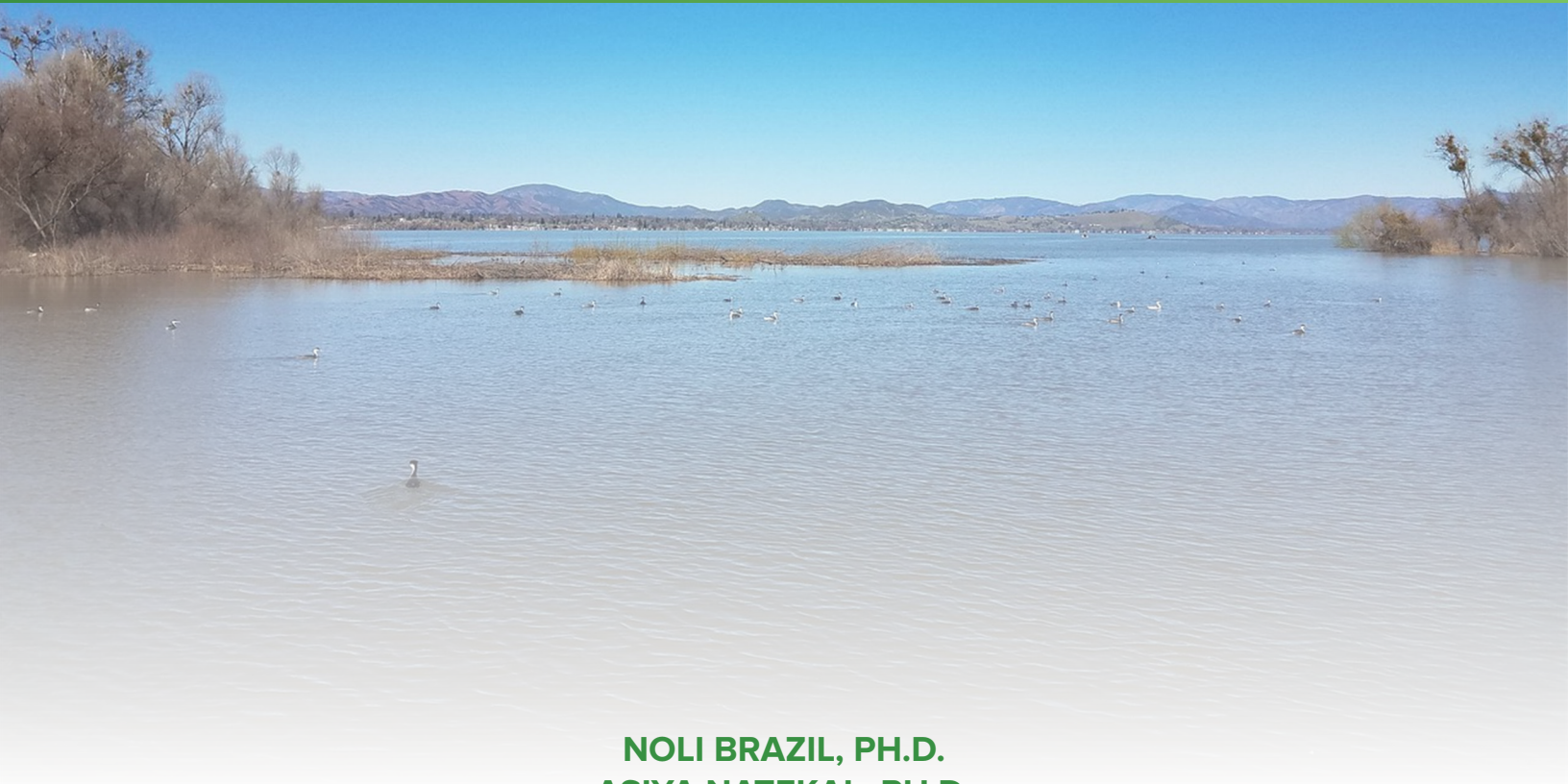




CALIFORNIA'S CLEAR LAKE REGION: A SOCIOECONOMIC PROFILE



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Introduction

The objective of the socioeconomic analysis is to provide an in-depth statistical portrait of the Clear Lake region. A quantitative assessment of the region's socioeconomic indicators can be used to identify current strengths, weaknesses, opportunities, and threats. The data provided in this document can also establish a baseline against which to measure future socioeconomic change.

In this profile, we examined the Clear Lake region across multiple geographic scales. At the lowest scale, we examined all Census incorporated and designated places within Lake County. The Census defines a place as a concentration of population; a place either is legally incorporated under the laws of its respective State, or a statistical equivalent that the Census Bureau treats as a census designated place (CDP). There are two incorporated cities in Lake County: Clearlake and Lakeport (We refer to these as Lake County Places or LCP). There are 13 CDPs: Clearlake Oaks, Clearlake Riviera, Cobb, Hidden Valley Lake, Kelseyville, Lower Lake, Lucerne, Middletown, Nice, North Lakeport, Soda Bay, Spring Valley, and Upper Lake. A separate examination of the five federal and state recognized Native American reservations will be conducted in the tribal engagement component of the Center for Regional Change report.

The following methodological features form the foundation of our analytic framework. In this analysis:

1. We compare the Clear Lake area to the broader regions
2. We examine the Clear Lake area over time
3. We examine the Clear Lake area across several important socioeconomic domains

We describe each of these features below.

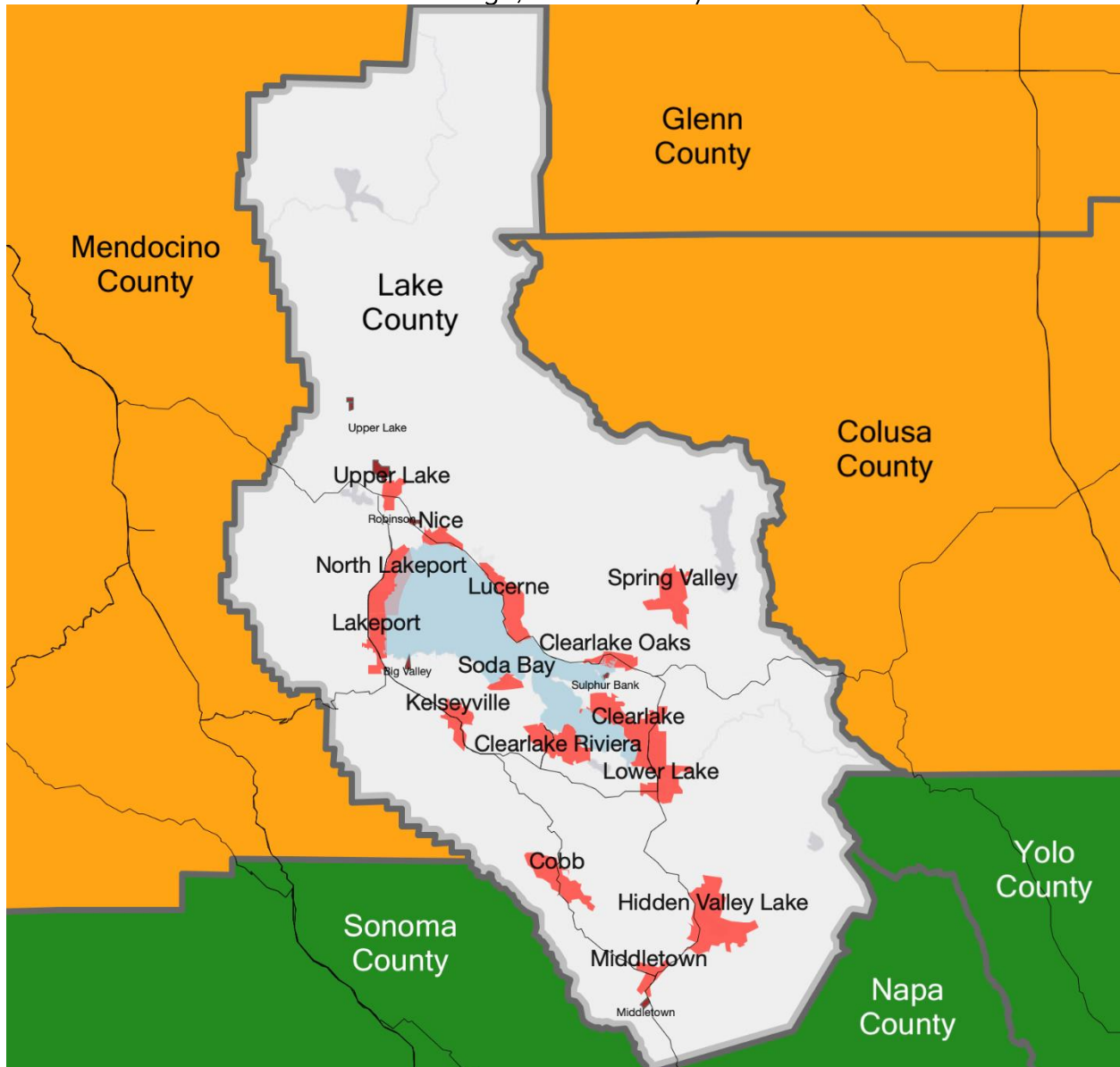
Regional comparison

A comparison to the regions that an area borders or is nested within provides important context to its demographic and socioeconomic profile. We compared Lake County Places (LCP) to three larger regions:

1. Lake County (LC).
2. The counties adjacent to the Northern border of Lake County (NBC; Colusa, Glenn, and Mendocino).
3. The counties adjacent to the Southern border of Lake County (SBC; Napa, Sonoma, and Yolo).

We separated the adjacent counties to those located in the North and South because the Northern counties are primarily rural whereas the Southern counties are more urban. Figure 1 shows Lake County Places and the three comparison areas. The map also shows the locations of the five Native American communities in Lake County.

Figure 1: Lake County Places (red), Lake County (white), and bordering counties (North: orange; South: Green)



Comparison over time

A comparison of characteristics over time provides insight into where the region has been and the direction in which it has been headed in recent years. We examine characteristics at three time points: 2000, 2010, and 2018. The year 2018 represents the most recent year in which Census data were available at the time of the analysis. The year 2010 represents the Great Recession, thus allowing for an analysis of post-recession recovery. The year 2000 goes back far enough to capture a meaningful long-term analytic period. For measures whose data do not go back to 2000, we collected data for the closest year.

Domains

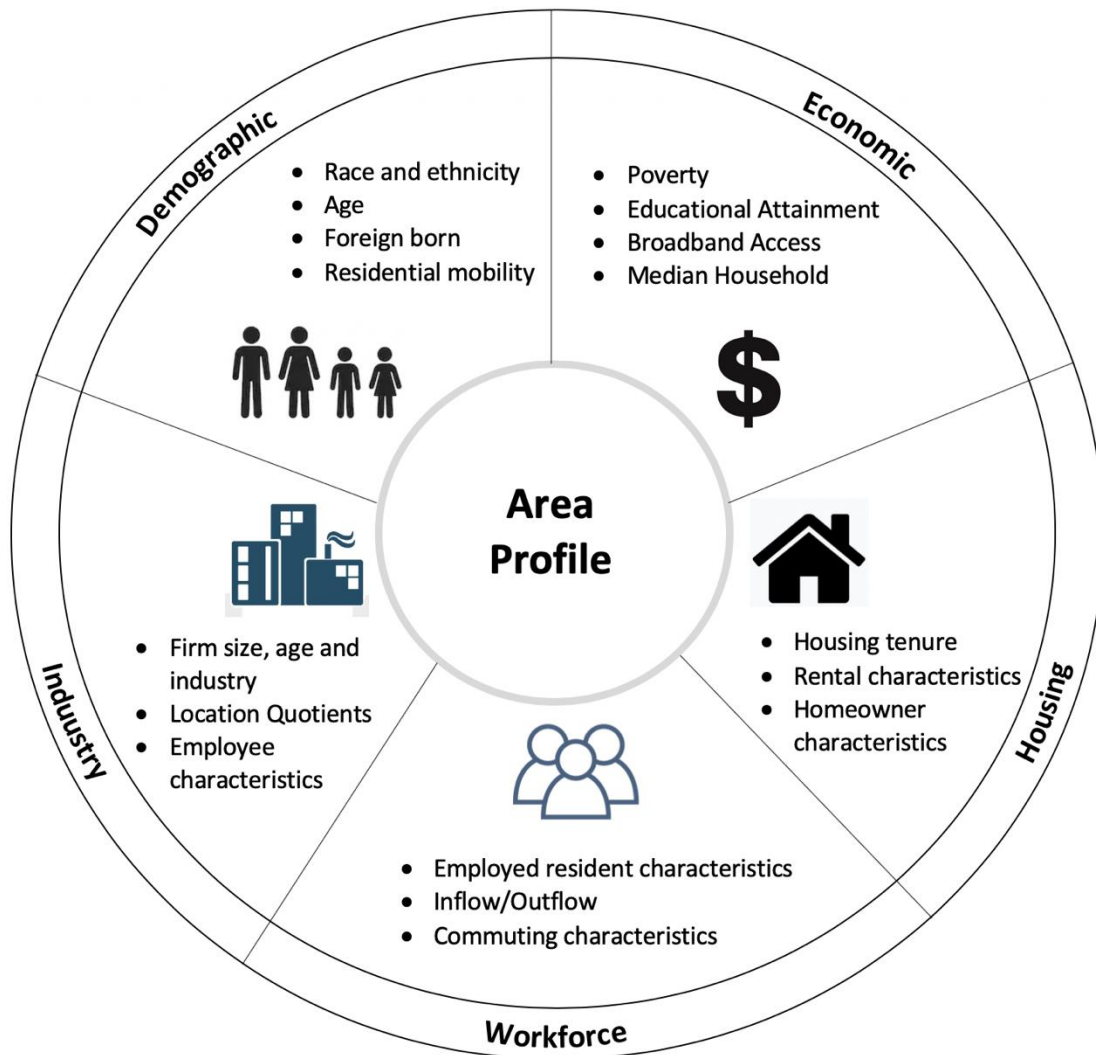
No one metric is an adequate reflection of the socioeconomic and demographic status of an area, so multiple measures are used in the analysis. The measures are organized under five domains, which are depicted in Figure 2. The figure also lists example characteristics examined under each domain. We group measures into familiar categories to help clarify, organize, and create a clear framework for understanding an area's multi-dimensional profile. Although we present each domain and indicator individually in this document, it is important to note and understand, most domains and indicators are, in some way, linked with most of the others.

The measures selected are not intended to be comprehensive. Instead, they were chosen because they serve as the best representatives of a domain *and* have publicly available data at the place and county levels and over a long time period¹. This resulted not only in the exclusion of individual measures but also entire domains. For example, a health domain was excluded from the analysis because health-related characteristics are not publicly available at the place level and at multiple time points over an extended time period. We trade off comprehensiveness in the number of characteristics with comprehensiveness in scale and time. This was done to differentiate from and contribute to prior works that have typically examined a large set of characteristics for a single year at the county level with no comparison to bordering regions².

¹ We did not collect primary data from surveys or interviews as it was beyond the scope of the report.

² For example, see Lake County Economic and Demographic Profile 2018. Center for Economic Development, California State University, Chico and Lake County Wellness Roadmap: A Framework for Taking Action to Create a Vibrant, Thriving, and Resilient Community. Health Leadership Network.

Figure 2: The five domains of an area profile



Tribal communities

We did not separately examine the region's Native American Tribal communities. This was done because of the limitations of Census data to capture the socioeconomic characteristics of tribal communities at the study's geographic and temporal scale of analysis. Moreover, some nations in Lake County are not federally recognized or have ownership of land that would lead them to be missed in the analysis. Such limitations necessitate qualitative interventions and specific tribal engagement strategies to better understand the needs, resources, and challenges of Tribal communities in the Clear Lake region. A separate examination of the five federal and state recognized Native American reservations will be conducted in the tribal engagement component of the Center for Regional Change report.

We next present the five domain profiles using the analytic framework described above. In each profile, we present tables, graphs, and summary points for individual indicators and highlight the main takeaways. We conclude the report with a discussion of major takeaways and their broad implications.

Demographic Profile

Introduction

This section presents demographic characteristics including population size, age, racial/ethnic and foreign-born composition, and residential mobility. The profile provides an overview of who lives in Lake County places, how resident composition has changed over time, and a comparison to the broader region.

We compared Lake County Places (LCP) to three larger regions:

1. Lake County (LC).
2. The counties adjacent to the Northern border of Lake County (NBC; Colusa, Glenn, and Mendocino).
3. The counties adjacent to the Southern border of Lake County (SBC; Napa, Sonoma, and Yolo).

Population Size

Total population is the number of people who consider the area their primary residence. It does not include persons who are here temporarily unless they consider this area their primary residence.

