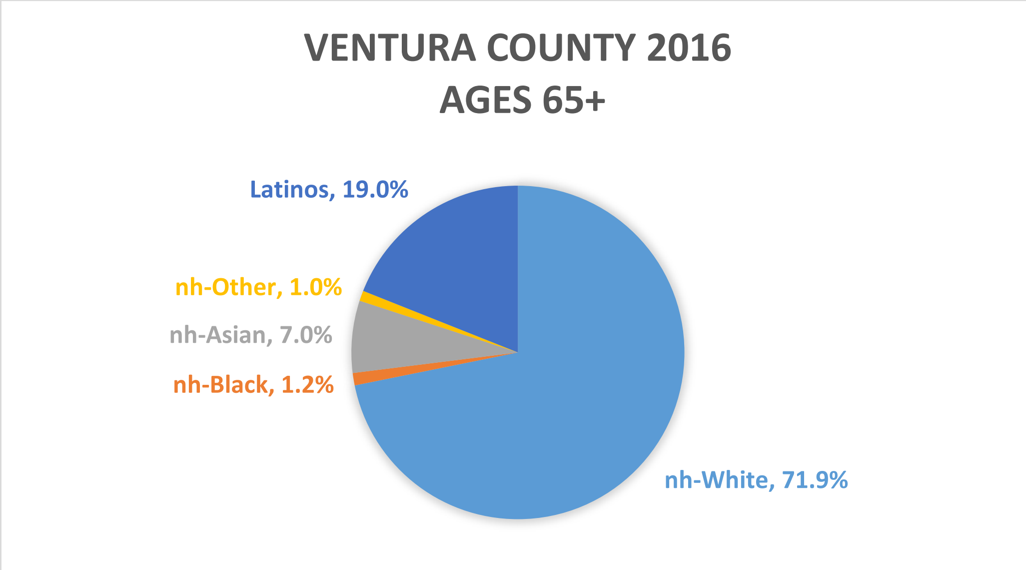
In 2000, Ventura County's youth (ages 0-17), population was just under 50% non-Hispanic white. The next largest group was Latino, comprising 43.3% of the county's youth population. Black, Asian, and "other" youth represented about 10% of the county's youth. However, the demographics were starkly different among Ventura County's elderly population in 2000. Over three-fourths (76.7%) of the elderly population was non-Hispanic white in 2000. Latinos were a distant second, representing just over 15% of the elderly population. The remaining groups represented well under 10% of the total elderly population in 2000.

Figure 15. Racial-Ethnic Profile of Ventura County's Youth Population, 2016



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

Figure 16. Racial-Ethnic Profile of Ventura County's Elderly Population, 2016



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

Figures 15 and 16 (above) replicate the previous analyses to examine how the demographic divide (between the county's youth and elderly populations) have changed over time. Compared to 2000, Latinos make up the majority (52.2%) of Ventura County's youth population in 2016. The share of non-Hispanic whites among the youth population decreased from 46% in 2000 to 35.7% in 2016. Among the county's elderly population, non-Hispanic whites remain the largest group (71.9%) but the share of Latinos increased from 15.1% in 2000 to nearly 20% in 2016.

Despite whites and Latinos representing the two largest groups in Ventura County, 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 Ventura 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).

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:

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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

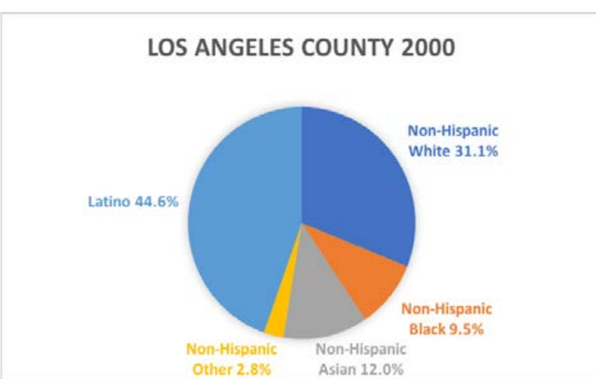


Figure 1.

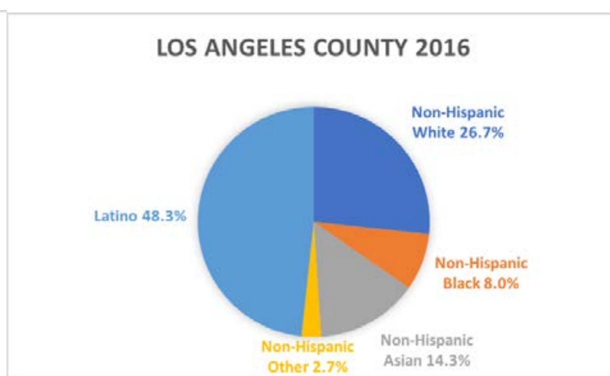


Figure 2.

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

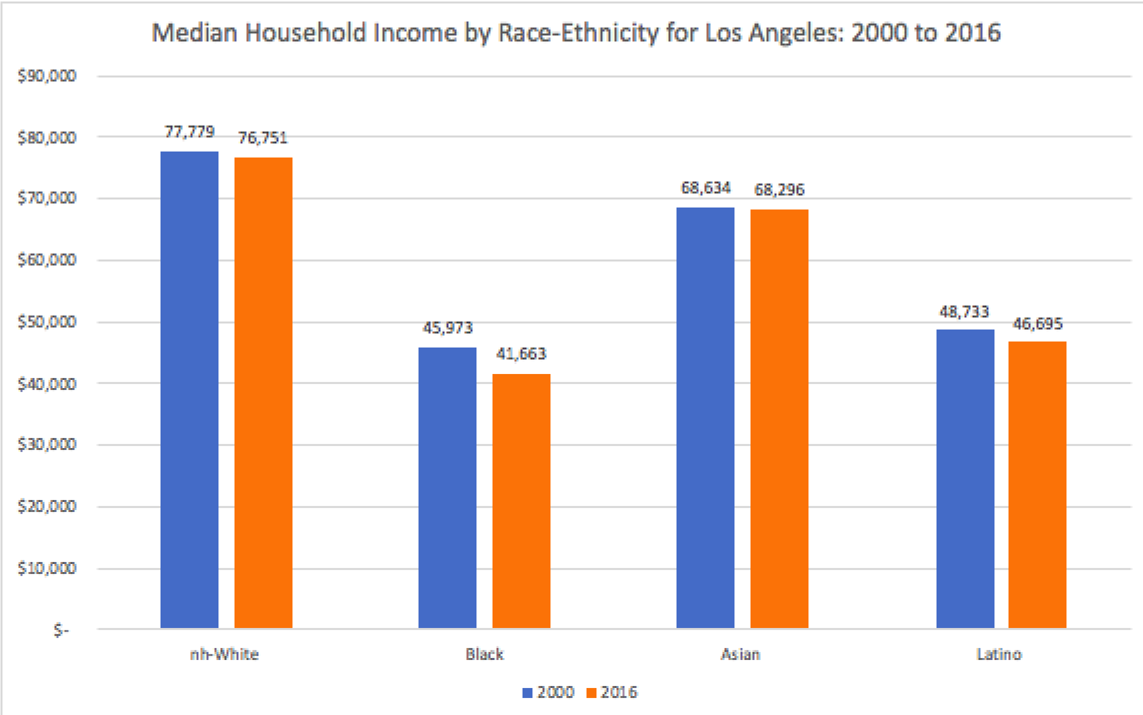
2016 Gini Coefficient for Los Angeles County – 0.50 (California = 0.49)

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).

Figure 3 (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

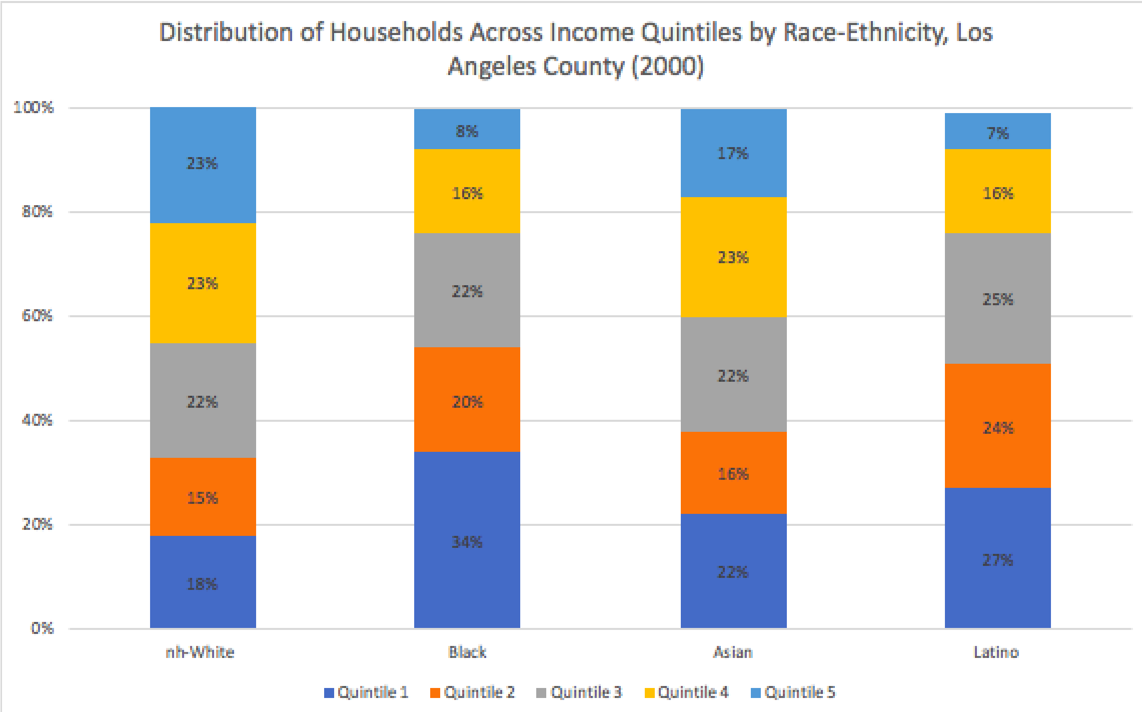
Income Quintiles 2000	**Income Quintiles 2016**
Quintile 1: $19,999 or less	**Quintile 1**: $24,999 or less
Quintile 2: $20,000 to $34,999	**Quintile 2**: $25,000 to $44,999
Quintile 3: $35,000 to $59,999	**Quintile 3**: $45,000 to $74,999
Quintile 4: $60,000 to $99,999	**Quintile 4**: $75,000 to $124,999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