Population size, 2000-2018

	2018	2000-2010	2010-2018
LCP	50,600	14.5%	0.7%
LC	64,148	10.4%	-0.3%
NBC	136,783	3.9%	0.1%
SBC	856,824	7.0%	6.5%

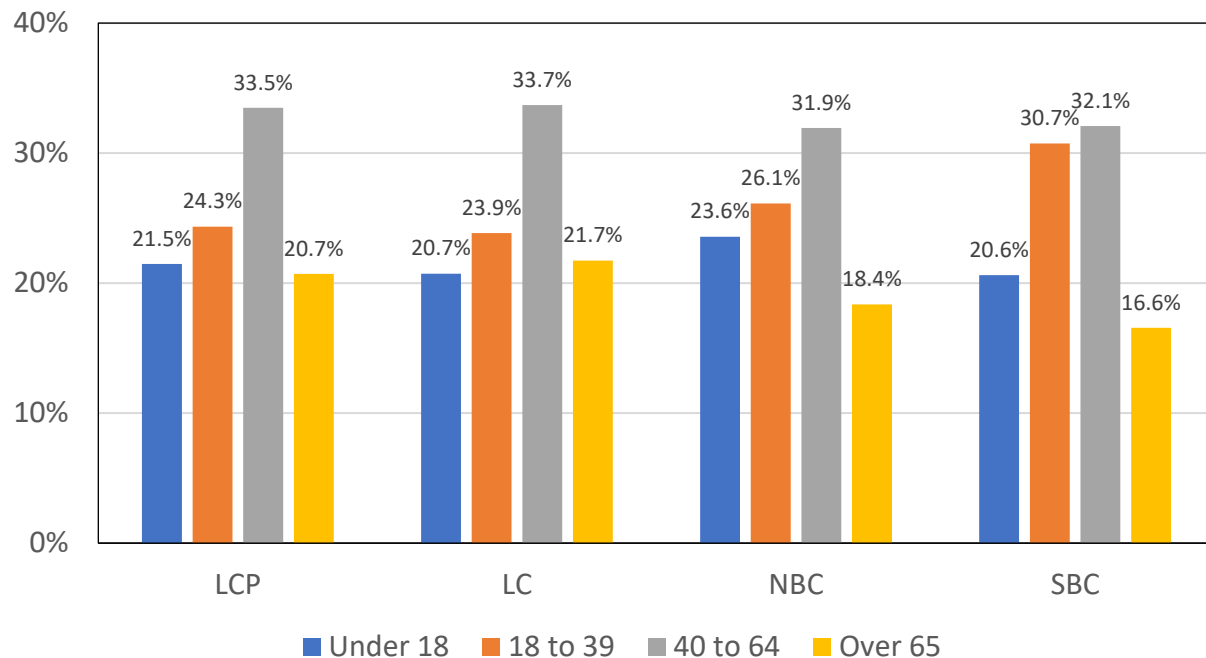
Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

In 2018, LCP accounted for 79% of the Lake County population. The resident population increased by 14.5% between 2000 and 2018, representing the largest increase among the four areas. Population size increased only between 2000 and 2010, a pattern also found in LC and NBC. In contrast, SBC experienced a nearly equal increase in both periods.

Age Distribution

The age distribution provides insight on the types of services and needs within a community. A large older teen and young adult demographic has a greater need for higher education and vocational training facilities, while a large middle-aged group creates more focus on employment opportunities. An area with a large retired population typically has fewer employment concerns, but a greater need for medical and social services. We break the age distribution into four major groups: youth (under 18 years old), young adults (18 to 39 year old), middle age adults (40-64 year old) and retired and senior citizens (over 65 years old).

Age group distribution, 2018



Source: 2014-2018 American Community Survey

Change in age group distribution, 2000-2018

	LCP		LC		NBC		SBC	
	2000-10	2010-18	2000-10	2010-18	2000-10	2010-18	2000-10	2010-18
Under 18	-1.2%	-2.0%	-2.1%	-1.1%	-2.5%	-1.2%	-1.7%	-2.1%
18 to 39	1.9%	0.6%	1.9%	0.6%	-0.6%	-0.2%	-0.9%	-0.1%
40 to 64	3.0%	-3.1%	2.5%	-4.1%	2.3%	-3.0%	2.2%	-1.6%
Over 65	-3.7%	4.5%	-2.3%	4.6%	0.9%	4.4%	0.4%	3.9%

Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- Lake County places have a similar age distribution as Lake County. However, LCP is much older relative to the bordering counties, particularly the Southern counties, which have a significantly larger percentage of young adult (18-39)

residents (30.7% compared to 24.3%) and smaller elderly (over 65) population (16.6% compared to 20.7%).

- LCP lost younger residents, experiencing -1.2 and -2.0 percentage point declines in the under 18 population in 2000-10 and 2010-18, respectively. It gained residents between 18 to 39 since 2000, but these gains were concentrated between 2000 and 2010 (1.9 percentage points). The reverse is true for the over 65 population, which saw a decline between 2000-10 (-3.7 percentage points) but an increase since 2010 (+4.5 percentage points). The 40 to 64 year old population witnessed an increase from 2000-10 and a decrease similar in magnitude since 2010.
- All areas experienced an increase in the over 65 population, representing the secular trend of the large baby boomer population aging into retirement. However, this age group in LCP and LC decreased between 2000 and 2010 and then increased between 2010 and 2018, whereas NBC and SBC experienced increases in both periods.
- Conversely, the proportion under 18 population decreased in all areas.

Racial and Ethnic Composition

We categorize the resident population into six major race/ethnic groups: Non-Hispanic white, non-Hispanic Asian, non-Hispanic black, non-Hispanic Native American, non-Hispanic other, and Hispanic. We present racial and ethnic composition in three different ways: (1) Proportion of race/ethnic group; (2) Location quotients, which measure the concentration of each race/ethnic group in Lake County places relative to the larger areas; (3) and racial/ethnic diversity, which is measured as an index of 0 to 1, with 1 indicating that each race/ethnic group has equal representation and thus maximum diversity. Full descriptions of the location quotient and the diversity index are located in the technical appendix.

Racial and Ethnic composition, 2000 and 2018

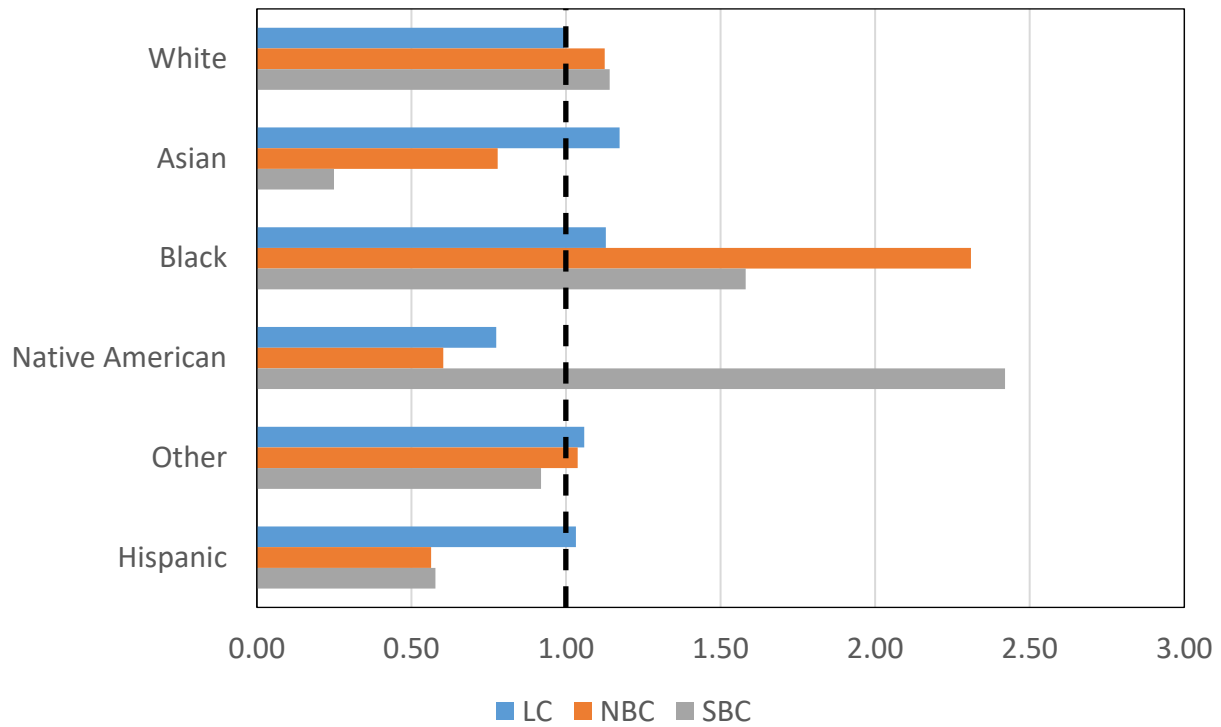
	LCP		LC		NBC		SBC	
	2000	2018	2000	2018	2000	2018	2000	2018
White	80.2%	70.4%	80.6%	71.1%	68.3%	58.1%	69.7%	57.6%
Asian	1.1%	1.0%	0.9%	1.0%	1.5%	2.1%	4.5%	7.0%
Black	2.3%	2.5%	2.1%	2.2%	0.6%	0.7%	1.4%	1.8%
Native American	1.8%	2.0%	2.4%	3.3%	3.4%	2.5%	0.7%	0.3%
Other	3.1%	2.3%	2.9%	2.4%	3.0%	3.1%	3.4%	4.2%
Hispanic	11.5%	21.9%	11.1%	20.0%	23.3%	33.5%	20.3%	29.0%

Source: 2000 Decennial Census and 2014-2018 American Community Survey

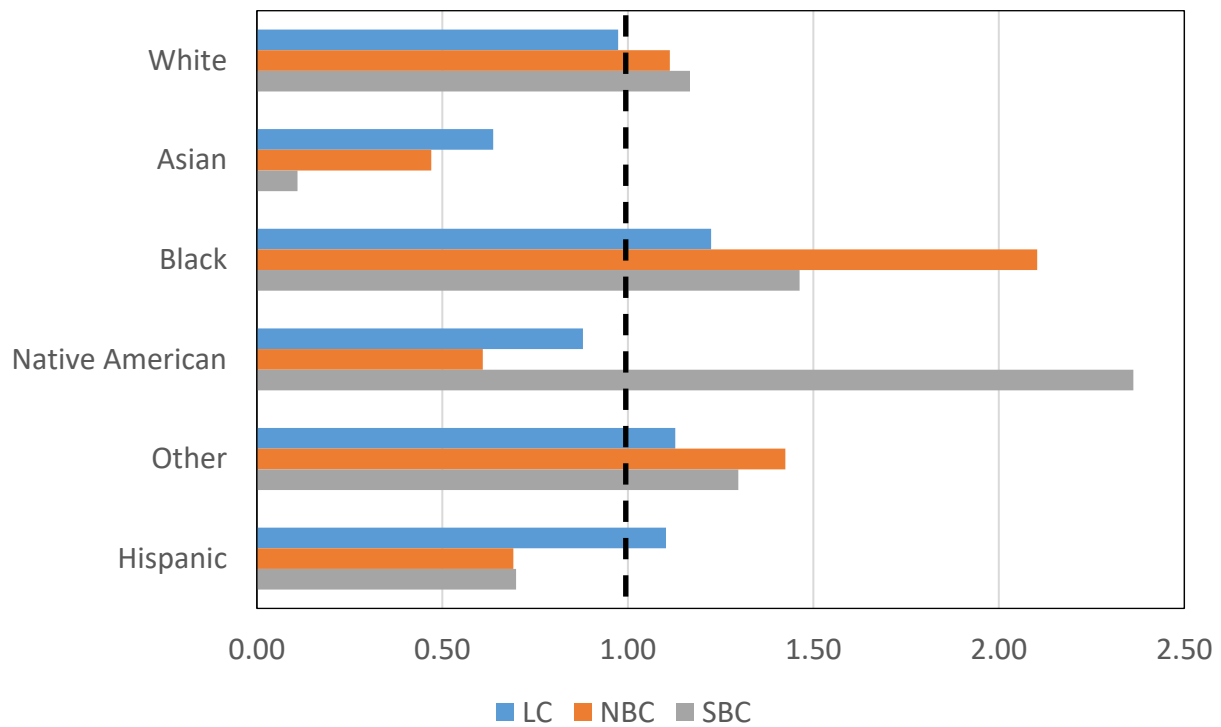
*Race/ethnic groups are non-Hispanic

- Lake County places are predominantly non-Hispanic white (70.4%). The next largest race/ethnic group is Hispanic (21.9%). The remainder of the population is nearly evenly scattered across the other 4 race/ethnic categories.
- The proportion of white residents in LCP dropped by 10 percentage points since 2000. The area experienced a near identical increase in the Hispanic population during this time period. The other race/ethnic groups percentages changed little.
- A location quotient (LQ) of 1 indicates that the proportion of a race/ethnic group is the same in LCP as the larger area. In comparison to Lake County, LCP has a greater concentration of Hispanic residents across all years (LQs 1.03, 1.10 and 1.09 in 2000, 2010 and 2018, respectively), but a lower concentration of Native American residents (0.77, 0.88 and 0.63). The proportion white and black are similar in the two areas. The concentration of Asian residents in LCP has decreased such that Lake County has a larger proportion relative to LCP in 2018.
- The NBC and SBC LQs show that LCP has greater concentrations of white and black residents, but lower concentrations of Asian and Hispanic residents across all years. LCP has a lower concentration of Native American residents relative to the Northern counties, but a significantly higher concentration relative to the Southern counties.
- The concentration of Hispanic residents in LCP relative to NBC and SBC has increased since 2000, increasing from 0.49 to 0.65 and 0.56 to 0.75, respectively. Other significant changes include an increasing concentration of Native American residents and a decreasing concentration of black residents in LCP relative to both bordering areas.

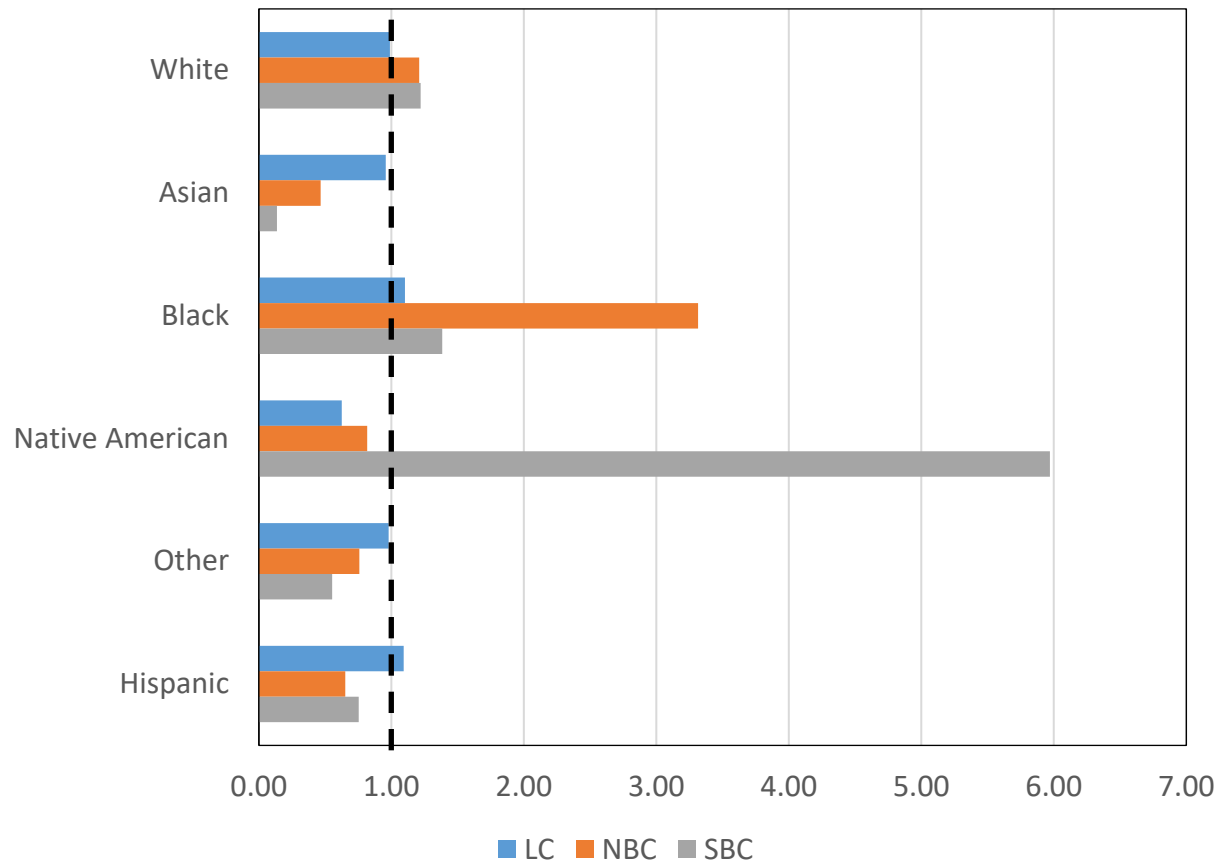
Location Quotients, 2000



Location Quotients, 2010

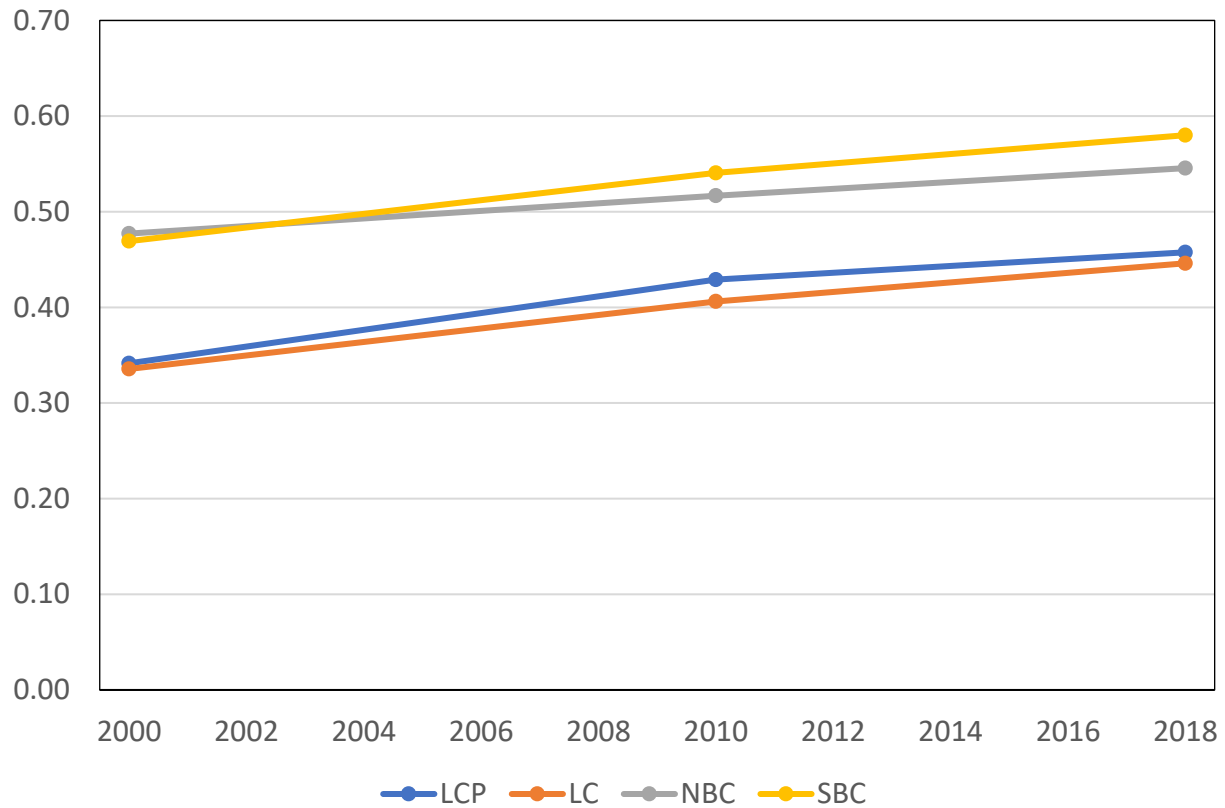


Location Quotients, 2018



Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

Racial/Ethnic Diversity, 2000-2018

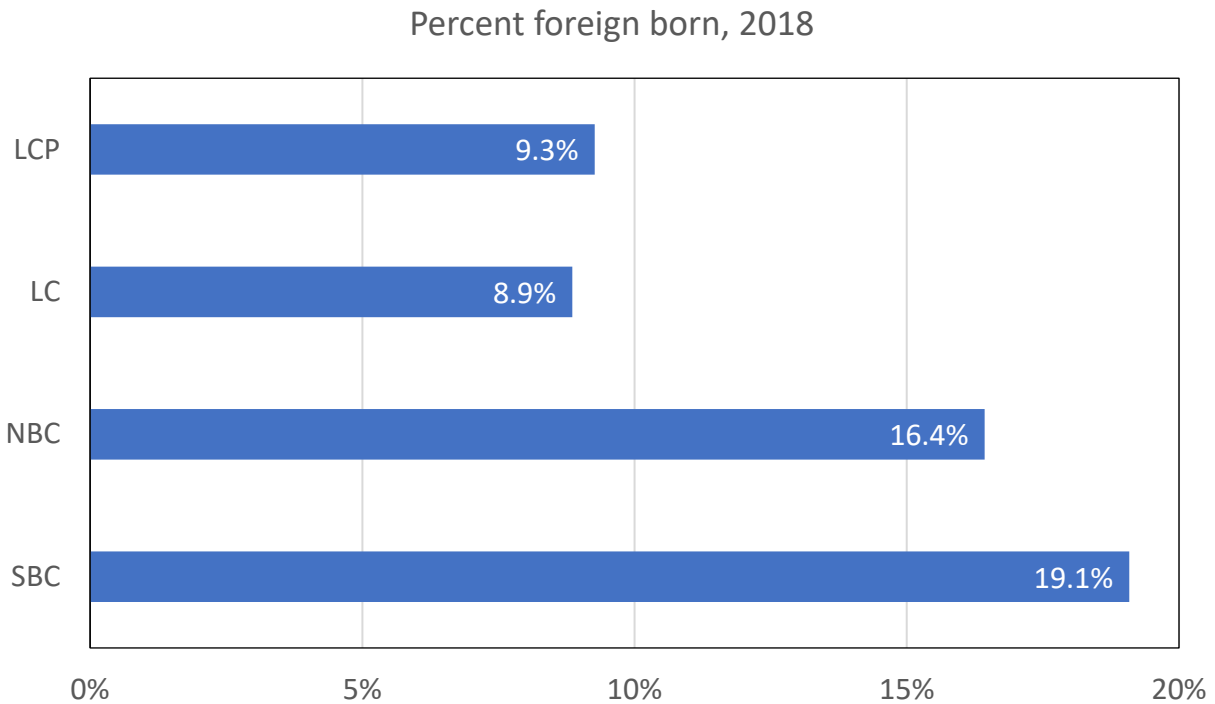


Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

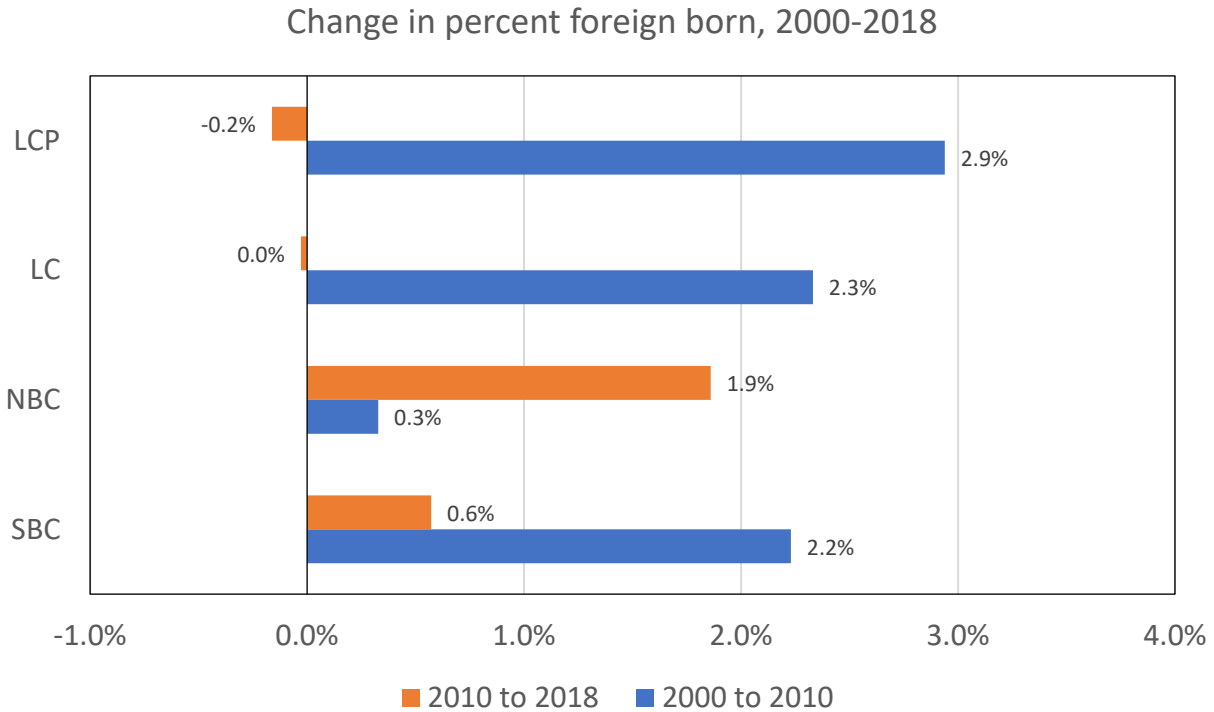
- Diversity in LCP is considerably lower relative to the bordering counties. In 2018, racial/ethnic diversity was approximately 26% higher in Southern and Northern bordering counties relative to LCP.
- Racial/ethnic diversity has increased since 2000 in all areas. The proportional increase was highest in LCP, thus its gap with the bordering counties decreased.

Foreign Born Population

The foreign-born population includes anyone who is not a U.S. citizen at birth, including those who become U.S. citizens through naturalization. The foreign born population in the United States has increased significantly. The following figures show whether LCP follows this trend.



Source: 2014-2018 American Community Survey



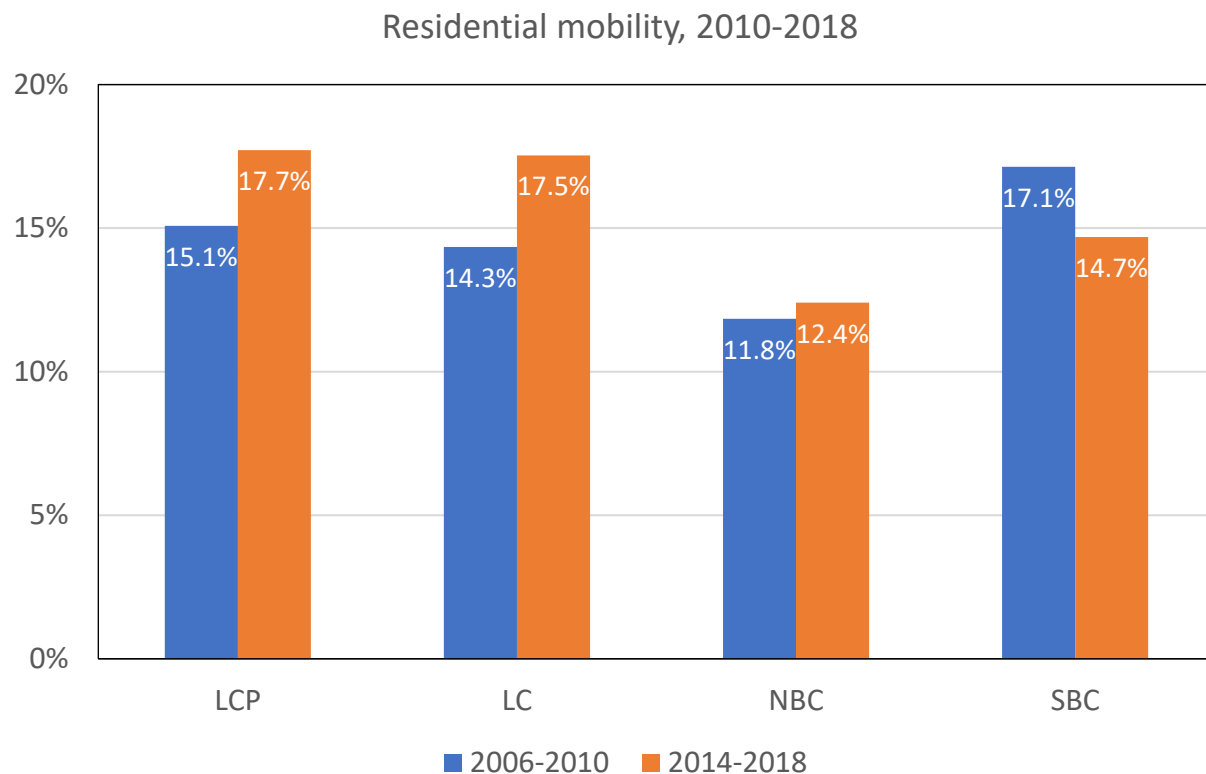
Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- The percent of residents who are foreign-born is slightly larger in LCP (9.3%) relative to Lake County (8.9%), but is considerably smaller than the Southern (19.1%) and Northern (16.4%) bordering counties.
- LCP and SBC experienced the largest percentage point increases in the foreign born population between 2000 and 2018 among the four areas (2.7 percentage points).
- The increase in LCP primarily occurred between 2000 and 2010 (2.9 percentage points). A similar pattern exists in the other areas except for the Northern bordering counties, which experienced a greater increase after 2010 (1.9 percentage points) relative to before 2010 (0.3 percentage points).

Residential Mobility

Residential mobility is measured as the proportion of current households who are living in a different house from one year ago³. The measure captures both internal mobility (those moving within the area) and external mobility (those moving into the area from another area).

³ Residential mobility in 2000 is not included because 2000 decennial census measures 5-year mobility rates



Source: 2006-2010 and 2014-2018 American Community Surveys

- LCP and Lake County had similar rates of residential mobility in 2018 (17.7% and 17.5%, respectively). However, LCP's rate is higher than the rates in the Southern (14.7%) and Northern (12.4%) counties. Since 2010, LCP's gap increased with the Northern border counties and reversed with the Southern border counties.

Main Takeaways

- Lake County Places experienced the largest proportional increase in population size, with the increase primarily occurring between 2000 and 2010.
- LCP has a similar age profile to Lake County, but an older profile relative to the North and South bordering counties. LCP has gotten older since 2000, with a sizable portion of this increase occurring between 2010 and 2018.
- LCP has a similar racial/ethnic profile as Lake County, but with slightly less Native American and greater Hispanic presence. Compared to the bordering counties, LCP has a significantly larger proportion white and smaller proportion Hispanic.

- Percent white in LCP has dropped by approximately 10 percentage points since 2000. The area experienced a near identical increase in proportion Hispanic. In contrast to white concentration which remained relatively stable throughout the period, Hispanic concentration increased in LCP relative to the bordering areas.
- Racial/ethnic diversity in Lake County places is similar to Lake County but considerably lower relative to the bordering counties. However, LCP experienced the greatest proportional increase in diversity since 2000.
- The percentage of residents who are foreign-born is larger in the LCP relative to Lake County, but is considerably smaller than the Southern and Northern bordering counties. However, the LCP along with SBC experienced the largest percentage point increase in the foreign born population among the four areas.

Housing Profile

Introduction

Access to affordable housing provides opportunities for improved outcomes in employment, health, and education. This section presents housing characteristics, including mean gross rent, mean home value, housing tenure, vacancy rate, and housing affordability. The interaction between housing and wildfire susceptibility is also explored. This section provides an overview of the housing characteristics and housing affordability in Lake County Places, and how the housing landscape has changed over time and a comparison to the broader region.

We compared Lake County Places (LCP) to three larger regions:

1. Lake County (LC).
2. The counties adjacent to the Northern border of Lake County (NBC; Colusa, Glenn, and Mendocino).
3. The counties adjacent to the Southern border of Lake County (SBC; Napa, Sonoma, and Yolo).

Mean Gross Rent

Mean Gross Rent, 2000-2018

Area of Analysis	Mean Gross Rent ⁴		
	2000	2006-2010	2014-2018
LCP	\$916.1	\$1,065.2	\$1,111.4
LC	\$854.5	\$972.9	\$968.0
NBC	\$779.6	\$938.7	\$921.7
SBC	\$1,190.0	\$1,325.2	\$1,478.7

Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, the mean gross rent in Lake County Places is \$1,111.4 per month.
- In Lake County Places, the mean gross rent has increased since 2000 (\$916.1 per month to \$1,111.4 per month).
- Similarly, since 2000, the mean gross rent has increased in Lake County and surrounding counties.
- As of 2018, the mean gross rent in Lake County Places (\$1,111.4 per month) is relatively higher than the mean gross rent in Lake County (\$968.0 per month) and the north bordering counties (\$921.7 per month), while it is noticeably lower than the mean gross rent in the south bordering counties (\$1,478.7 per month).

⁴ The dollar amounts are in 2018 dollars.