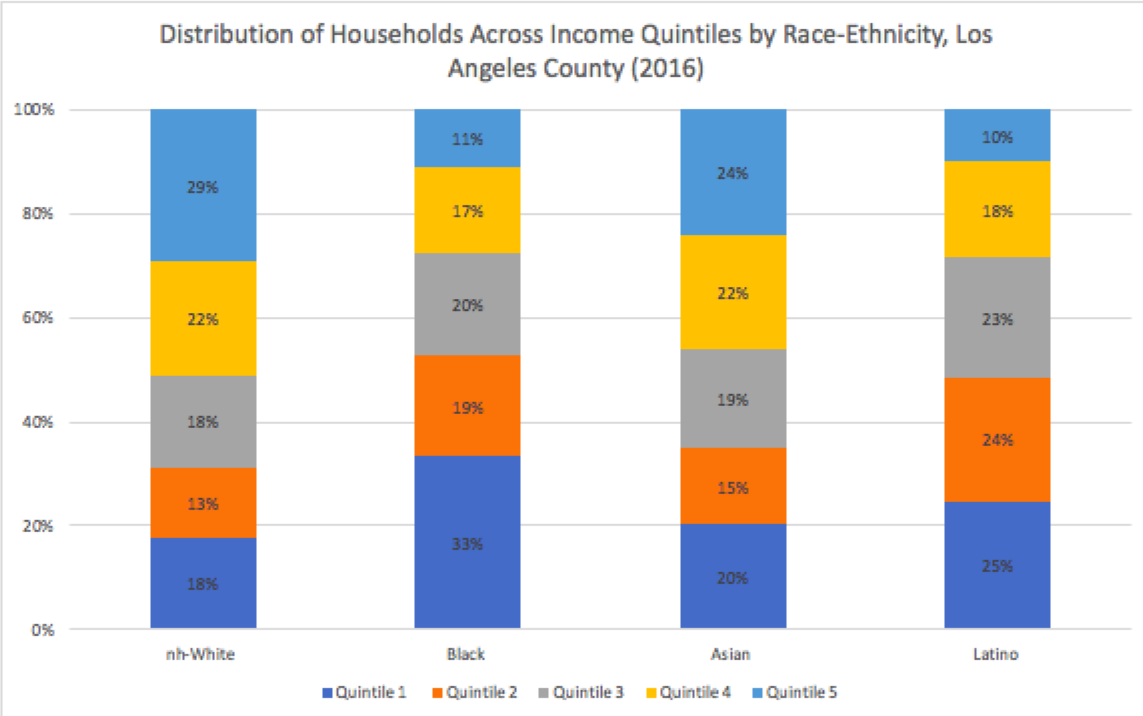


Data Source: County-level measures from 2000 U.S. Census.

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



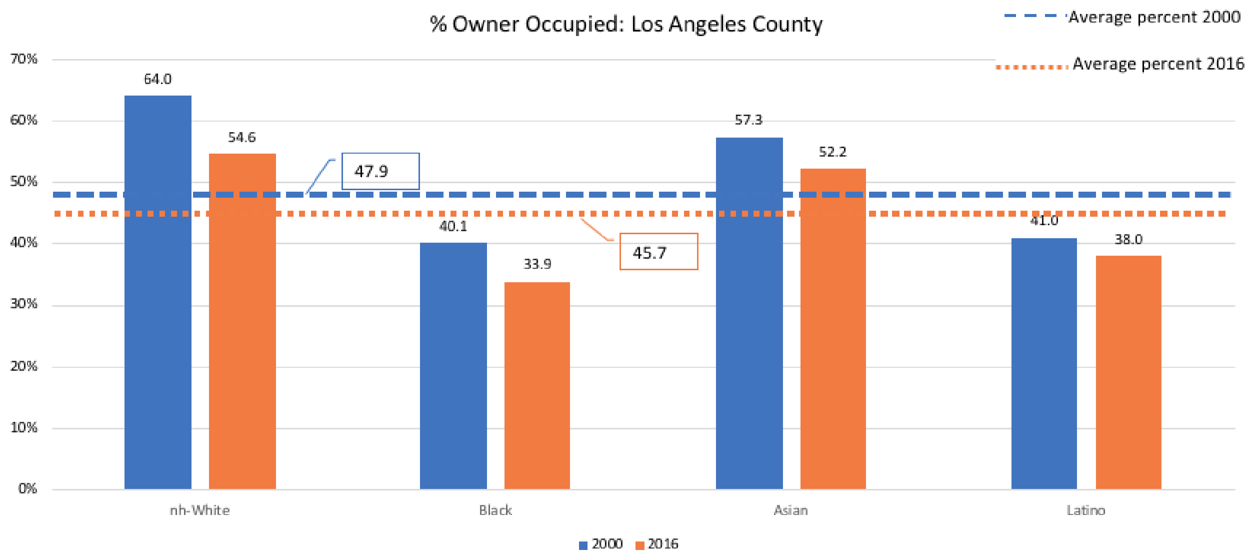
Data Source: County-level measures from the 2012-2016 American Community Survey (5-year estimates)

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

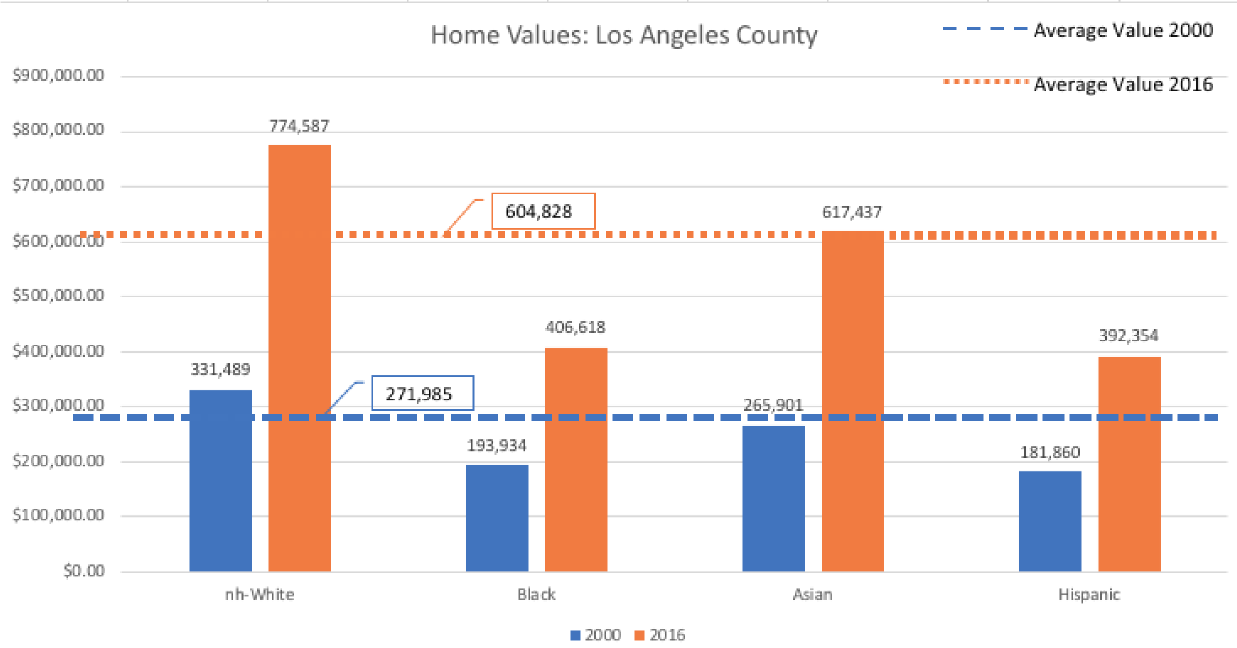


Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

Figure 6 (above) 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% in 2016) and remained below the overall county averages.

Home Values by Race-Ethnicity: 2000 to 2016

Figure 7. Racial-Ethnic Disparities in Home Values



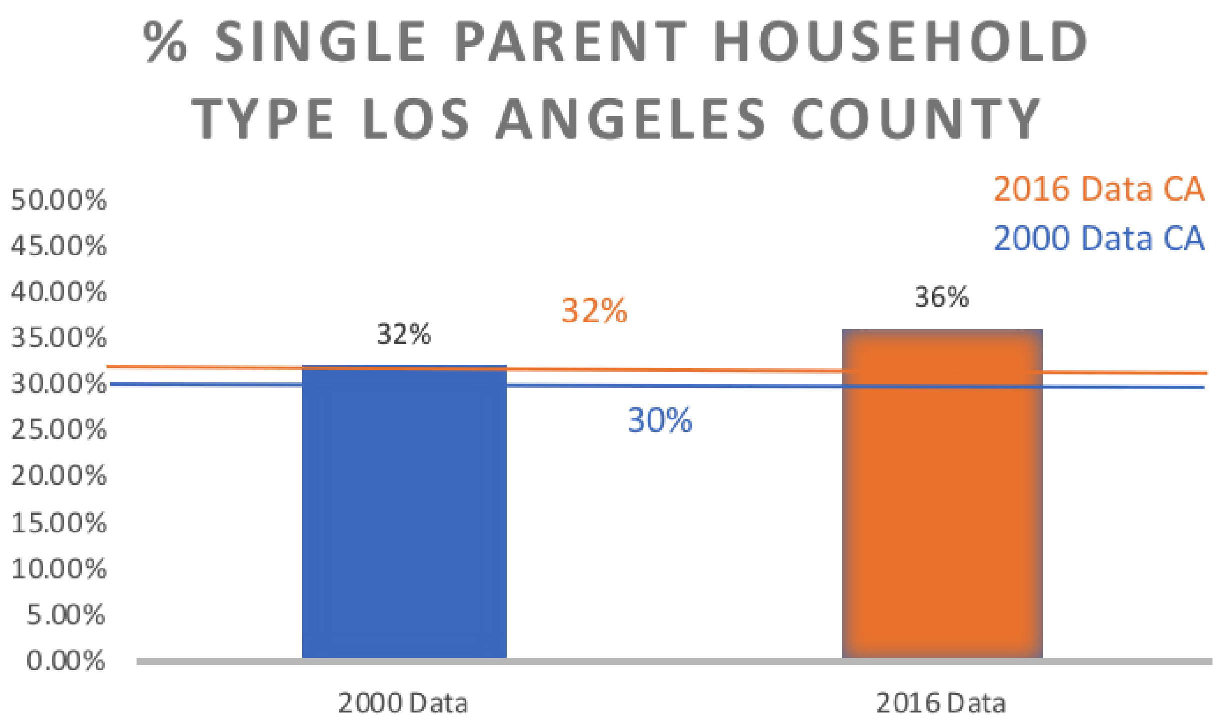
Data Sources: Individual-level data from the 2000 U.S. Census and 2012-2016 American Community Survey