Mean Home Value

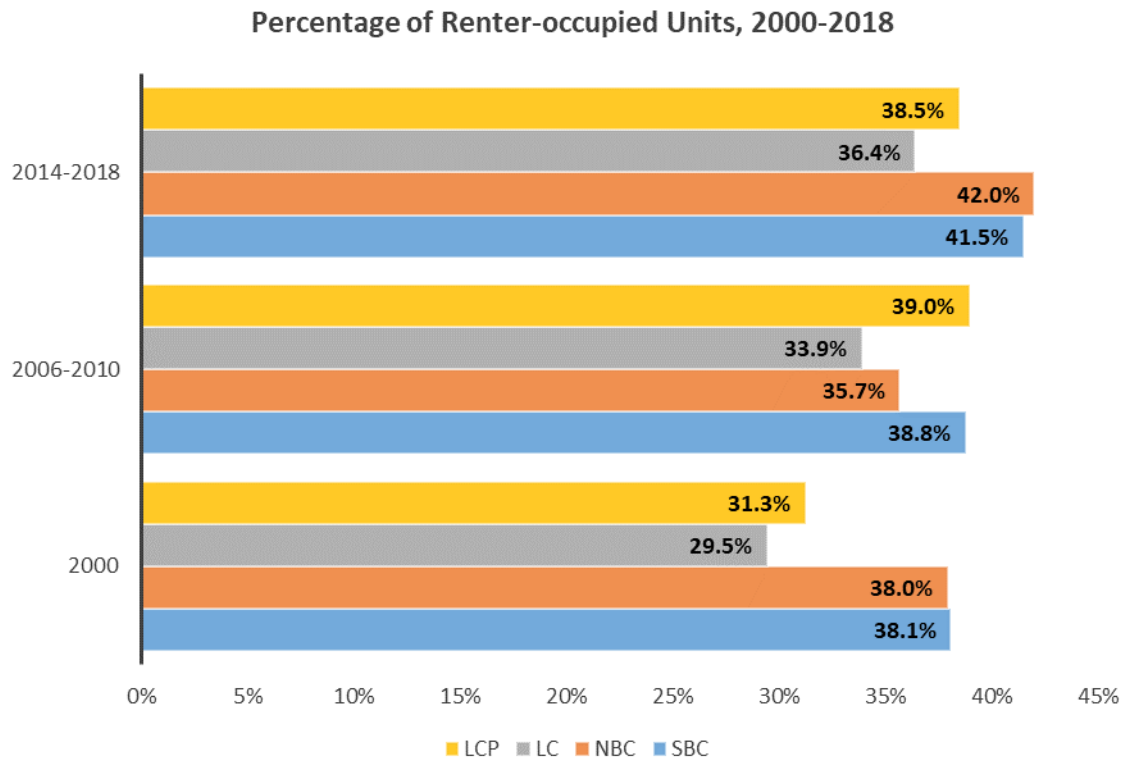
Mean Home Value (Homeownership), 2000-2018

Area of Analysis	2000	2006-2010	2014-2018
LCP	\$152,583.5	\$279,140.5	\$196,993.3
LC	\$149,865.6	\$305,567.8	\$195,400.0
NBC	\$176,830.1	\$356,994.6	\$276,200.0
SBC	\$317,802.2	\$570,761.6	\$522,633.3

Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, the mean home value in Lake County Places is \$196,993.3.
- In Lake County Places, the mean home value has increased since 2000 (\$152,583.5 to \$196,993.3).
- Similarly, since 2000, the mean home value has increased in Lake County and surrounding counties. However, the mean home value in the north and south bordering counties has noticeably increased as compared to the increase in home value in Lake County Places and Lake County.
- As of 2018, the mean home value of Lake County Places (\$196,993.3) is relatively higher than the mean home value of Lake County (\$195,400), while it is noticeably lower than the mean home value of the north bordering counties (\$276,200) and the south bordering counties (\$522,633.3).

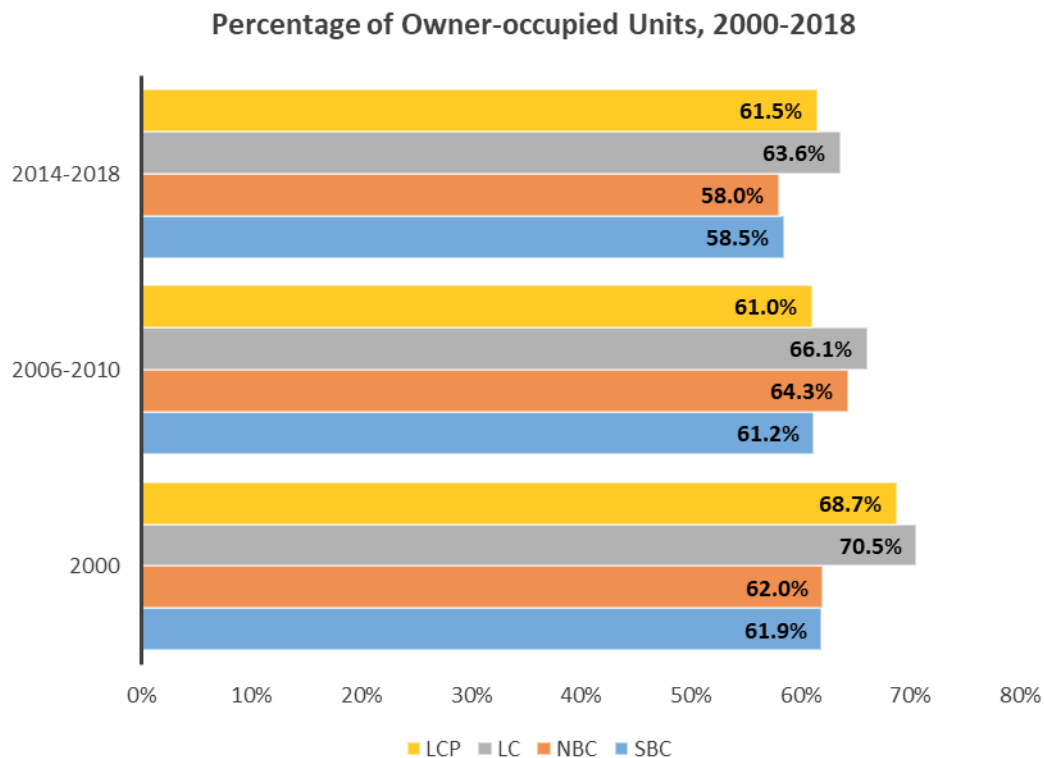
Percentage of Renter-occupied Housing Units



Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, the share of renter-occupied housing units in Lake County Places is 38.5%.
- In Lake County Places, the share of renter-occupied housing units has grown since 2000 (31.3% to 38.5% of the total).
- Similarly, the share of renter-occupied housing units has grown in Lake County and the surrounding counties. However, in the Lake County Places, there is a noticeable increase in the share of renter-occupied housing units compared to the share in the north and south bordering counties.
- As of 2018, the share of renter-occupied housing units in Lake County Places (38.5%) is relatively lower than the share of renter-occupied housing units in the north (42.0%) and the south bordering counties (41.5%).

Percentage of Owner-occupied Housing Units

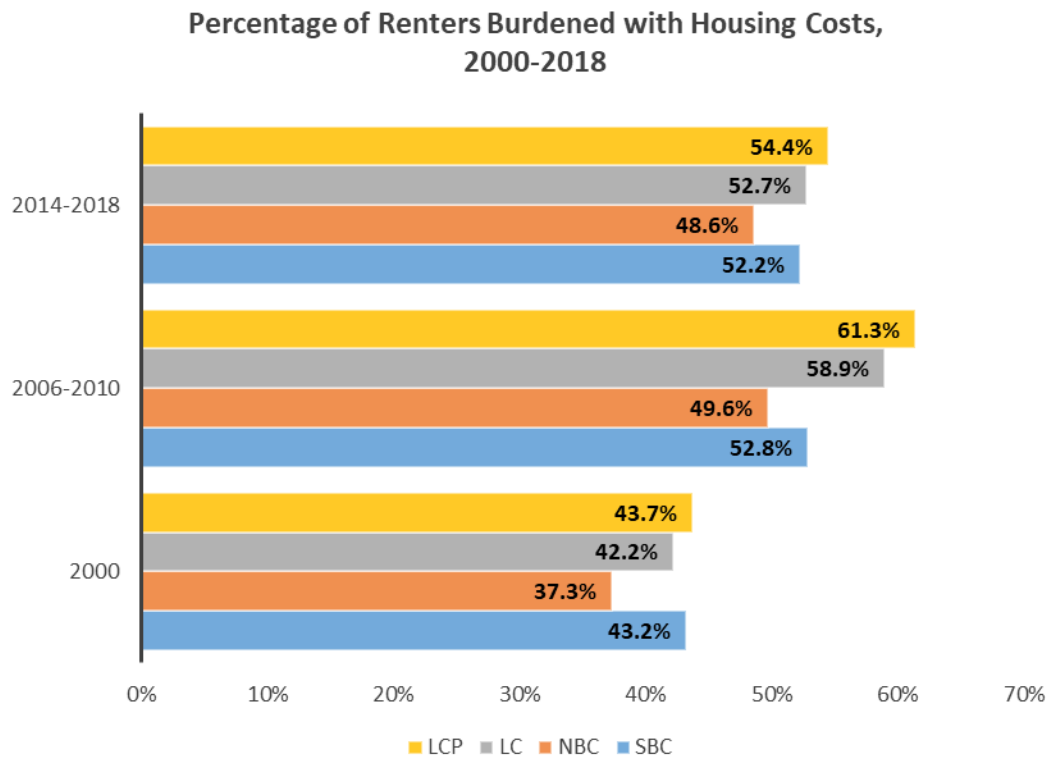


Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, the share of owner-occupied housing units in Lake County Places is 61.5%
- In Lake County Places, the share of owner-occupied housing units has declined since 2000 (68.7% to 61.5% of the total).
- Similarly, the share of owner-occupied housing units has declined in Lake County and the surrounding counties. However, in Lake County Places, there is a noticeable decrease in the share of owner-occupied housing units as compared to the share in the north and south bordering counties.
- In 2018, the share of owner-occupied housing units in Lake County Places (61.5%) is relatively higher than the share of owner-occupied housing units in the north (58 %) and south bordering counties (58.5%).

Rental Cost Burden

Rental cost burden measures the percent of renters for whom housing costs are 30% or more of household income.

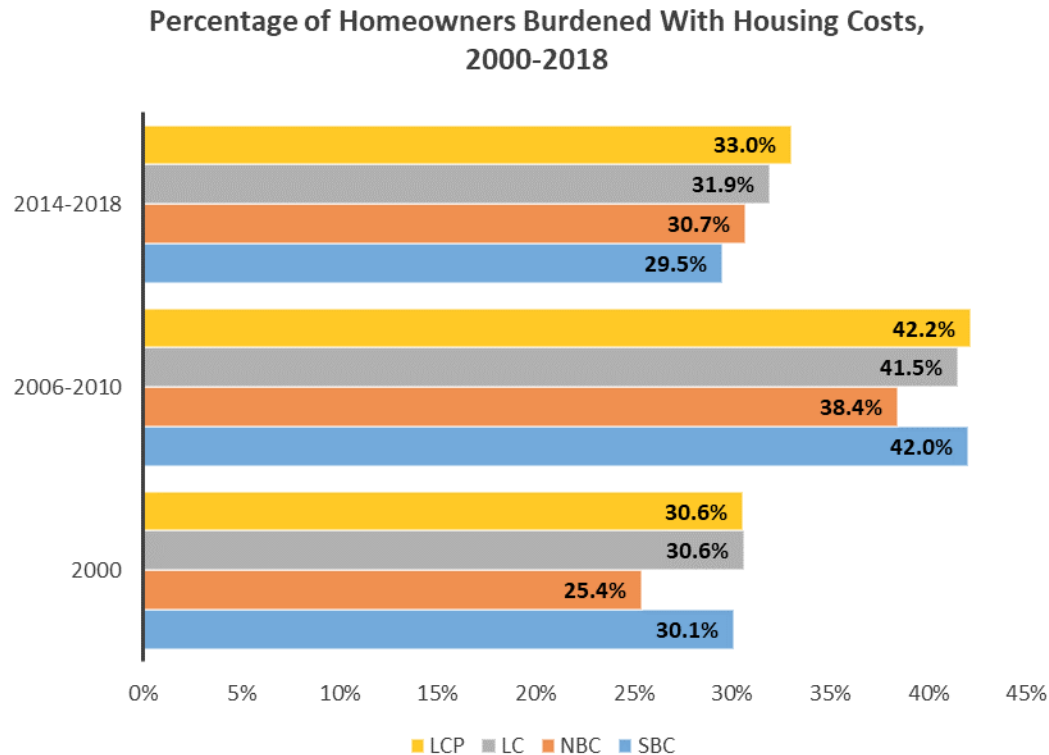


Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, the share of renters burdened with housing costs in Lake County Places is 54.4%.
- In Lake County Places, the share of renters burdened with housing costs has grown since 2000 (43.7 to 54.4%).
- Similarly, the share of renters burdened with housing costs has grown in Lake County and the surrounding counties. However, since 2000, the increase in the share of renters burdened with housing costs in Lake County Places is relatively higher than the share in the south bordering counties.
- In 2018, the share of renters burdened with housing costs in Lake County Places (54.4%) is noticeably higher than the share in the north (48.6%) and the south bordering counties (52.2%).

Homeowner Cost Burden

Homeowner cost burden measures the percent of homeowners for whom select housing costs⁵ are 30% or more of household income.

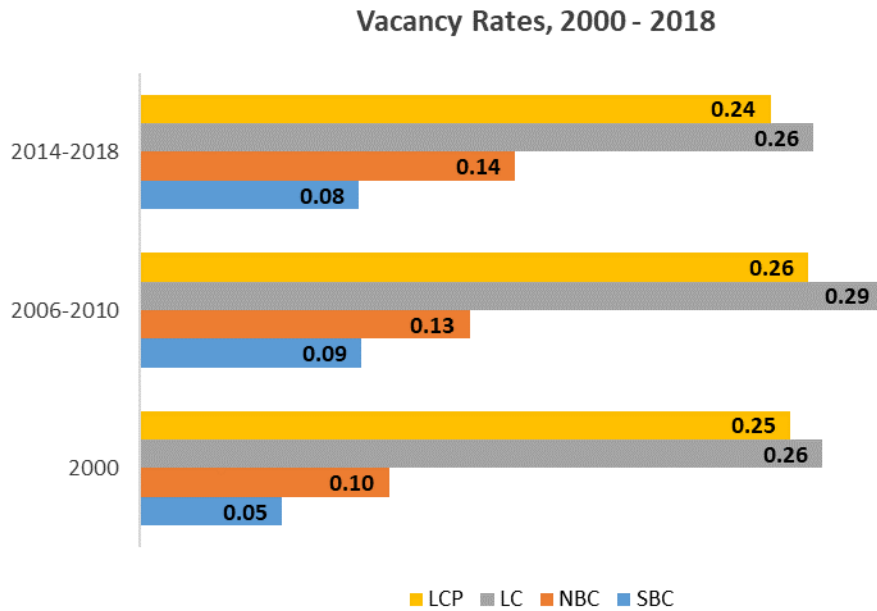


Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, 33 % of Lake County Places homeowners were burdened with housing costs.
- In Lake County Places, the share of homeowners burdened with housing costs grew noticeably from 2000 to 2010 and then saw a decline in 2018 (30.6% to 42.2% to 33%). Overall, the share of homeowners burdened with housing cost has grown since 2000.
- Similarly, the share of homeowners burdened with housing costs has grown in Lake County and in the surrounding counties.
- As of 2018, the share of Lake County Places homeowners burdened with housing costs (33 %) is relatively higher than those in the north (30.7%) and south bordering counties (29.5%).

⁵ Includes all mortgage principal payments, interest payments, real estate taxes, property insurance, homeowner fees, condo or coop fees and utilities (not including telephone or cable television)

Vacancy Rate



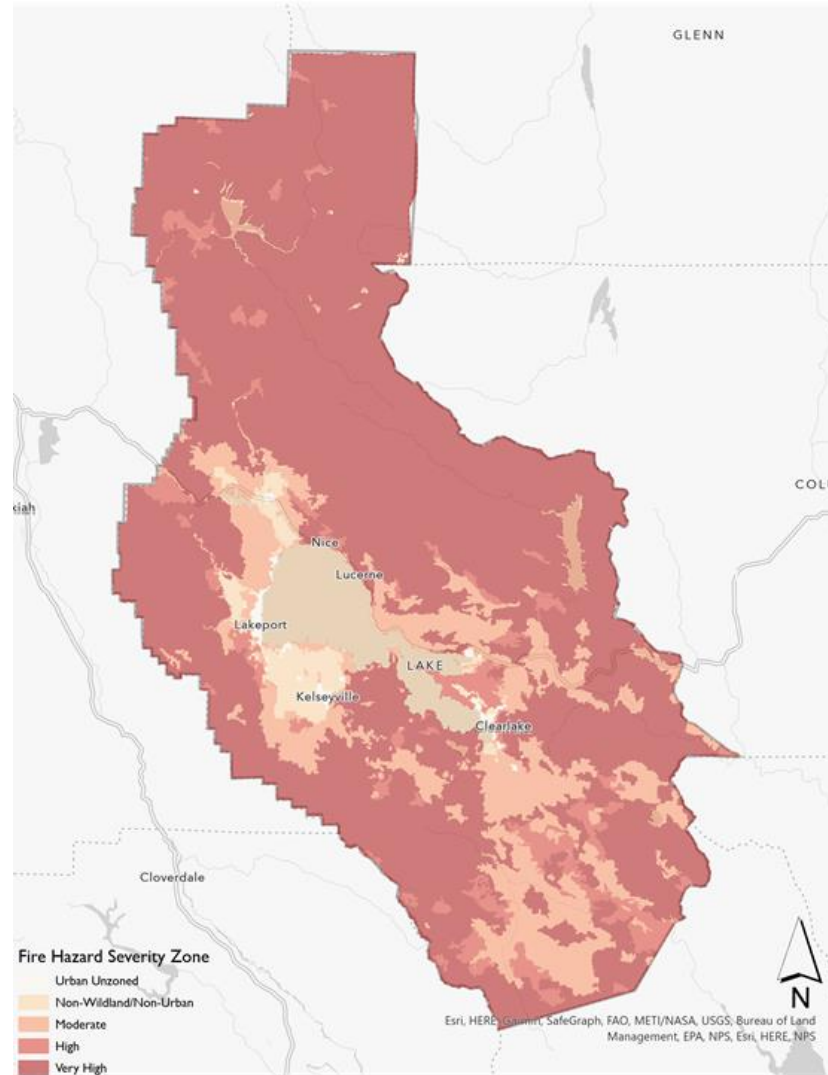
Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- As of 2018, Lake County Places has a vacancy rate of 0.24.
- As of 2018, the vacancy rate in LCP is noticeably higher than the vacancy rates in the north bordering (0.14) and south bordering counties (0.08).
- Since 2000, in LCP the vacancy rate has slightly decreased (0.25 to 0.24). However, the vacancy rates have grown in the north (0.10 to 0.14) and south bordering counties.

Wildfire and Housing

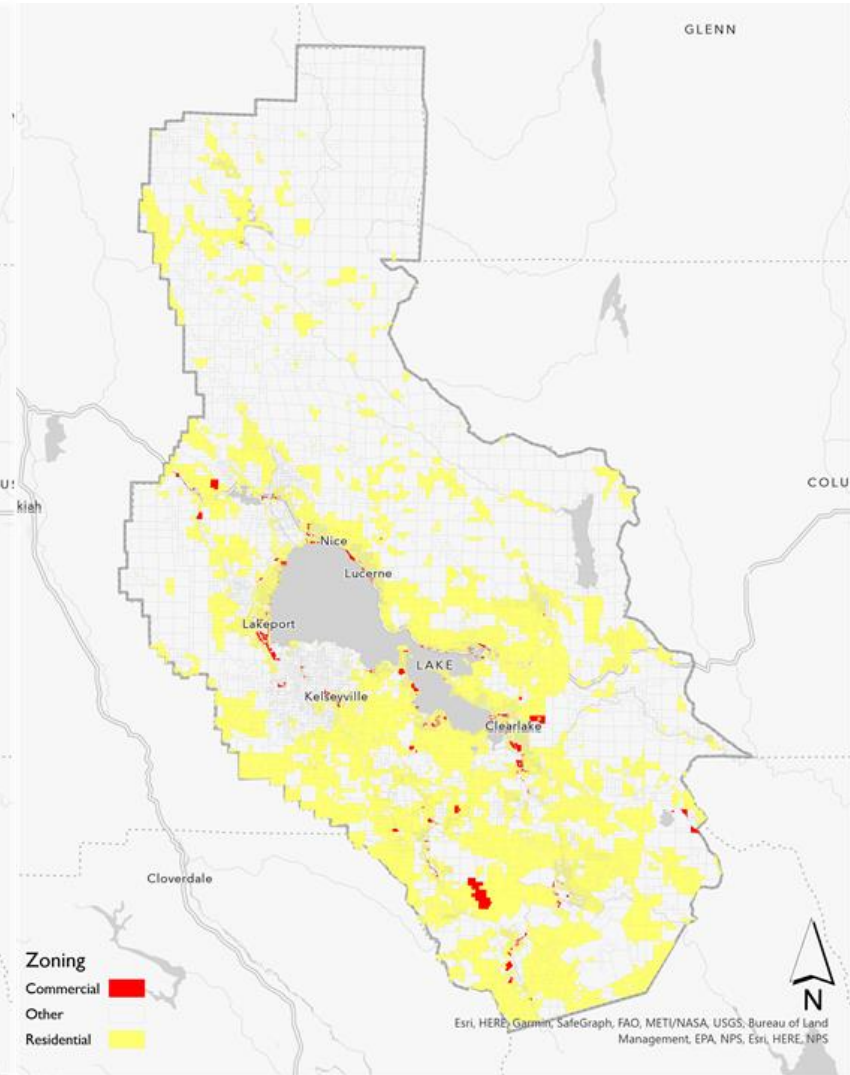
Wildfire is no longer a seasonal issue, rather an annual issue for Lake County. Several housing and commercial parcels are impacted by the wildfire. The housing and renter burdens described earlier might be a consequence of the wildfires' effects on the local housing market. Given this, we examined the spatial distribution of housing and commercial parcels by fire hazard severity zones. Map 1 represents the various fire hazard severity zones in Lake County. The map illustrates that the majority of Lake County falls in the high, and very high fire hazard severity zones. Map 2 illustrates the housing and commercial parcels for Lake County, City of Clearlake, and the City of Lakeport. Using the data from both maps, we calculated the total number of housing and commercial parcels and the associated net value of those parcels by fire hazard severity zone.

Map 1: Lake County Wildfire Hazard Severity Zones



Source: Lake County data portal

Map 2: Lake County Residential and Commercial Parcels



Note: Zoning data was obtained from Lake County, City of Clearlake, and City of Lakeport. Parcel assessor data was obtained from Lake County. Zoning designations were combined to create broad land use categories.

Residential and Commercial Parcels by Fire Hazard Severity Zone.

Parcels by FHSZ	Number of parcels	Percentage	Sum of Net Value of Parcels
High	7,282	100.0	\$829,471,521
Commercial	315	4.3	\$99,953,248
Other	433	5.9	\$75,552,174
Residential	6,534	89.7	\$653,966,099
Moderate	9,988	100.0	\$1,903,621,944
Commercial	558	5.6	\$165,399,508
Other	1,502	15.0	\$376,127,533
Residential	7,928	79.4	\$1,362,094,903
Non-Wildland/Non-Urban	1,831	100.0	\$452,742,172
Commercial	60	3.3	\$41,373,097
Other	1,191	65.0	\$298,490,894
Residential	580	31.7	\$112,878,181
Urban Unzoned	8,082	100.0	\$1,148,923,107
Commercial	798	9.9	\$210,972,913
Other	998	12.3	\$161,176,708
Residential	6,286	77.8	\$776,773,486
Very High	36,853	100.0	\$2,877,756,860
Commercial	733	2.0	\$111,076,515
Other	1,962	5.3	\$127,455,750
Residential	34,158	92.7	\$2,639,224,595
Grand Total	64,036		\$7,212,515,604

Source: Lake County Data Portal⁶; City of Lake Port and City of Clearlake⁷

- 36,853 parcels fall in the very high fire hazard severity zone. 92.7% of the parcels in this zone are residential parcels and the net value of residential parcels in this zone is \$2,639,224,595.
- 9,988 parcels fall in the moderate zone. 79.4% of the parcels in this zone are residential parcels and the net value associated with the residential parcels is \$1,362,094,903. 5.59 percent of the parcels in this zone are commercial parcels and the net value associated with these parcels is \$165,399,508.

⁶ We referred to the Lake County GIS Data Portal and contacted the GIS Specialist of Lake County to obtain data on zoning and fire hazard severity zones. We obtained most recent zoning data for Lake County (01/2021), parcel assessor data (accessed during 01/2021) and fire hazard severity zones (2008) from Lake County. Zoning designations were combined to create broad land use categories (see appendix for details).

⁷ We contacted the planners from each city to obtain most recent zoning data for City of Clearlake (12/2020), and City of Lakeport (05/2018). Zoning designations were combined to create broad land use categories (see appendix for details).

Main Takeaways

- As of 2018, the mean home value of Lake County Places is relatively higher than the mean home value of Lake County, while it is noticeably lower than the mean home value of the north bordering counties and the south bordering counties. This is important because the home value is an indicator of the broader health of the housing market.
- Homeowners and renters burdened with housing costs face challenges to cover other necessities. Additionally, the wildfires pose a considerable threat to Lake County Places' homeowners and renters. As of 2018, the share of LCP renter-occupied housing units is noticeably lower than the share of renter-occupied housing units in the north and south bordering counties. However, the share of renters burdened with housing costs in Lake County Places is noticeably higher than the share in the north and south bordering counties.
- In Lake County Places, the share of homeowners burdened with housing costs grew noticeably from 2000 to 2010, most likely due to the Great Recession in 2010 and then saw a decline in 2018. However, the share of LCP homeowners burdened with housing costs has grown since 2000.
- As of 2018, the vacancy rate in LCP is noticeably higher than the vacancy rates in the north and south bordering counties.
- A high proportion of residential and commercial parcels fall within the high and very fire hazard severity zones. Over the years, development in the wildland-urban interface (WUI) has drastically increased throughout. Wildland urban interface areas are those areas where human development borders or intermingles with wildland (for instance, grassland). Development in the WUI indicates an increase in the risk associated with the community's exposure to wildfire, loss of life, and economic loss due to property damage.

Economic Profile

Introduction

This section presents characteristics measuring the economic well-being of residents, focusing on income, poverty and educational attainment. Resident economic health has a direct impact on the demand for housing, infrastructure and services within a region. We also examine household internet access, an essential infrastructure in our digital age.

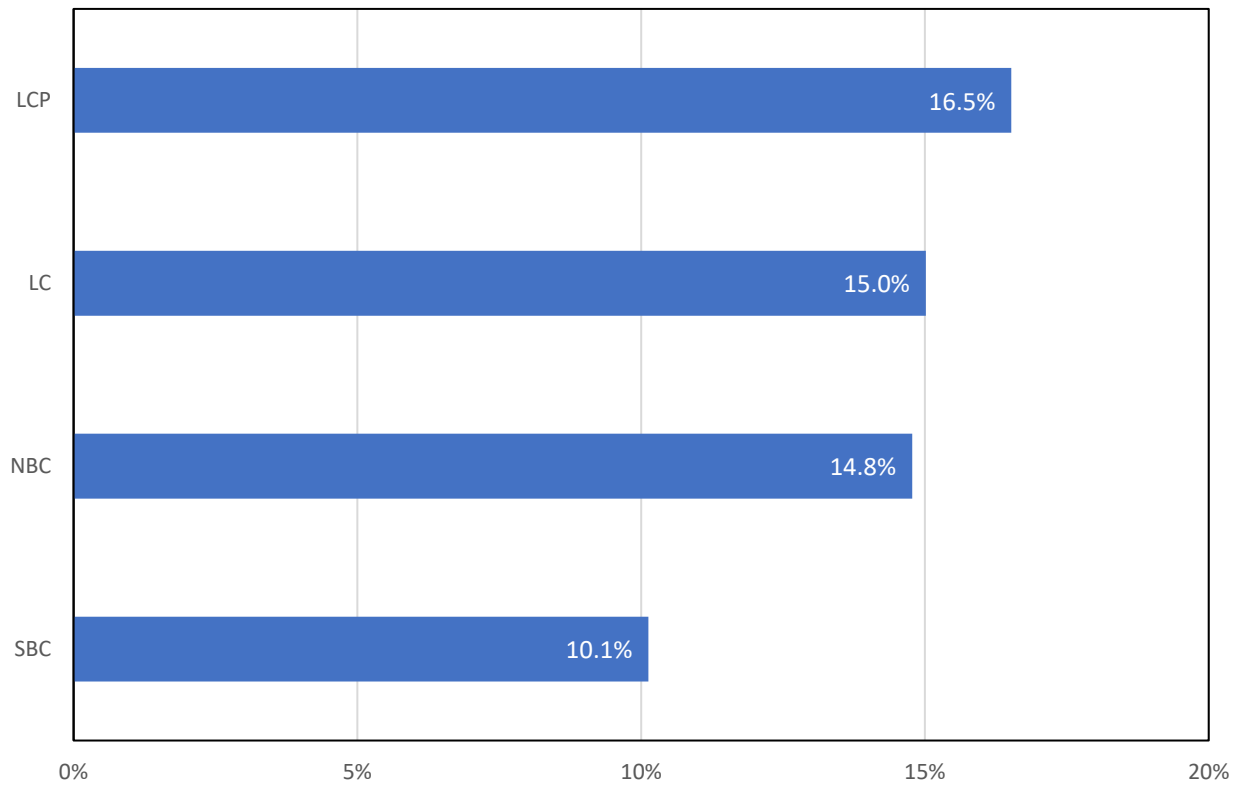
We compared Lake County Places (LCP) to three larger regions:

1. Lake County (LC).
2. The counties adjacent to the Northern border of Lake County (NBC; Colusa, Glenn, and Mendocino).
3. The counties adjacent to the Southern border of Lake County (SBC; Napa, Sonoma, and Yolo).

Poverty

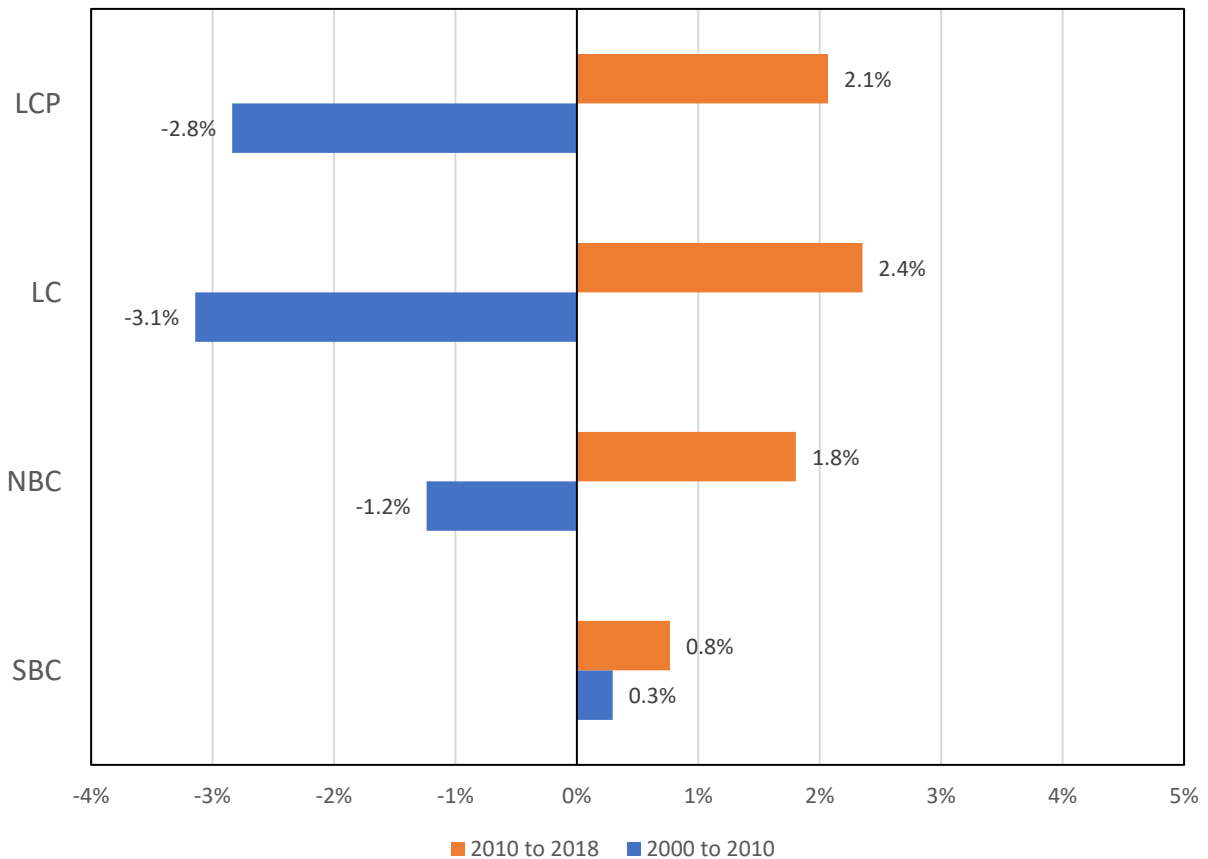
The poverty rate is the number of households whose income is below the poverty threshold divided by the total number of households. The poverty threshold, or poverty line, is the minimum level of resources that are adequate to meet basic needs. The official measure uses cash income, such as wages and salaries, Social Security benefits, interest, dividends, pension, or other retirement income. The poverty line is used to determine eligibility for federal, state, and local aid, including food stamps and health insurance.