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 period[1]. 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)

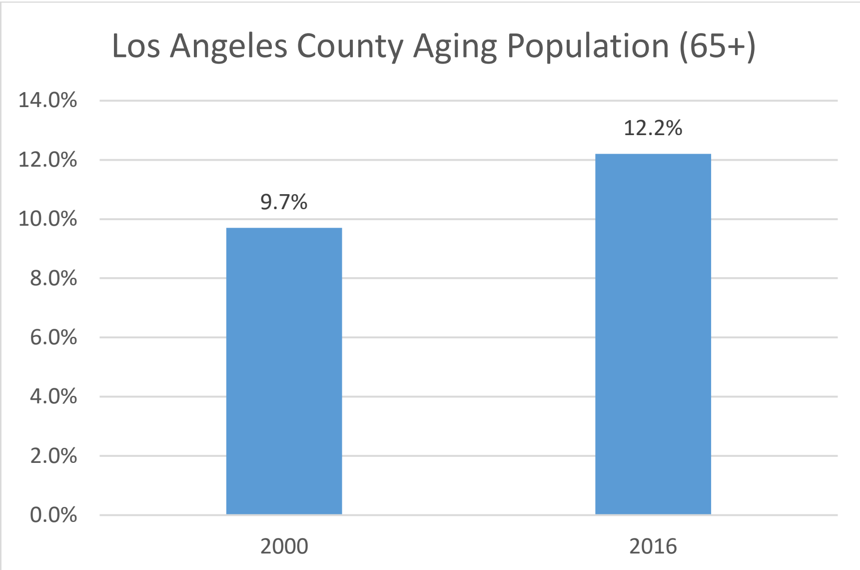
Figure 8 illustrates change in the percentage of families with children (defined as families with at least one child under the age of 18 present in the household) headed by a single parent from 2000 to 2016. The horizontal lines depict the statewide averages from 2000 (blue) and 2016 (orange). The bar 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

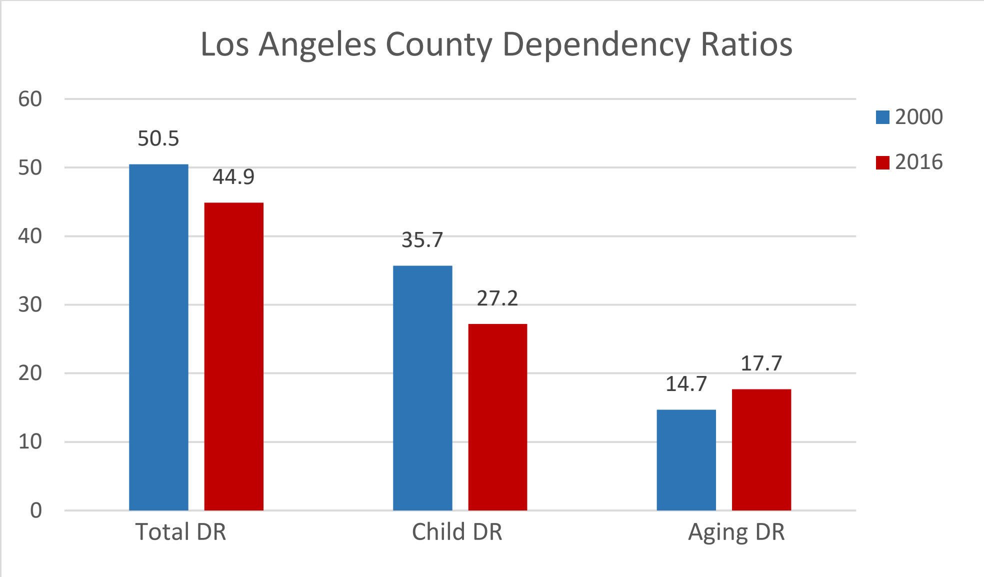
The total dependency ratio examines the share of those not in the labor force (the dependent ages are 0 to 14 years old and 65 years and older) to those typically in the labor force (ages 15 to 64). This measure indicates the amount of people who are of non-working ages compared to those of working age. 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:

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

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

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

Figure 10. Changes in Dependency Ratios, 2000 to 2016



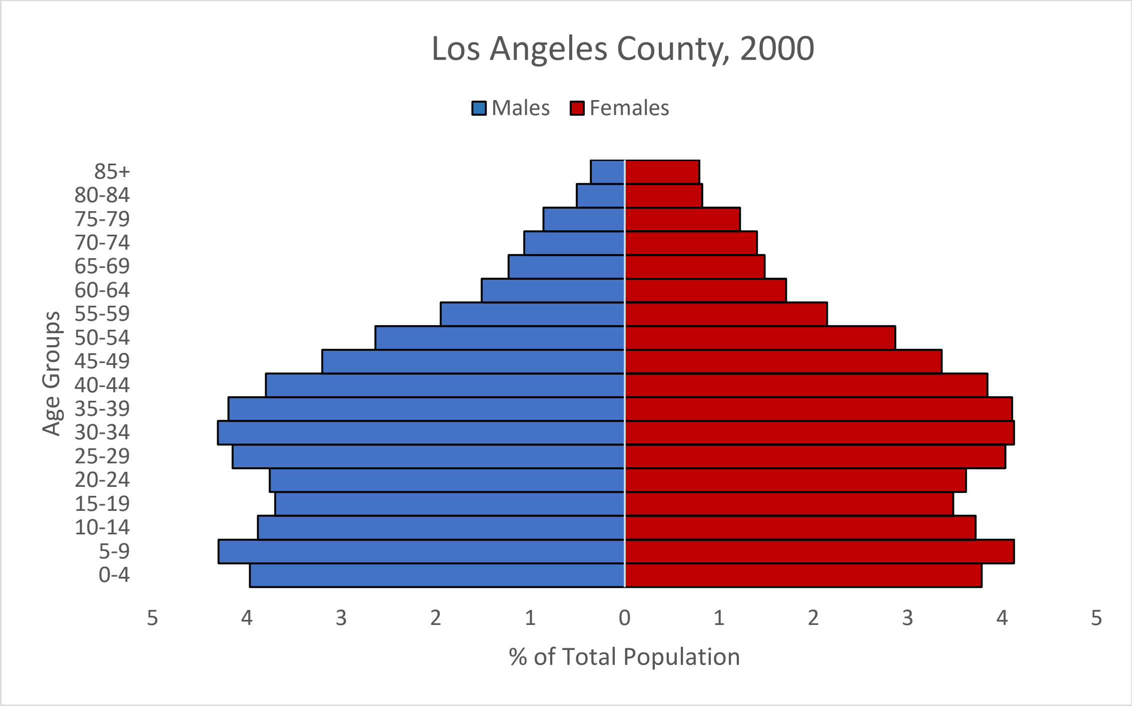
Data Sources: 2000 U.S. Census and 2012-2016 American Community Survey (5-year estimates)

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 larger 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

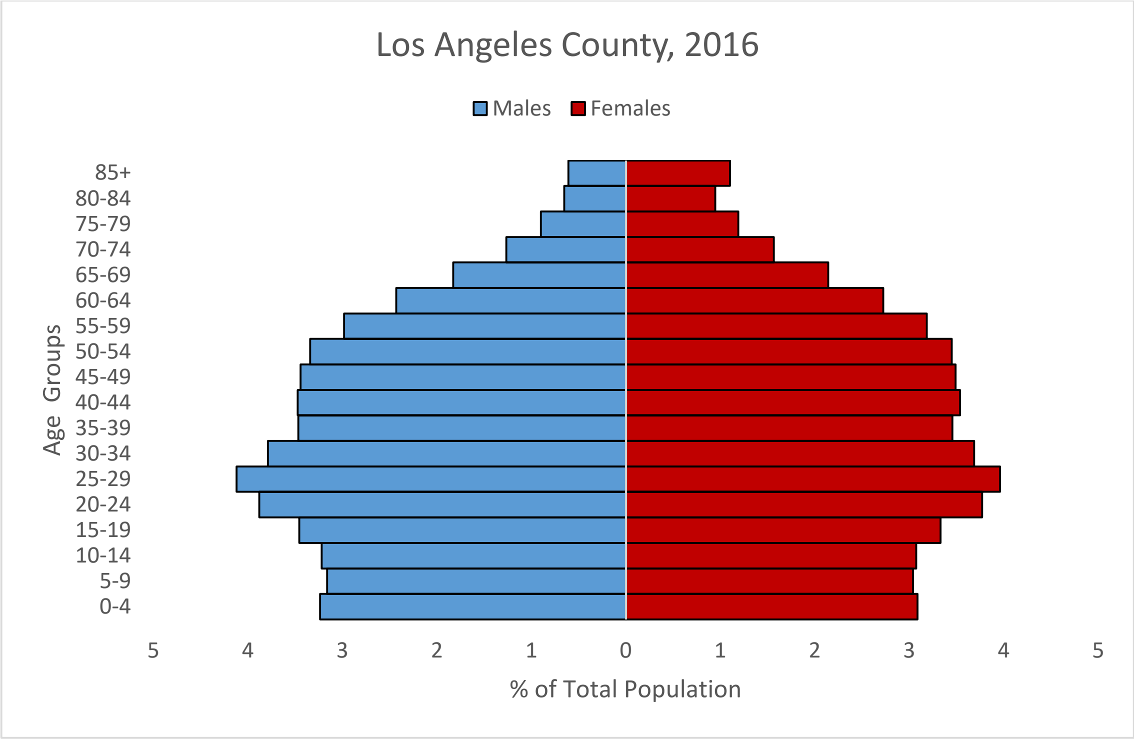
A population pyramid is a graph that shows the distribution of various age groups in the population. The shape of the pyramid on the graph represents whether the population is youthful (large base) or aging (declining base, wider bars towards the top). This is an important tool that examines current 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