Percent Poverty, 2018



Source: 2014-2018 American Community Survey

Change in Percent Poverty, 2000 - 2018



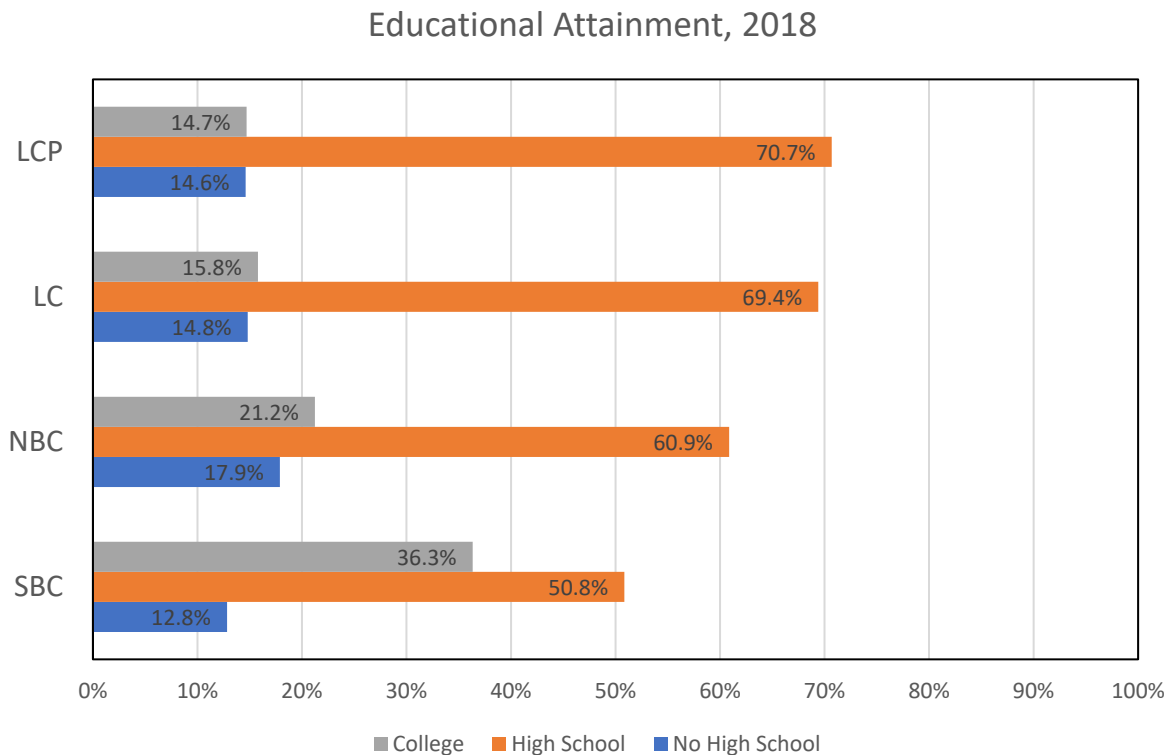
Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- Lake County Places have a higher poverty rate (16.5%) than Lake County (15.0%) and the Northern (14.8%) and Southern (10.1%) bordering areas.
- The LCP poverty rate decreased by 2.8 percentage points between 2000 and 2010 but increased by 2.1 percentage points between 2010 and 2018. Lake County experienced similar changes.
- In comparison to LCP, NBC experienced a similar increase in its poverty rate in the second half of the period, but a much smaller decrease in the first half. SBC experienced small increases in both periods.

Educational Attainment

Educational attainment measures the potential range of skills that community residents possess and the level of employment opportunities that they may obtain in the job market. It is measured as the highest educational attainment level for persons 25 years old and older. We present

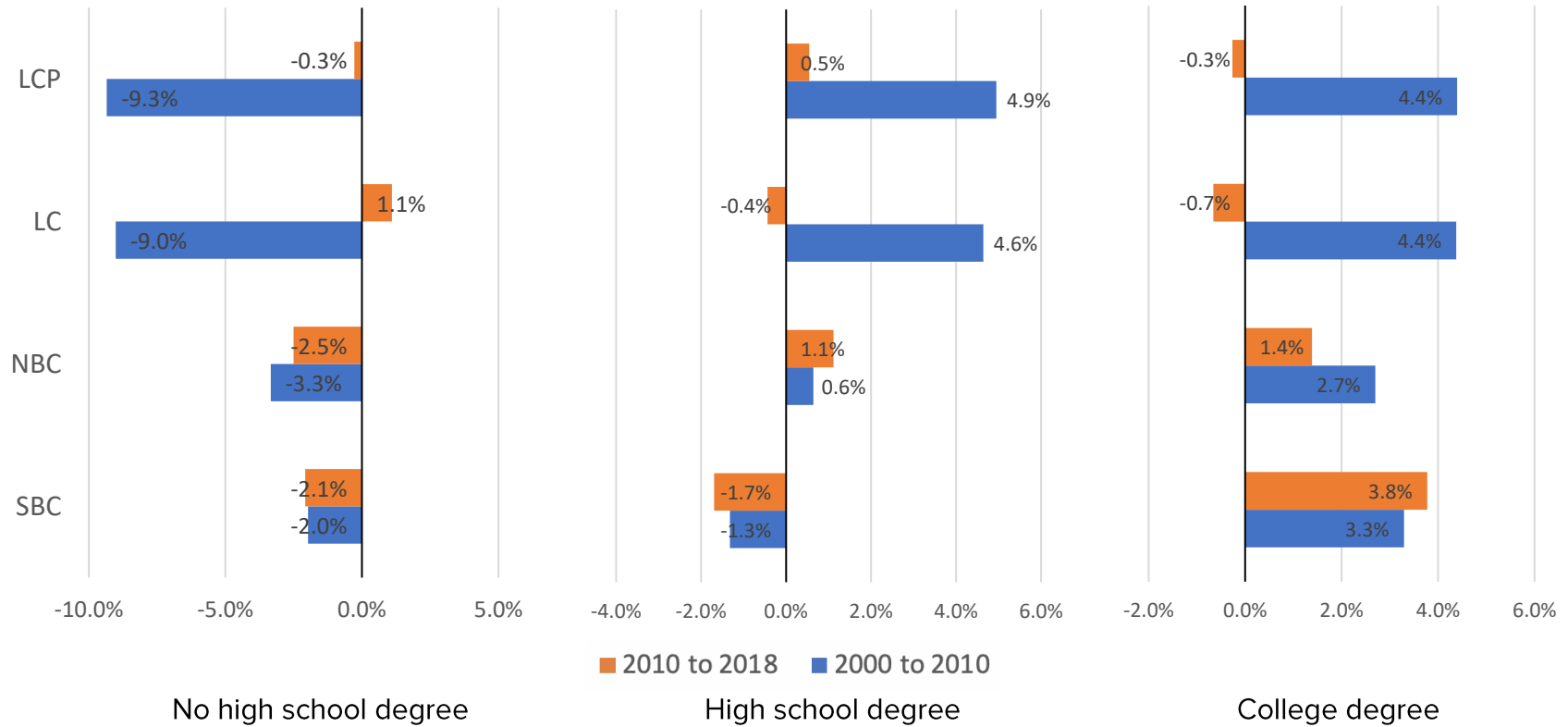
educational attainment in three categories: no high school degree, a high school degree only, and a college degree.



Source: 2014-2018 American Community Survey

- 70.7% of LCP residents possess only a high school degree, with the rest of the population nearly equally divided between no high school (14.6%) and college degree (14.7%) attainment. This distribution is similar to Lake County as a whole.
- North bordering counties have a larger share of residents with no high school degree (21.2%) compared to LCP, but has a higher share of residents with a college degree (21.2%).
- LCP experienced a substantial decrease in shares of residents with no high school degree and increases in shares of high school and college graduates between 2000 and 2010. The area experienced little to no change in educational levels since 2010. Lake County experienced similar trends.
- South bordering counties experienced the largest increase in percent college degree, with increases occurring throughout 2000 to 2018. SBC is the only area that experienced an increase in its share of residents with a college degree and decreases in both residents with no high school degree and a high school degree.

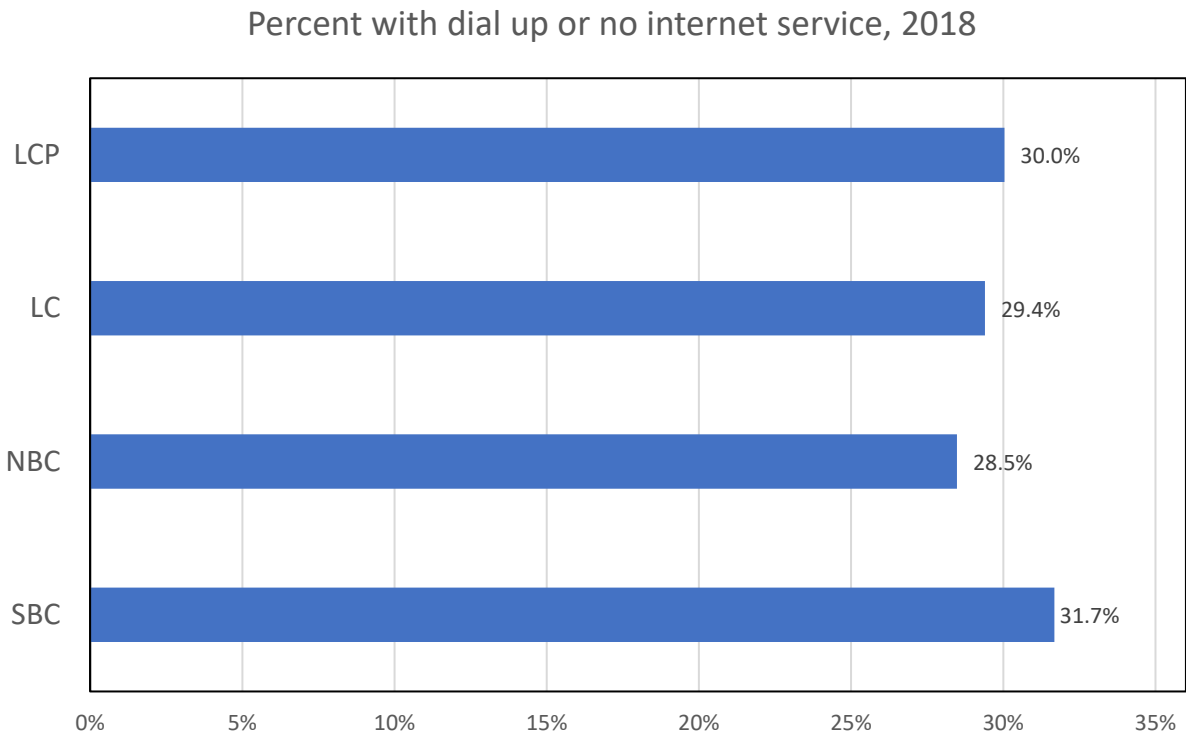
Change in educational attainment, 2000-2018



Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

Broadband Access

Broadband is high-speed internet access. By improving communication and the flow of information, broadband enhances efficiency, thus, enabling significant advances in a community's ability to compete in the regional economy. This facilitates job creation, decreases health-care costs, reduces miles driven and fossil fuels consumed, expands consumer choice, and improves competition⁸.



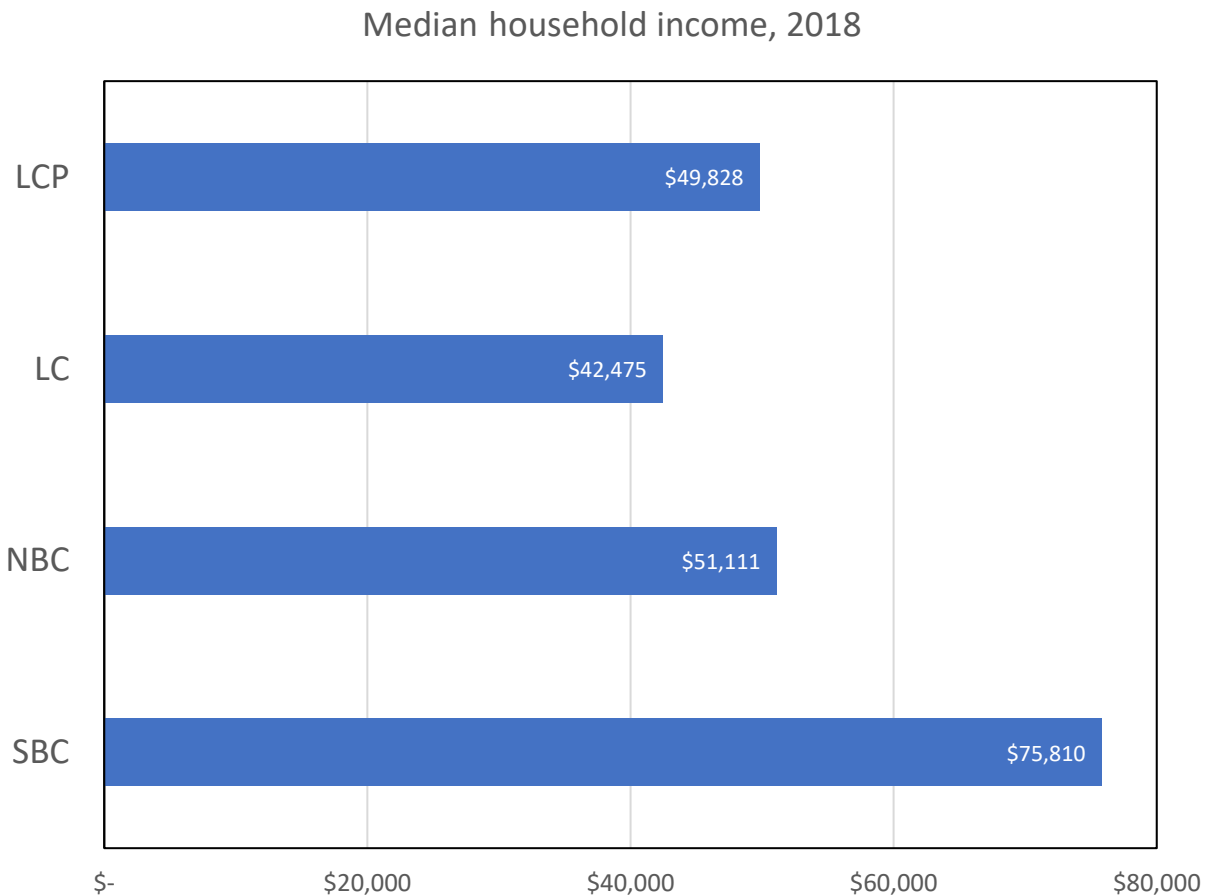
Source: 2014-2018 American Community Survey

- 30.0% of residents of Lake County Places have no or limited internet access. This percentage is comparable to Lake County as a whole, slightly larger than North bordering counties, and slightly lower than South bordering counties.

Median Household Income

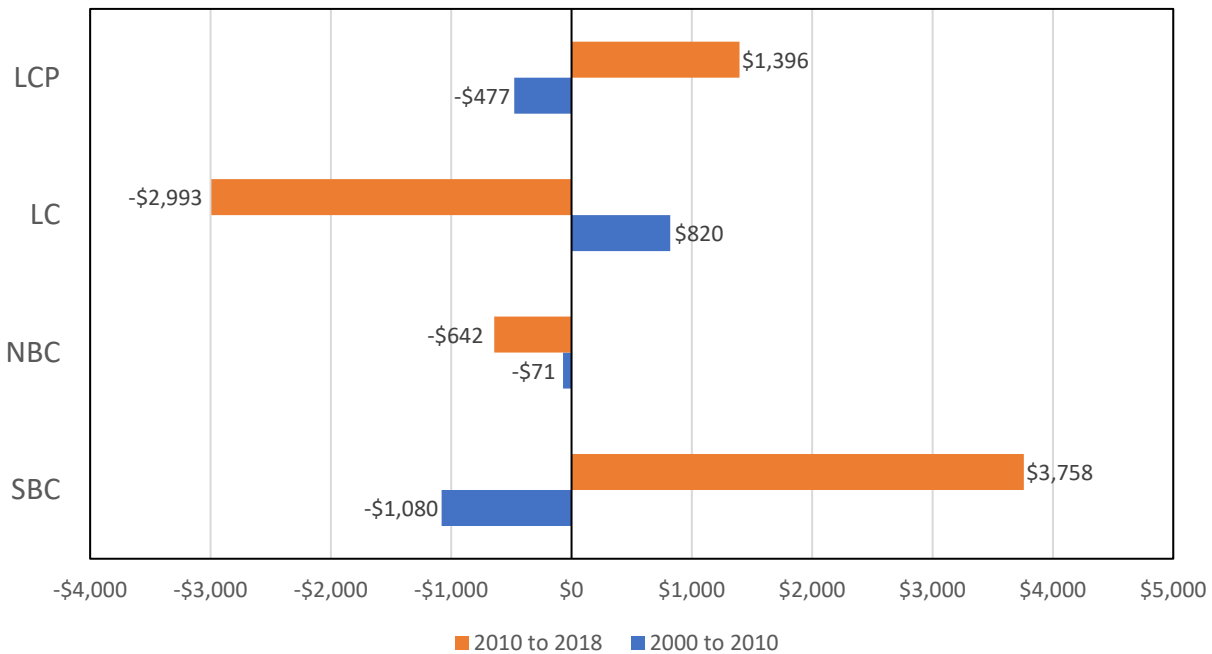
⁸ Broadband access data were not collected by the Census in 2000 or 2010

Median household income is the income level at which half of the area's households earn more and the other half earn less. It can be conceptualized as the income midpoint. It is a better measure of average income than per capita income when evaluating income growth among all economic classes. Median household income is measured in 2018 inflation adjusted dollars.