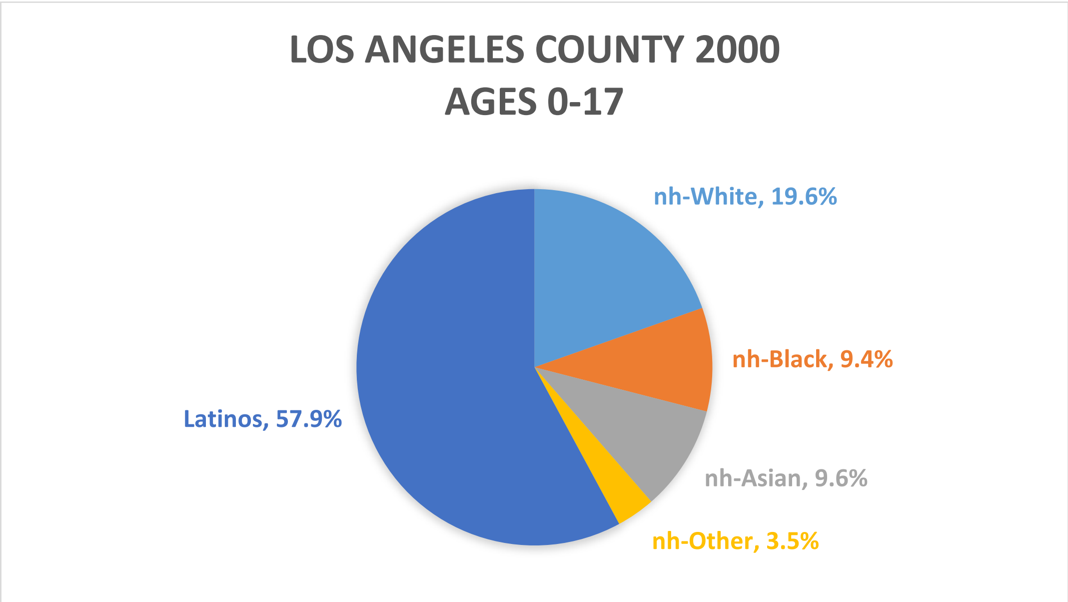
Data Source: 2012-2016 American Community Survey (5-year estimates)

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

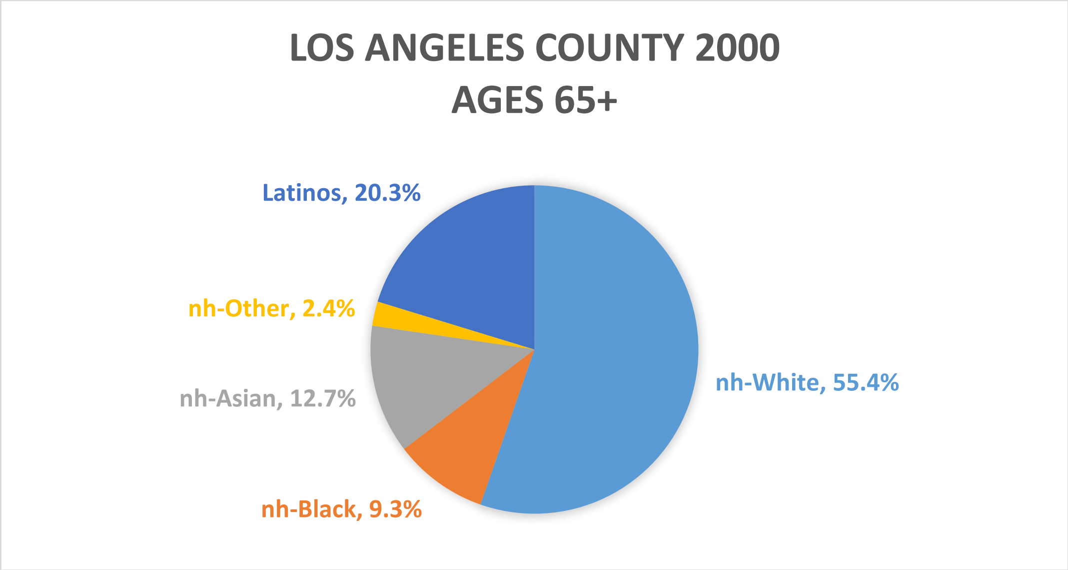
The demographic divide refers to the contrast of a diverse youth population (less than 18 years old) and a community's relatively white elderly population (ages 65+). The implication of this divide is that there may be few opportunities for people of a different race-ethnicity to interact, as they inhabit 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



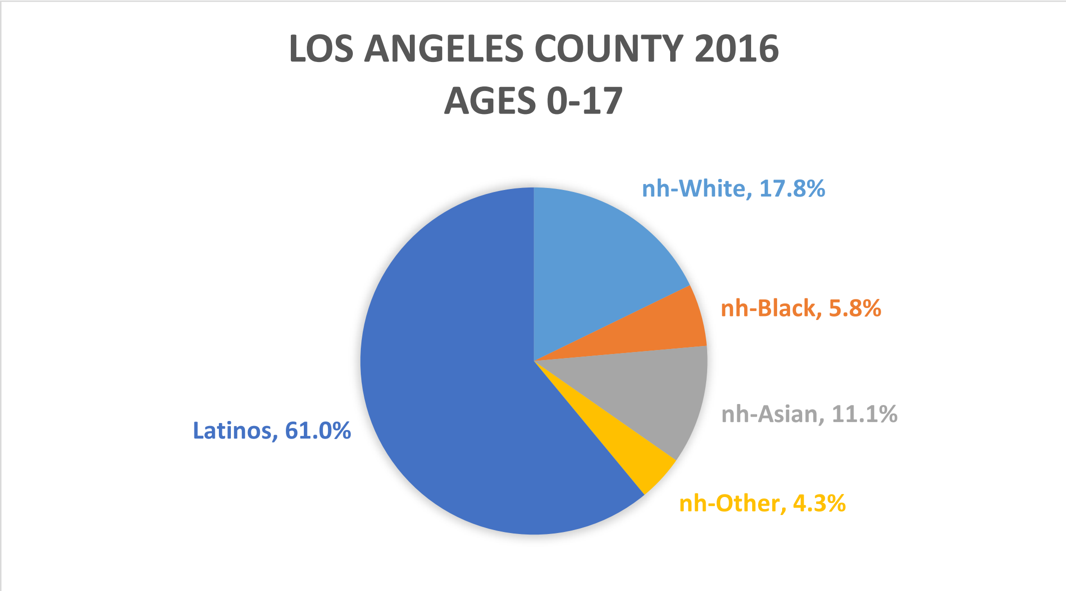
Data Source: 2000 U.S. Census

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



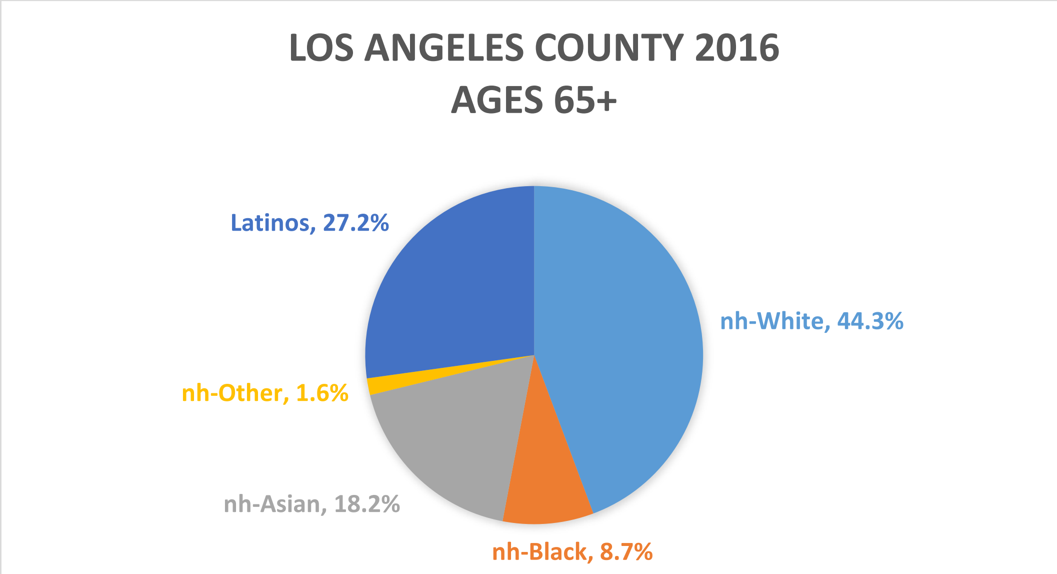
In 2000, Los Angeles County's youth (ages 0-17), population was majority Latino (57.9%). The next largest group was non-Hispanic white, comprising just under 20% of the county's youth population. Black and Asian youth each represented about 10%. When examining the county's elderly population in 2000, 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



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

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).

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

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Overall Racial-Ethnic Demographics: 2000 to 2016

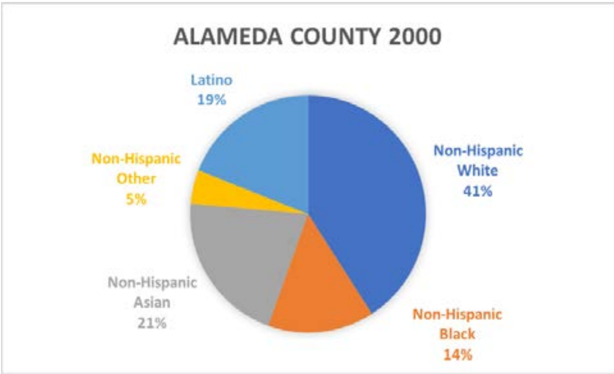


Figure 1.

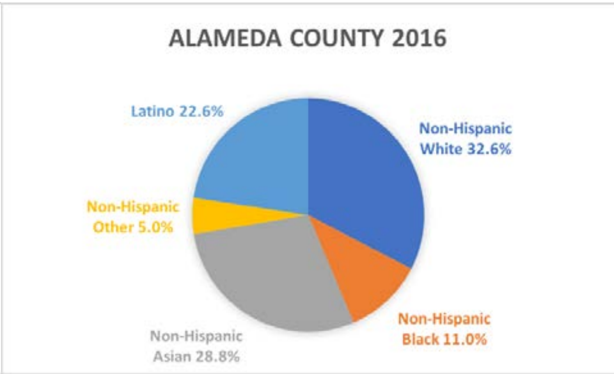


Figure 2.

Overall, Alameda County is one of California's most racially and ethnically diverse counties. Figures 1 and 2 demonstrate how the racial demographics of Alameda County have changed from 2000 to 2016. In 2000 (Figure 1), the county was 19% Latino and experienced a marginal increase to 23% by 2016. Conversely, the non-Hispanic White population declined from 41% in 2000 to 33% in 2016. The county's non-Hispanic Asian population increased by 7% (from 21% to 28.8%) and are now only slightly behind whites as the county's largest racial-ethnic group. Alameda County's non-Hispanic Black population decreased from 14% in 2000 to 11% in 2016. In both observation years, not one racial-ethnic group made comprised a majority of the county's population.

Neighborhood Racial-Ethnic Typologies: 2000 to 2016

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

Neighborhood Types	**2000**	**2016**
Homogenous (> 80% of one group)		
White	15 (4.2%)	3 (0.8%)
Latino	1 (0.3%)	0 (0.0%)
Asian	1 (0.3%)	5 (1.4%)
Black	1 (0.3%)	0 (0.0%)
No Majority (all groups < 50%)	156 (43.2%)	178 (49.3%)
All Other Tracts	187 (51.8%)	175 (48.5%)
Total # of Tracts	361	361

Source: 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. In total, Alameda County has 361 neighborhoods (census tracts). In 2000, it had 15 non-Hispanic white homogenous neighborhoods but by 2016 that number had decreased to three white homogenous neighborhoods. In 2000, there was only one Latino homogenous neighborhood and by 2016 there were none. Non-Hispanic Asian homogenous neighborhood increased from one in 2000 to five neighborhoods in 2016. Similar to the case of Latinos, there was only one non-Hispanic Black homogenous neighborhood and by 2016 the number decreased to 0. Lastly, in 2000, there were 156 census tracts (43.2%) that had no racial-ethnic majority. By 2016, the number of "no majority" neighborhoods in Alameda county increased to 178 (49.3% of all tracts).

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.

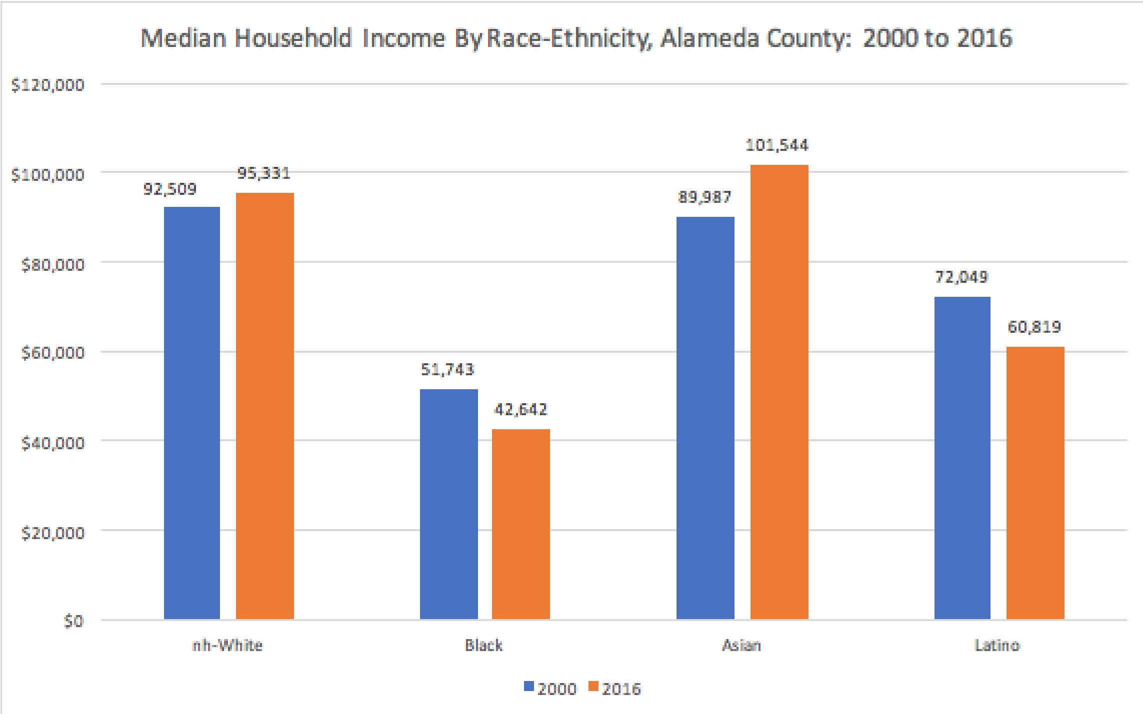
Table 2. Overall Income Inequality

2016 Gini Coefficient for Alameda County = 0.47 (California = 0.49)

The 2016 Gini coefficient for Alameda County is 0.47, which is lower than the state's Gini coefficient of 0.49. These results suggest that income inequality in Alameda County is slightly *lower* than California as a whole.

Median Household Income by Race-Ethnicity: 2000 to 2016

Figure 3. Racial-Ethnic Disparities in Household Income



Data Source: State-level measures from 2012-2016 American Community Survey (5-year estimates), County-level measures from Census 2000 (adjusted for inflation to 2016 dollars)

The chart above illustrates the unequal distribution of median household income by race-ethnicity in Alameda County in 2000 (blue) and 2016 (orange). Our findings imply that in Alameda County, Blacks and Latinos exhibited lower median household incomes than their White and Asian counterparts did for both years (2000 and 2016). Still, Latinos have higher median household incomes than Blacks in both observation periods. Interestingly, in 2016 Asians held the highest median household income, reaching over $100,000, while every other group for 2016 and 2000 remained under $100,000. In fact, Asian households in 2016 ($101,544) made $80,000 more than Black households ($42,642). The data clearly depict how income varies across race-ethnicity in Alameda 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.

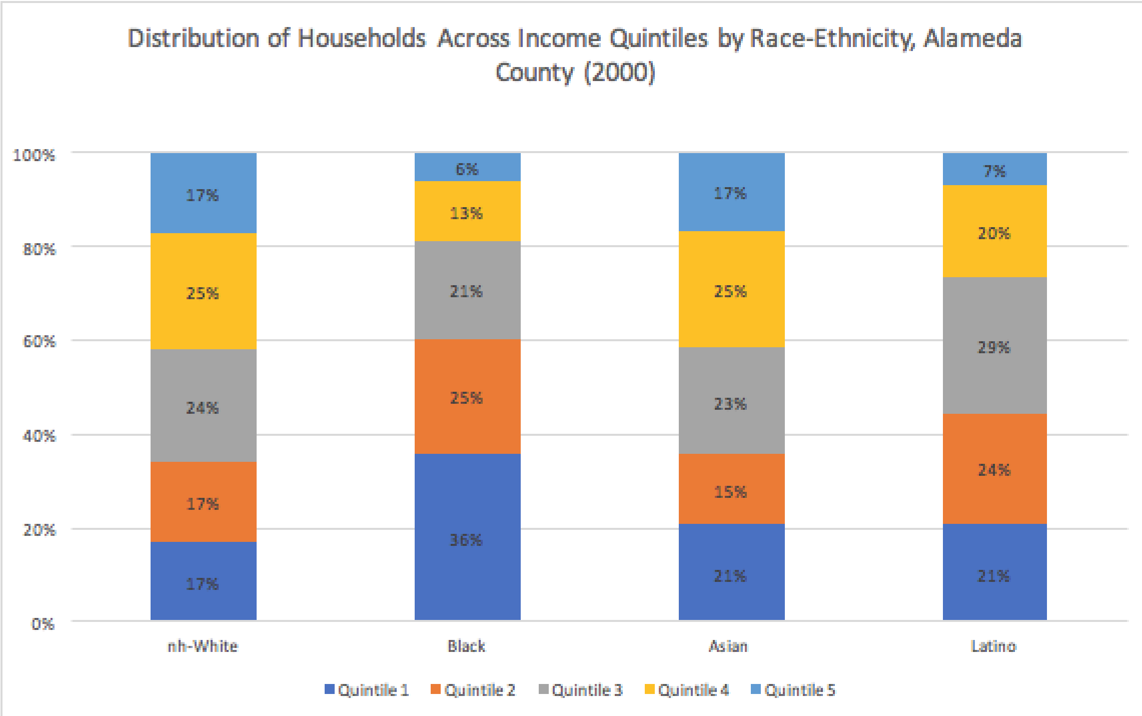
Table 3. Breakdown of Income Quintiles for Alameda County, 2000 to 2016

Income Quintiles 2000	**Income Quintiles 2016**
Quintile 1: $24,999 or less	**Quintile 1**: $34,999 or less
Quintile 2: $25,000 to $44,999	**Quintile 2**: $35,000 to $74,999
Quintile 3: $45,000 to $74,999	**Quintile 3**: $75,000 to $124,999
Quintile 4: $75,000 to $124,999	**Quintile 4**: $125,000 to $199,999
Quintile 5: $125,000 or more	**Quintile 5**: $200,000 or more

Description of Results for Alameda County (2000):

The chart below demonstrates Alameda 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. The prevalent trend shows that non-Hispanic black and Latino households are overrepresented in *lower* income groups (quintiles 1 and 2), relative to the county average, while non-Hispanic whites and non-Hispanic Asians are overrepresented in *higher* income groups (quintiles 4 and 5). For instance, over one-third of Black households (36%) fall into Quintile 1, representing households who make less than $25,000. On the other hand, 42% of non-Hispanic white and Asian households fall into either Quintiles 4 or Quintile 5 (households making $75,000 or more).