Source: 2014-2018 American Community Survey

Change in median household income, 2000-2018



Source: 2000 Decennial Census, 2006-2010 and 2014-2018 American Community Surveys

- Median household income in LCP is higher than in the rest of Lake County in 2018 (\$49,828 compared to \$42,475) but is lower compared to the North bordering counties (\$51,111) and significantly lower compared to the South bordering counties (\$75,810).
- LCP experienced a decline in median household income between 2000 and 2010 (-\$477) but an increase between 2010 and 2018 (\$1,396). Lake County experienced the reverse trend: an increase between 2000 and 2010 (\$820), but a significant decline between 2010 and 2018 (-\$2,993)
- The Northern bordering counties experienced a slight decrease between 2000-10 (-\$71) and then a much larger decrease between 2010-18 (-\$642). The Southern bordering counties experienced a significant bounce back since 2010, with median household income increasing by \$3,758 between 2010 and 2018.

Main Takeaways

- Lake County Places compare equally or favorably to Lake County across most measures of resident economic well-being. The only measure showing a greater disadvantage is the poverty rate, which is 1.5 percentage points higher in LCP relative to the county.
- LCP shows greater disadvantage relative to the bordering counties. It has a higher poverty rate, a lower percent of residents with a college degree, and a lower median household income. For some of these measures, the gap has increased since 2000, especially in comparison to the Southern bordering counties.
- Broadband access in LCP is similar to the other three areas.
- The widening gaps for most of the measures primarily occur between 2010 and 2018. In the case of poverty and educational attainment, LCP made gains in 2000-10, but either no change or regressed between 2010-18.
- The LCP experienced an increase in percent of residents with a high school degree and college degree since 2000, but the increase was primarily between 2000-10.

Workforce Profile

Introduction

The workforce plays a vital role in enhancing the economy. It is essential to understand the workforce characteristics and their trends to promote equitable economic growth. This section presents the workforce characteristics, including jobs by employed residents' characteristics (such as age, earnings, race and ethnicity, and educational attainment), industry sector, and distance to the workplace. Furthermore, this profile includes inflow, outflow, and interior job characteristics by worker age and earnings. Overall, this section provides an overview of the workforce characteristics in Lake County Places (LCP), and how these attributes have changed over time and a comparison to the broader region.

We compared Lake County Places (LCP) to three larger regions:

1. Lake County (LC).
2. The counties adjacent to the Northern border of Lake County (NBC; Colusa, Glenn, and Mendocino).
3. The counties adjacent to the Southern border of Lake County (SBC; Napa, Sonoma, and Yolo).

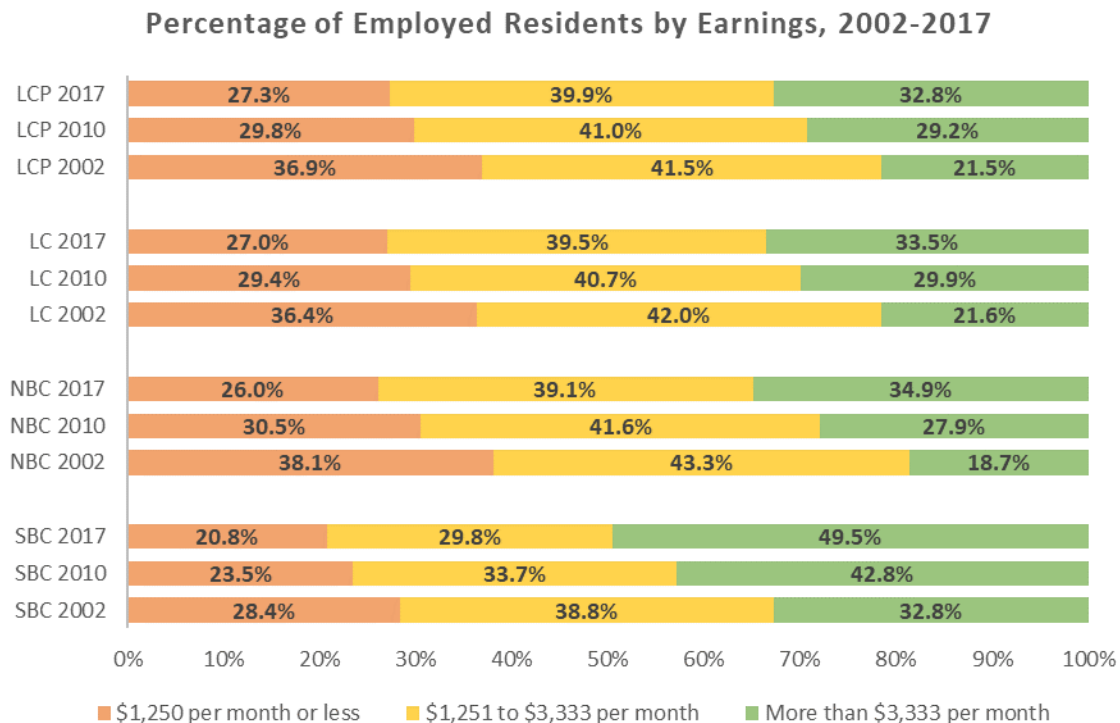
Percentage of Employed Residents by Age



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the largest age category of employed residents in Lake County Places is 30 to 54 years old (50.8% of the total).
- In Lake County Places, the share of employed residents 55 years and older has grown since 2002 (16.9% to 27.3%).
- Similarly, since 2002, the share of employed residents 55 years and older has grown in Lake County and surrounding counties.
- The share of employed residents 55 years and older is relatively higher in Lake County Places (27.3%) as compared to the north bordering counties (26.5%) and south bordering counties (25.6%).

Percentage of Employed Residents by Earnings



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- In 2017, employed residents earning \$1251 to \$3,333 per month have the largest share in Lake County Places (39.9%).
- In Lake County Places, the share of employed residents earning more than \$3,300 per month has grown since 2002 (21.5% to 32.8% of the total).

- Similarly, since 2002, the share of employed residents earning more than \$3,300 has increased in Lake County and surrounding counties. However, in 2017, the share of employed residents earning more than \$3,300 per month in the south bordering counties (49.5%) is noticeably higher than the share of employed residents earning more than \$3,300 per month in the Lake County Places (32.8%).
- In Lake County Places, the share of employed residents earning \$1250 per month or less has declined since 2002 (36.9% to 27.3% of the total)
- Similarly, since 2002, the share of employed residents earning \$1250 per month or less has declined in Lake County and surrounding counties. However, in 2017, Lake County Places has a noticeably higher share of employed residents earning \$1250 per month or less (27.3%) in comparison to the share of those in the south bordering counties (20.8%).

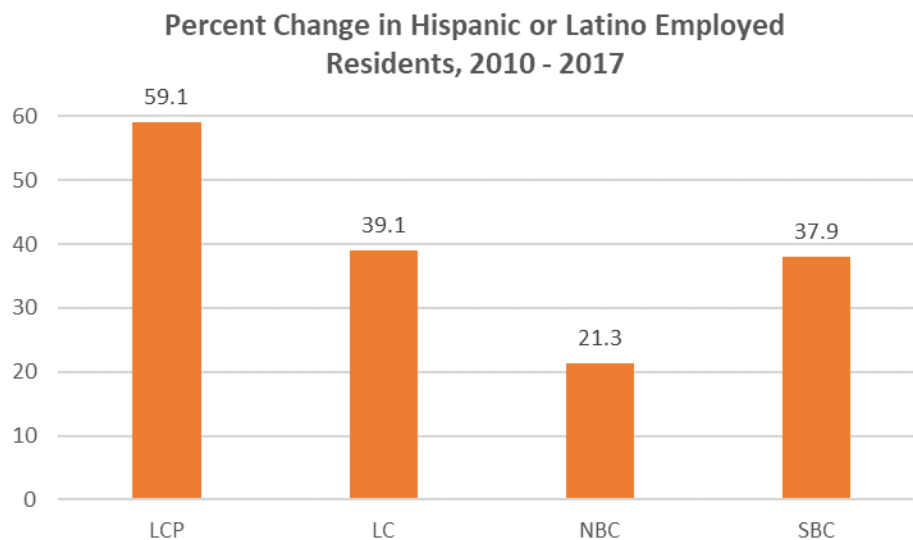
Percentage of Employed Residents by Race, 2010-2017

	White Alone	Black or African American Alone	American Indian or Alaska Native Alone	Asian Alone	Native Hawaiian or Other Pacific Islander Alone	Two or More Race Groups
LCP 2017	86.9 %	3.0%	3.2%	3.2%	0.2%	3.5%
LCP 2010	89.6 %	2.8%	2.4%	2.7%	0.2%	2.4%
LC 2017	87.1%	2.8%	3.6%	2.9%	0.3%	3.3%
LC 2010	89.7%	2.5%	2.8%	2.5%	0.3%	2.3%
NBC 2017	88.2 %	1.8%	3.5%	3.4%	0.4%	2.7%
NBC 2010	89.1%	1.7%	3.2%	3.4%	0.4%	2.2%
SBC 2017	83.9 %	3.2%	1.4%	7.9%	0.4%	3.1%
SBC 2010	86.0 %	2.8%	1.3%	7.3%	0.4%	2.3%

Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthejob.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the share of Lake County Places employed residents is predominantly white (86.9%).
- Since 2010, the share of non-white employed residents has grown in Lake County Places (10.4% to 13.1% of the total).
- Similarly, since 2010, the share of non-white employed residents has grown, in all geographies.
- As of 2017, the share of non-white employed residents in Lake County Places (13.1%) is relatively higher than share of non-white employed residents in the north

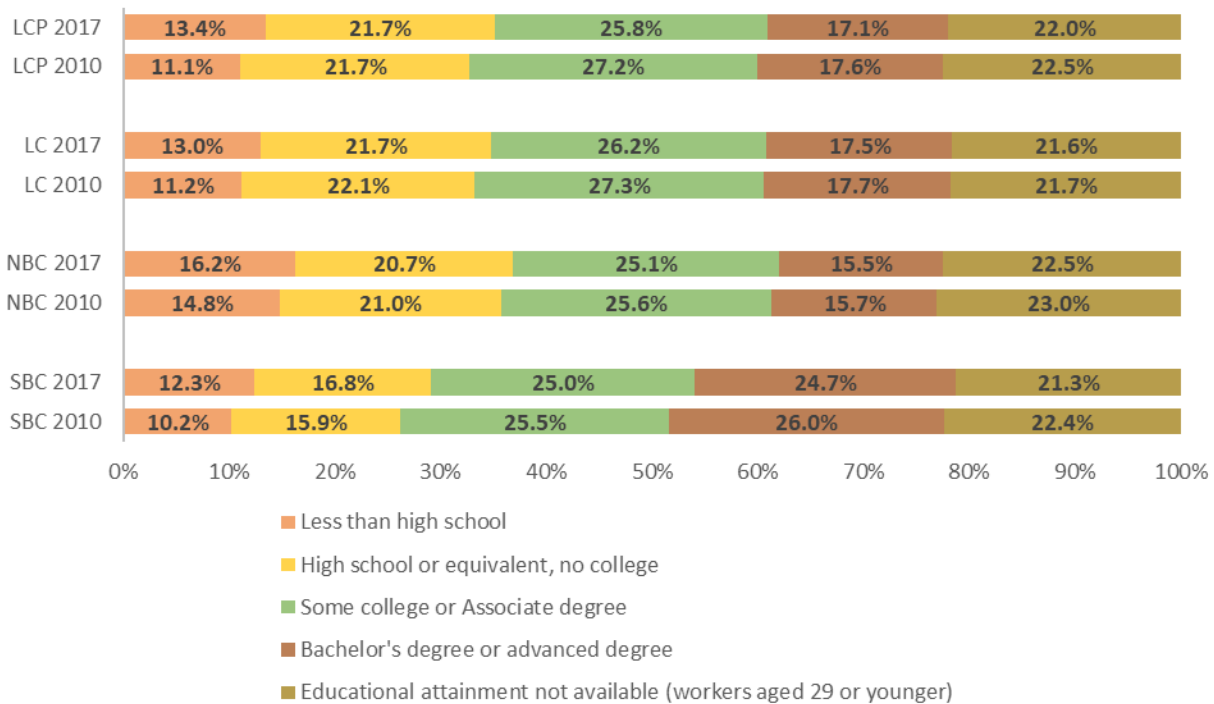
bordering counties (11.8%) and Lake County (12.9%), but relatively lower than those in the south bordering counties (16.1%).



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- The percentage of Hispanic employed residents has increased by 59.1% in Lake County Places since 2010.
- The Lake County Places experienced the highest increase (59.1%) in the percentage of Hispanic or Latino employed residents in comparison to the increase of Hispanic or Latino employed residents in Lake County (39.1%), the north bordering counties (21.3%) and the south bordering counties (37.9%).

Percentage of Employed Residents by Educational Attainment, 2002-2017

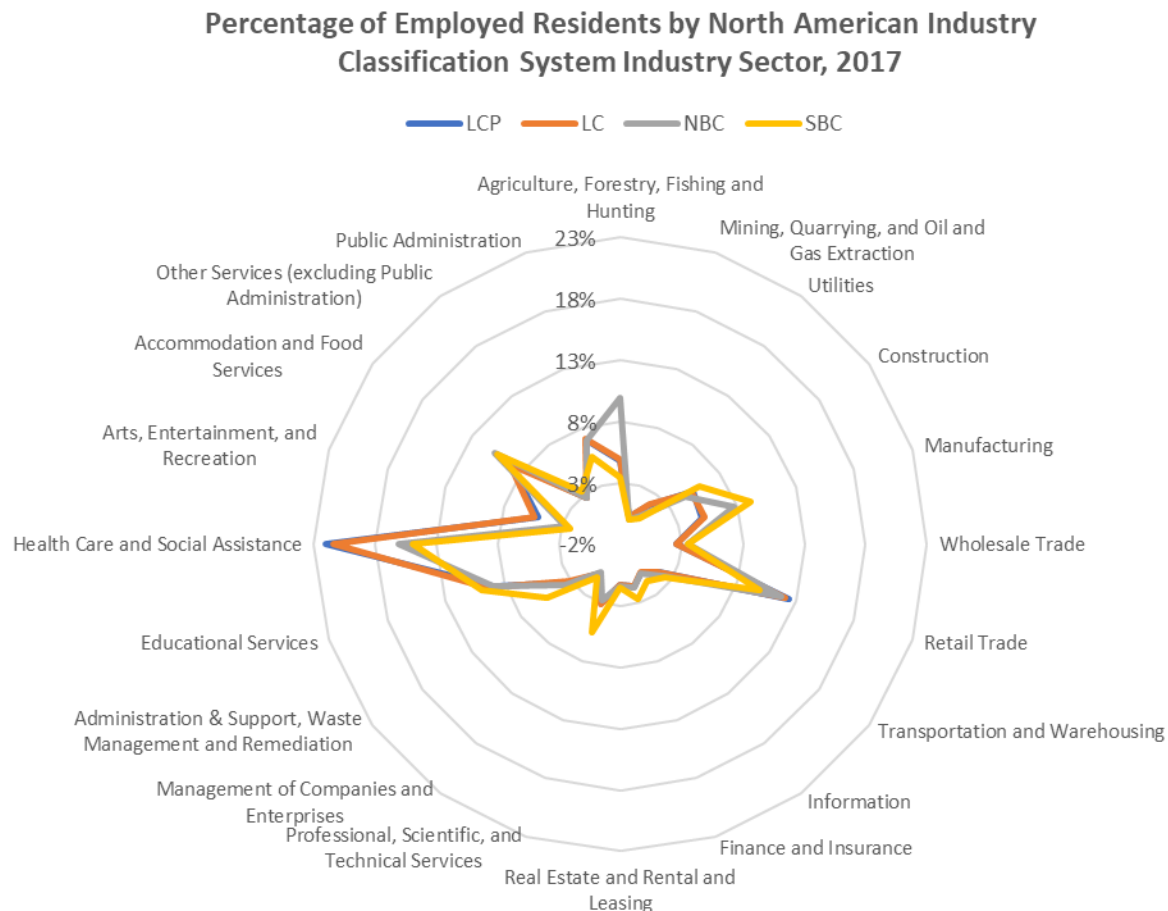


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, employed residents with some college or Associate degree represent the largest share in Lake County Places (25.8%).
- The share of employed residents with less than a high school degree has relatively grown in LCP since 2010 (11.1% to 13.4% of the total).
- Similarly, since 2010, the share of employed residents with less than a high school degree has grown in Lake County and surrounding counties. However, in 2017, the share of employed residents with less than a high school degree in LCP is lower as compared to those in the north bordering counties (16.2%), but relatively higher than those in the south bordering counties (12.3%).
- As of 2017, the share of employed residents with a bachelor's degree or advanced degree in Lake County Places (17.1%) is noticeably lower than the share of employed residents with a bachelor's degree or advanced degree in south bordering counties (24.7%).