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

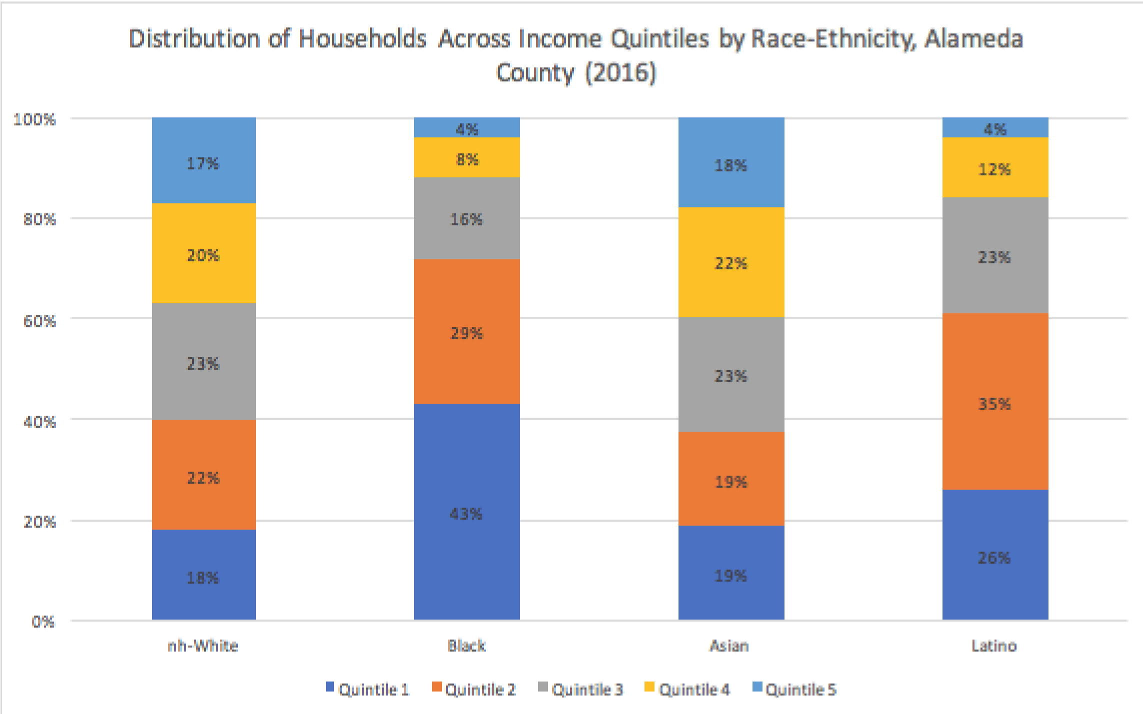


Data Source: U.S. Census 2000

Description of Results for Alameda County (2016):

Figure 5 shows the dispersion of Alameda County's racial-ethnic groups across income quintiles in 2016. The overall pattern from 2000 holds true, namely that Latino and black households are overrepresented in lower income quintiles (1 and 2). However, by 2016, non-Hispanic white and Asian households became more equally distributed across income quintiles. Among these two latter groups, they are sorted evenly (around 20%) for each income quintile compared to Latino and black households who are concentrated in lower income quintiles. In fact, the trend analysis between 2000 and 2016 illustrates continual declines in the proportions of Latino and black households who are located in the upper income quintiles. Only 12% of black households and 16% of Latino ones are in income quintiles 4 or 5 (more than $125,000). It is important to look at a county's income over time and compare them because we can see the changes in income inequality over the course of time. We can see that from the years 2000 and 2016 the distribution of income has shifted, and certain groups have jumped quintiles.

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



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

Section 3 – Housing Inequality

Overview

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 demonstrates 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 Alameda County, 2000 to 2016

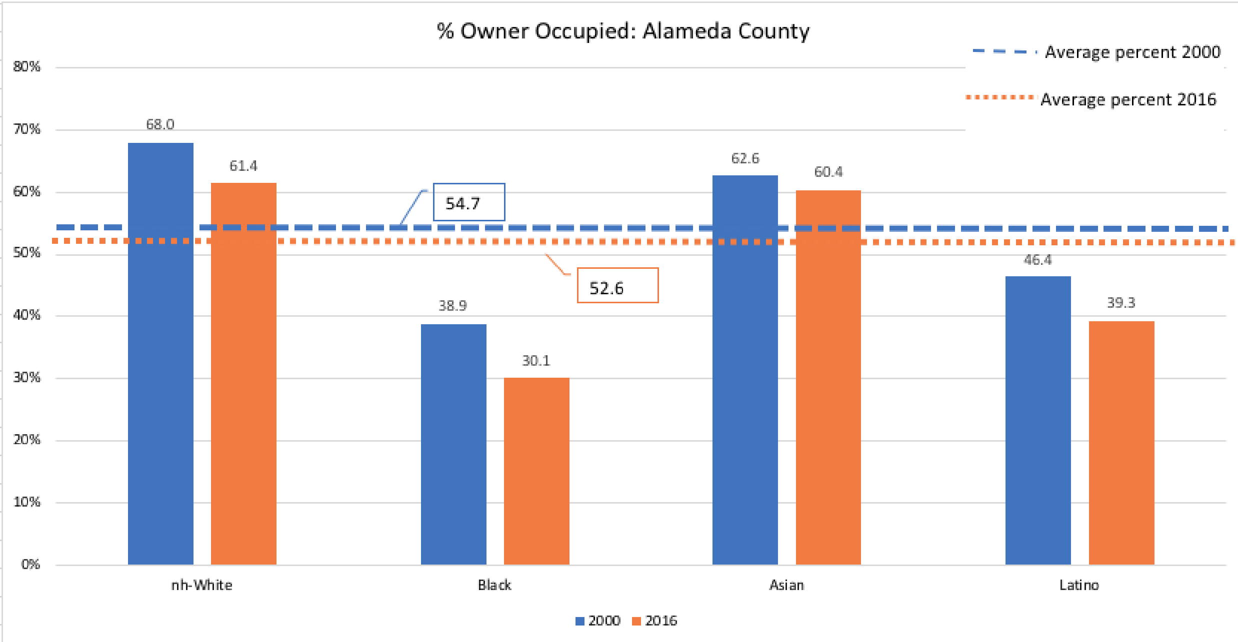


Figure 6 compares homeowner rates across racial-ethnic 2000 and 2016 in Alameda County. Across the observation period, non-Hispanic white and Asian homeownership rates are higher than those for black and Latino households. Less than half of black and Latino households are homeowners in Alameda County. The overall homeowner rates for Alameda County decreased from 54.7% in 2000 to 52.6% in 2016. This trend was present for each racial-ethnic group. For instance, Blacks had the lowest homeowner rates in 2000 (38.9%) but experience nearly a 10% drop to 30.1% in 2016.

Home Values by Race-Ethnicity, 2000 to 2016

Figure 7. Racial-Ethnic Disparities in Home Values

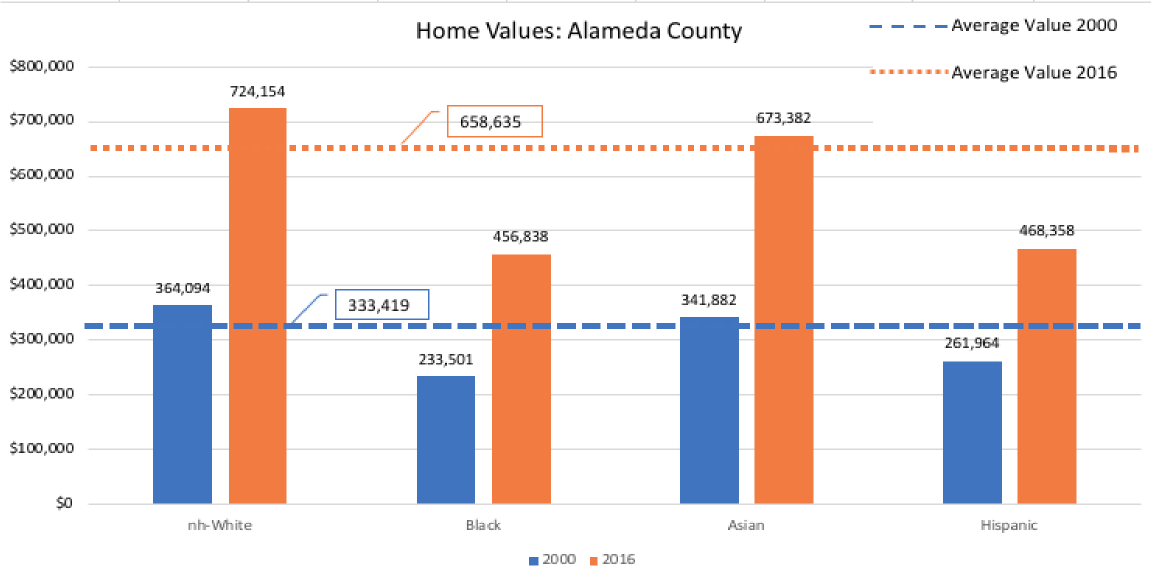


Figure 7 compares the average home values by race in Alameda County from 2000 to 2016. The average home values for Alameda County have increased for all racial-ethnic groups across the observation period[1]. The county's overall home value nearly doubled from $333,419 in 2000 to $658,635 in 2016. Still, there are notable racial-ethnic disparities in home values. In 2016, the home values for non-Hispanic white ($724,154) and Asian households ($673,382) far surpassed home values for black ($456,838) and Hispanic ($468,258) households. The increase in home values could be a testament to the increased property costs in California, and especially in the Bay Area. Alameda, San Francisco, and San Mateo counties have experienced substantial population growth thus increasing the demand for housing.

[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

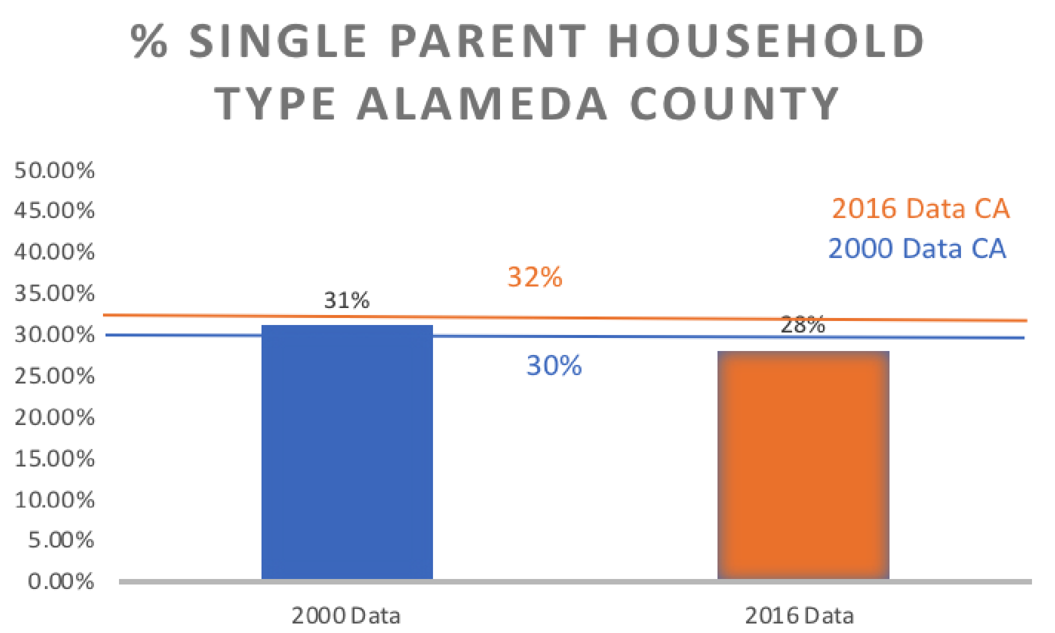


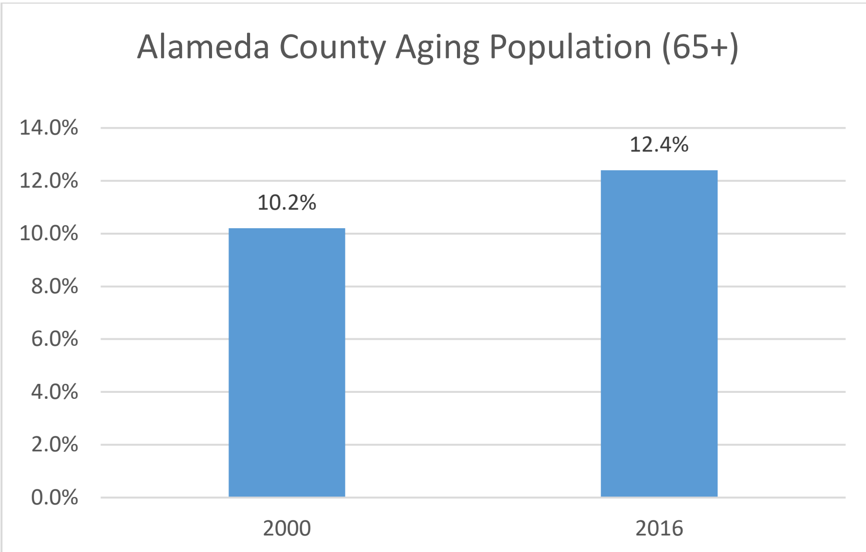
Figure 8 illustrates change in the percentage of families with children (defined as families with at least one child under the age of 18 present in the household) headed by a single parent from 2000 to 2016. The percentage of families that are headed by a single parent in Alameda County marginally declined from 31% in 2000 to 28% in 2016. This was in contrast to the statewide averages where the percentage of single-headed families increased from 30% in 2000 to 32% in 2016.

Section 4 – Age Structure

By looking at age structure, we can strengthen 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 Alameda County's Elderly Population, 2000 to 2016



Alameda County's elderly population increased across the observation period from 10.2% in 2000 to 12.4% 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 Alameda County's aging population.

Trends in Age Structure: Dependency Ratios, 2000 to 2016

The dependency ratio is an age population ratio of those not in the labor force (the dependent ages are 0 to 14 years old and 65 years and older) and those typically in the labor force (ages 15 to 64). The ratio can 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 rations 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 are listed below:

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

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

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

Figure 10. Changes in Dependency Ratios, 2000 to 2016

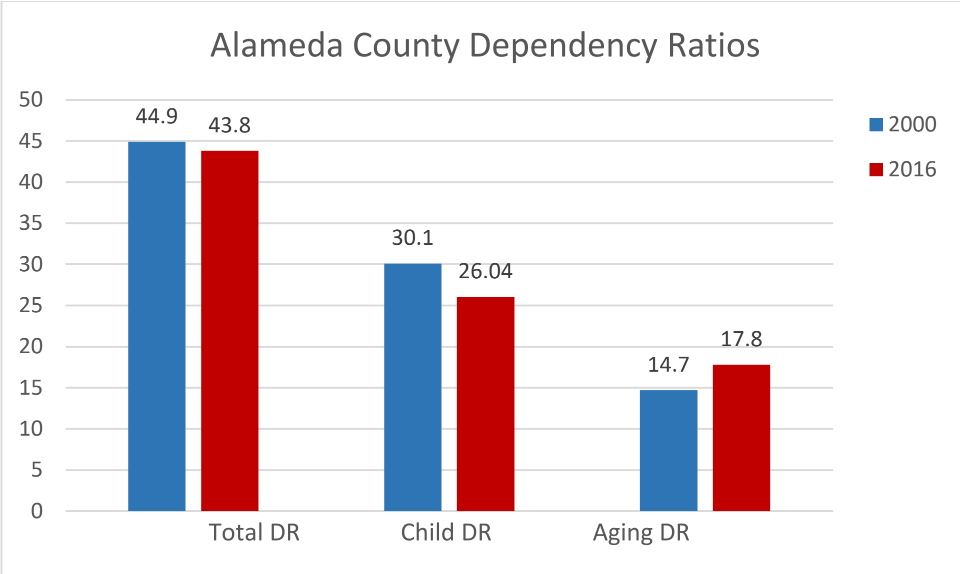


Figure 10 displays the total, child, and aging dependency ratios for Alameda County in 2000 and 2016. We find that the dependency ratio for the total and child dependency ratio have decreased over the observation period. The total dependency ratio (non-working age to working age) dropped slightly from 44.9 in 2000 to 43.8 in 2016 while the child dependency ration (ages 0-14 to working age) declined from 30.1 to 26.0 during the same time 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 17.8 in 2016. By 2016, for every 100 people in the working age group, there were 17.8 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 Alameda County's changing age structure.

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

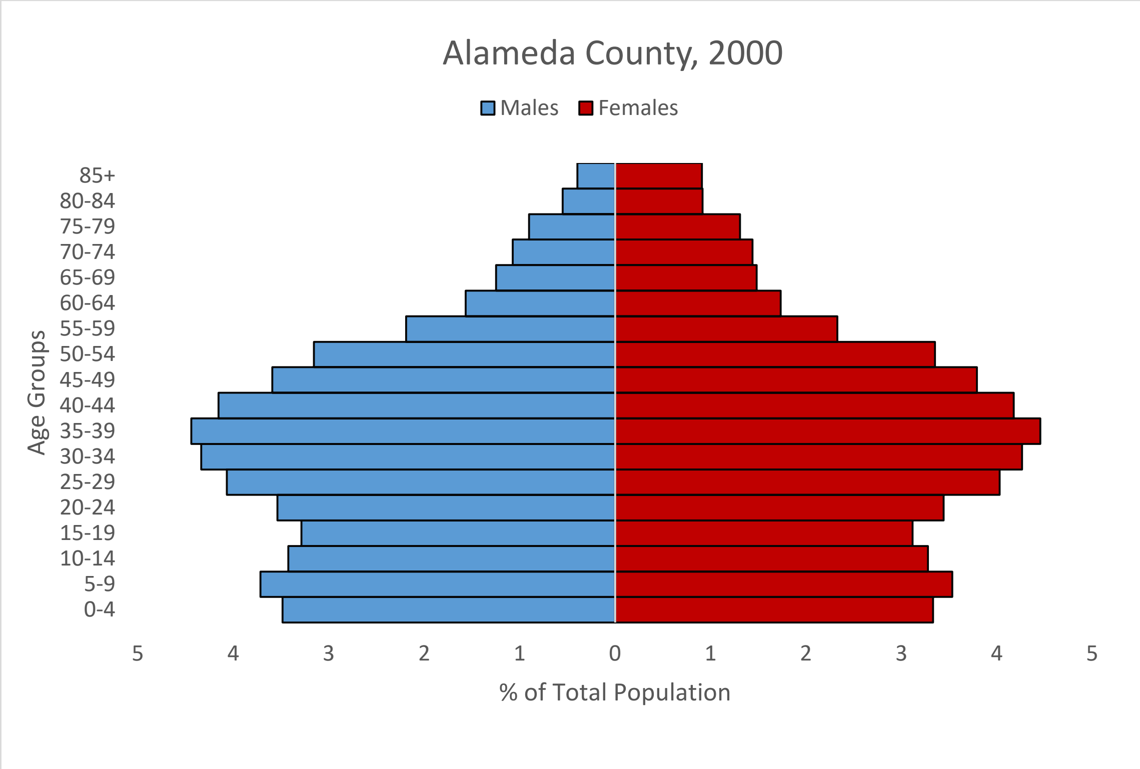
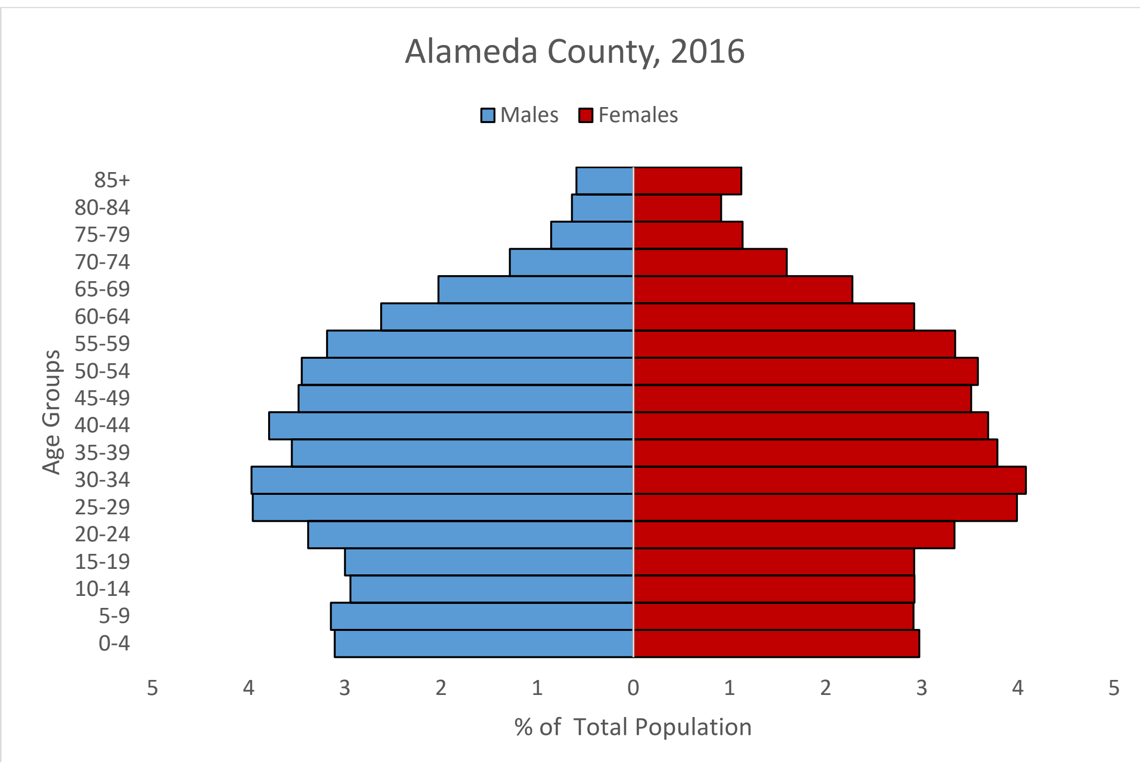


Figure 12: Population Pyramid (Age Distribution by Sex), 2016

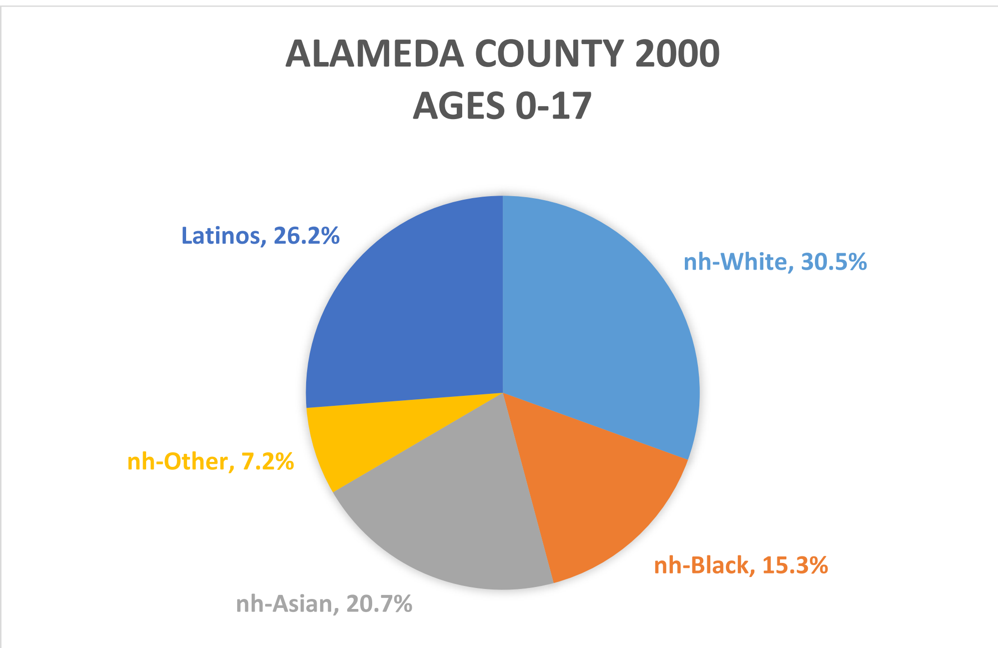


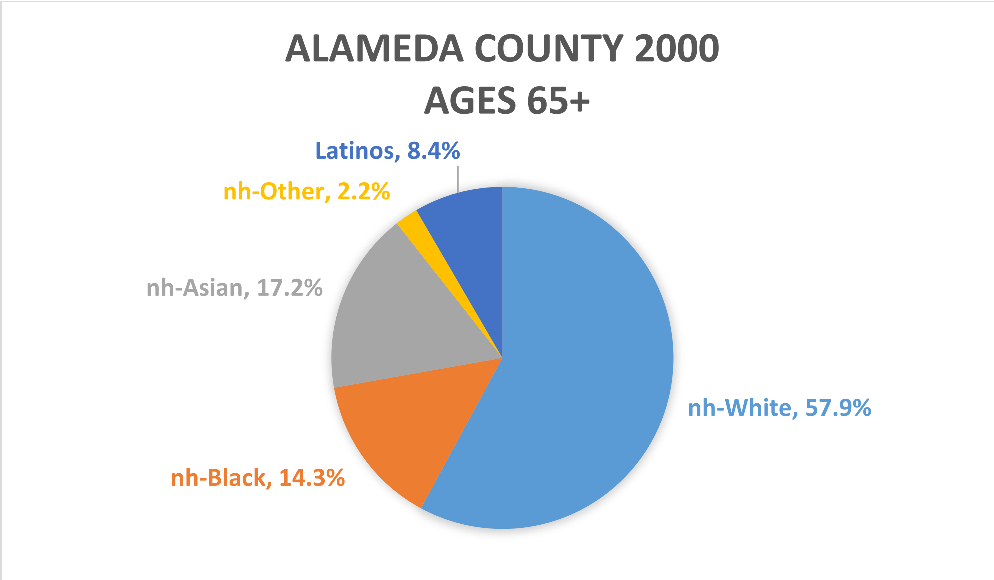
The comparison of the population pyramids from 2000 to 2016 illustrates the common trend found across California counties: the population is aging. In particular, the base of the pyramid (youth) is narrowing while the width of bars in older ages continue to increase. The underlying factors of this changing age structure are related to declining birth rates in addition to longer life expectancies. As birth rates remain low, the 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

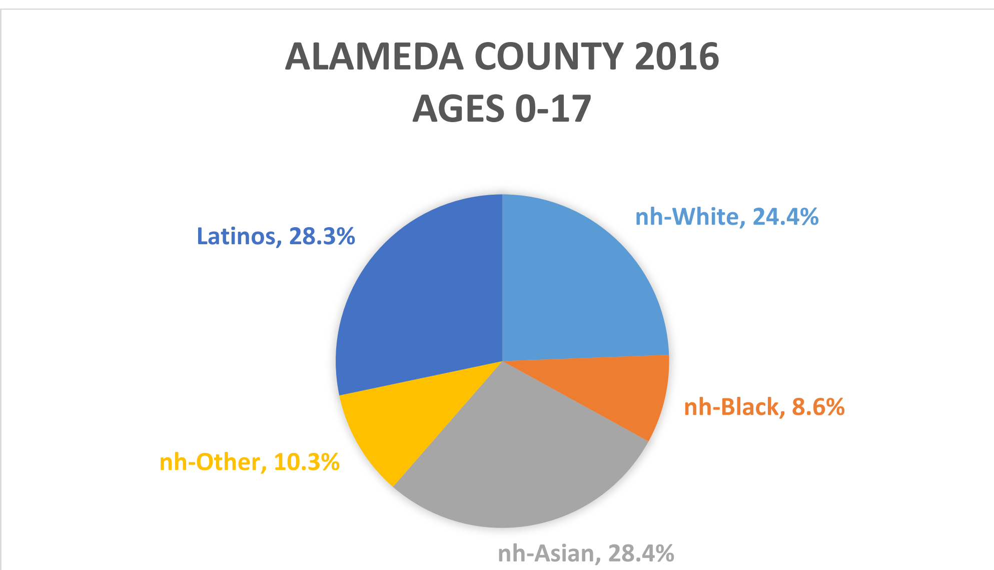
The demographic divide refers to the contrast of a diverse youth population (less than 18 years old) and a community's relatively white elderly population (ages 65+). The implication of this divide is that there may be few opportunities for people of a different race-ethnicity to interact, as they inhabit 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?

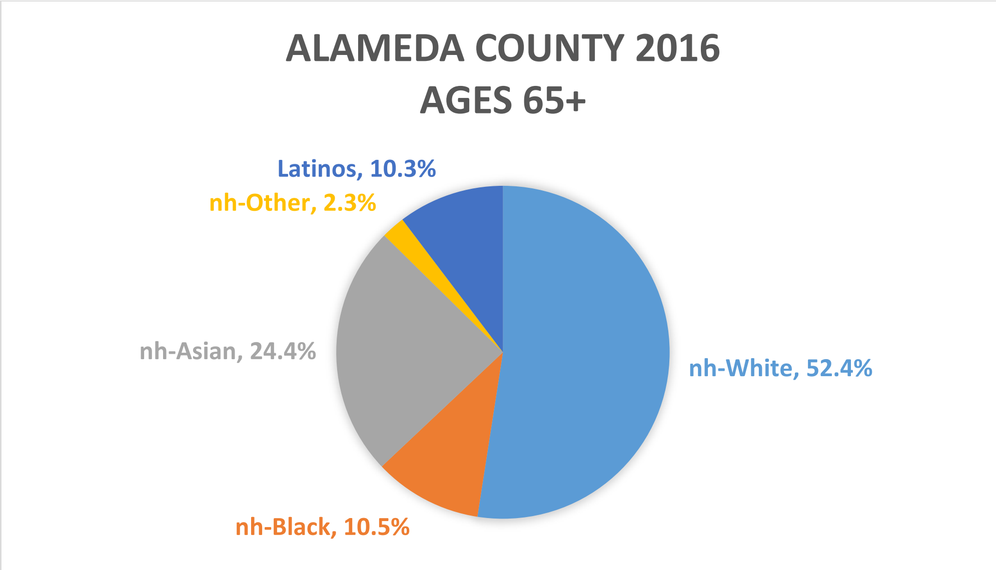
Race-Ethnicity	Ages 0-17	Ages 65+
White	30.5	57.9
Black	15.3	14.3
Asian	20.7	17.2
Other	7.2	2.2
Latino	26.2	8.4





In 2000, Alameda's youth (ages 0-17), population was relatively diverse. Not one group represented more than one-third of the population. Non-Hispanic whites made up nearly one-third of the youth population (30.5%) followed by Latinos (26.2%), non-Hispanic Asians (20.7%) and non-Hispanic blacks (15.3%). The elderly population is also diverse but non-Hispanic whites make up the majority (57.9%). Interestingly, although Latinos made up nearly 20% of Alameda County's *total* population in 2000, they represented just under 9% of the county's *elderly* population.





There is a similar pattern in 2016. The youth population is still relatively diverse but now Asians (28.4%) and Latinos (28.3%) represent the two largest racial-ethnic groups followed by whites (24.4%) and non-Hispanic other (10.3%). Non-Hispanic blacks now represent the smallest youth group (8.6%).

Among the elderly population (ages 65+) in 2016, whites represent the slight majority (52.4%) although non-Hispanics whites as a whole represent about one-third of Alameda County's total population (see Section 1 of this report). Latinos and Asians experienced growth in their elderly population from 2000 to 2016 but this increase was much higher for Asians who now make up nearly one-quarter (24.4%) of Alameda County's elderly population.

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 Alameda'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).

Lastly, we do not report p-values nor do we discuss statistical significance. Due to the rather large sample sizes (in most cases tens of thousands or hundreds of thousands), our results were usually significant, even if the disparities were within tenths of a percent (<1%). Consequently, we decided to describe larger trends and focus on *substantive*, versus *statistically significant* changes.