Percentage of Employed Residents by North American Industry Classification Industry Sector

Federal agencies use the North America Industry Classification System (NAICS) to classify business establishments mainly for tabulation and statistical analysis. The 2-digit NAICS represent industry sectors.

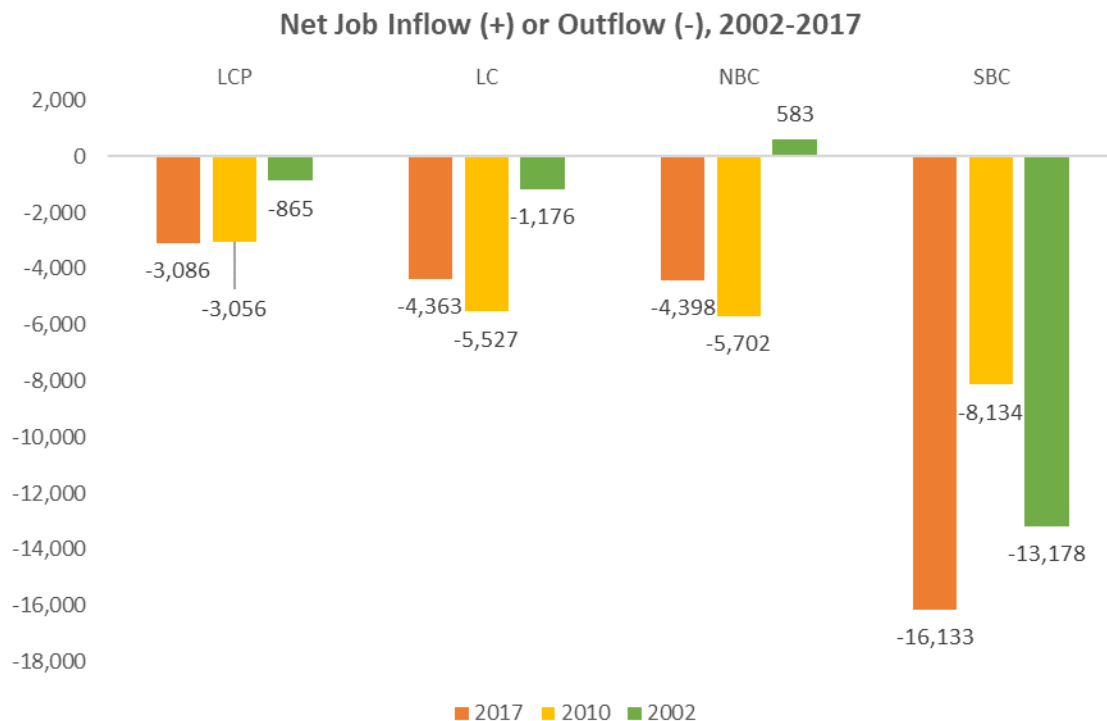


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the Health Care and Social Assistance sector had the highest share of employed residents (22.1%) in Lake County Places.
- Similarly, the Health Care and Social Assistance sector represents the highest share of employed residents in other communities. However, the share of Health Care and Social Assistance sector employed residents (22.1%) in the Lake County Places is higher as compared to those in Lake County (21.4%) and surrounding counties (NBC:16.1%; SBC: 15%).

Net Job Inflow (+) or Outflow (-)

Net job inflow/outflow indicates whether a given area is a labor force magnet or provider.

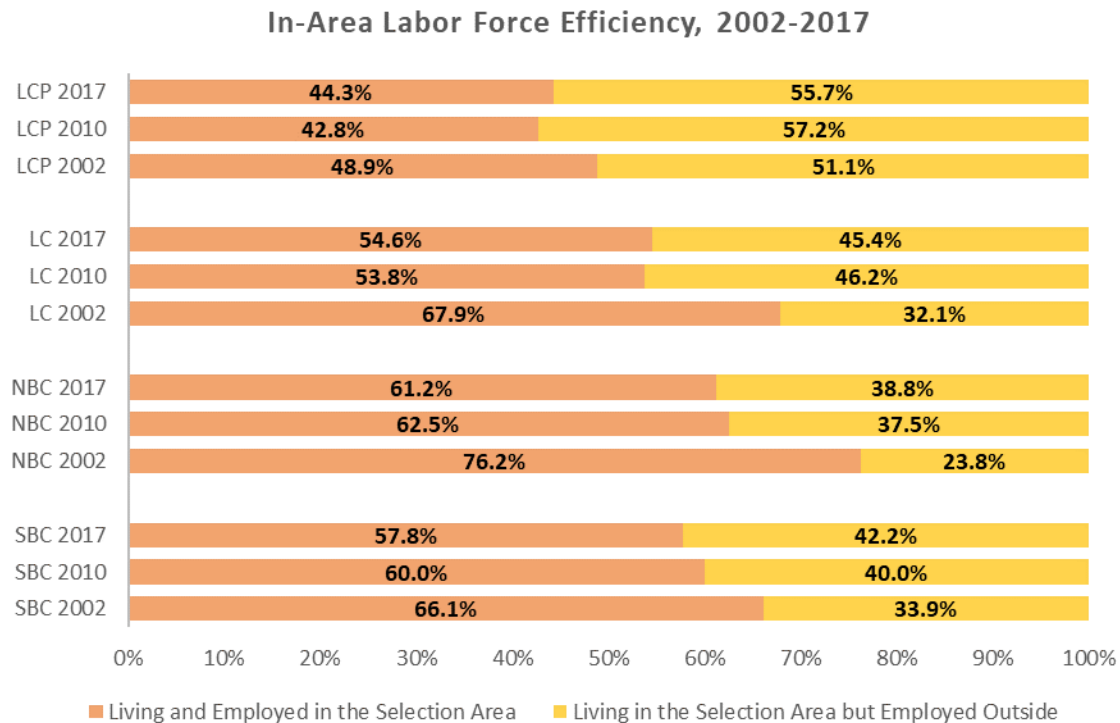


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, Lake County Places demonstrates a net outflow of 3086 workers for employment.
- In LCP, the net outflow of workers has grown since 2002.
- Similarly, the net outflow of workers has increased in Lake County and surrounding counties since 2002.

In-Area Labor Force Efficiency

In-Area labor efficiency presents the share of employed residents that work in the given area and outside the given area.

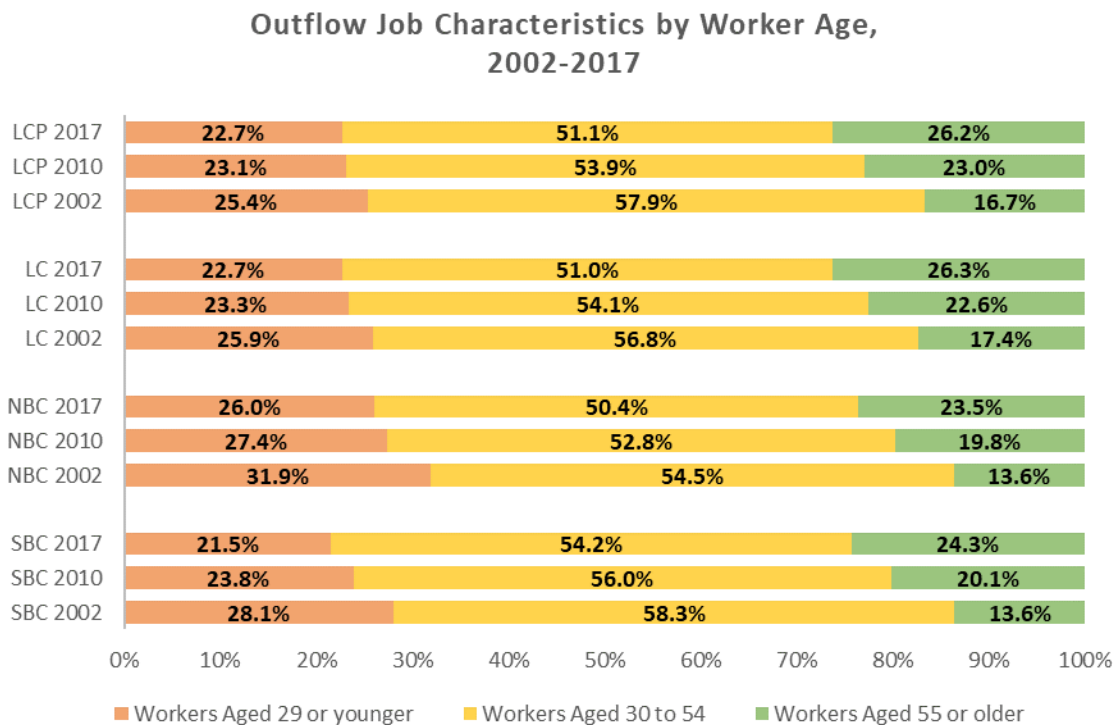


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, in Lake County Places, the share of LCP residents employed outside LCP is higher (55.7%) than the share of residents employed in LCP.
- The share of LCP residents working outside LCP has relatively grown since 2002 (51.1% to 55.7% of the total).
- Similarly, since 2002, the share of residents working outside their area of residence has grown in Lake County and surrounding counties. However, in 2017, the share of LCP employed residents working outside LCP (55.7%) is noticeably higher compared to those in Lake County (45.4%), the north bordering counties (38.8%), south bordering counties (42.2%).

Outflow Job Characteristics

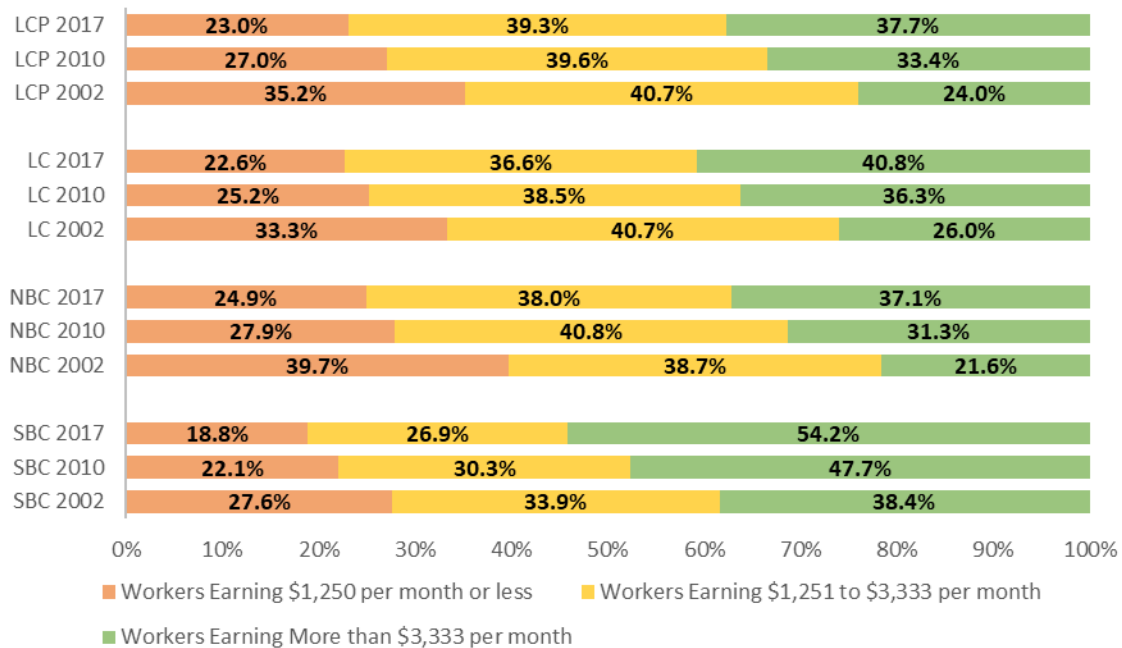
Outflow jobs represent the external jobs filled by residents of the selection area. The following two charts present the outflow job characteristics by age and earnings, respectively.



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the largest age category of outflow workers in Lake County Places is 30 to 54 years old (51.1% of the total). However, this group of workers has declined since 2002.
- In Lake County Places, the share of 55 years and older outflow workers has grown since 2002 (16.7% to 26.2%)
- Similarly, since 2002, the share of 55 years and older outflow workers has grown in Lake County and surrounding counties.
- As of 2017, the share of 55 years and older workers is relatively higher in the Lake County Places (26.2%) as compared to those in the north bordering counties (23.5%) and south bordering counties (24.3%).

Outflow Job Characteristics by Worker Earnings, 2002-2017

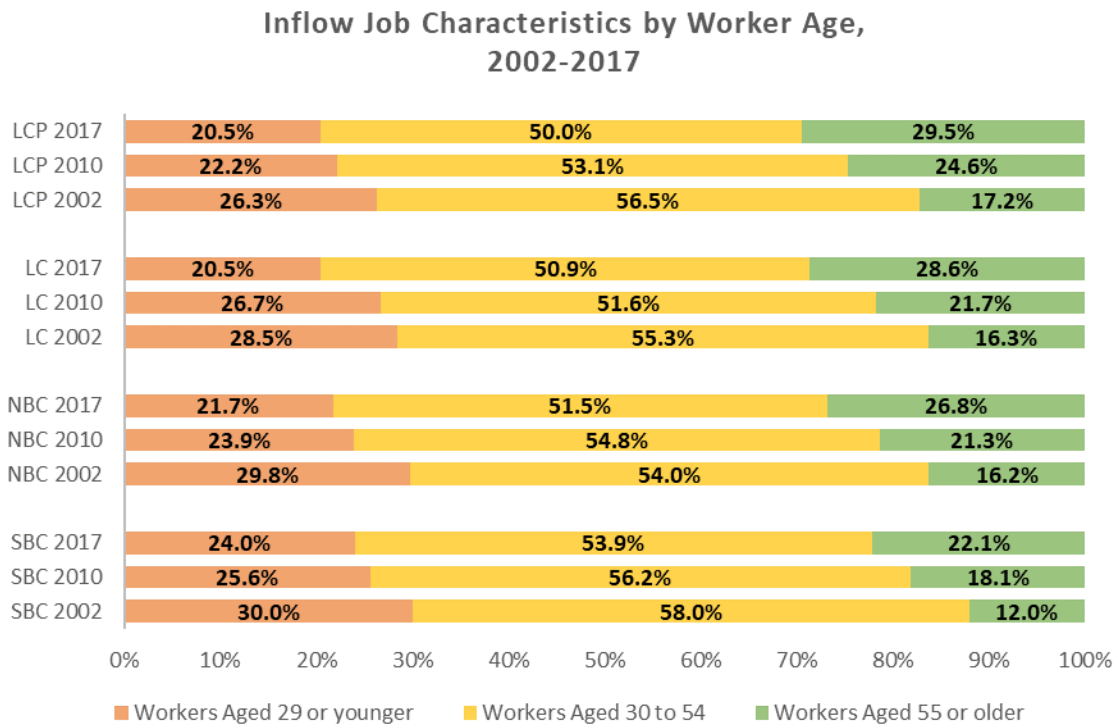


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- In 2017, outflow workers earning \$1251 to \$3,333 per month have the largest share in Lake County Places (39.3%).
- In Lake County Places, the share of outflow workers earning more than \$3,300 per month has grown since 2002 (24% to 37.7% of the total).
- Similarly, since 2002, the share of outflow workers earning more than \$3,300 has increased in Lake County and surrounding counties. However, in 2017, the share of outflow workers earning more than \$3,300 per month in the south bordering counties (54.2%) is noticeably higher than the share of workers earning more than \$3,300 per month in Lake County Places (37.7%).
- In Lake County Places, the share of workers earning \$1250 per month or less has declined since 2002 (35.2% to 23% of the total)
- Similarly, since 2002, the share of workers earning \$1250 per month or less has declined in Lake County and surrounding counties. However, in 2017, Lake County Places has a noticeably higher share of workers earning \$1250 per month or less (23%) in comparison to those in the south bordering counties (18.8%).

Inflow Job Characteristics

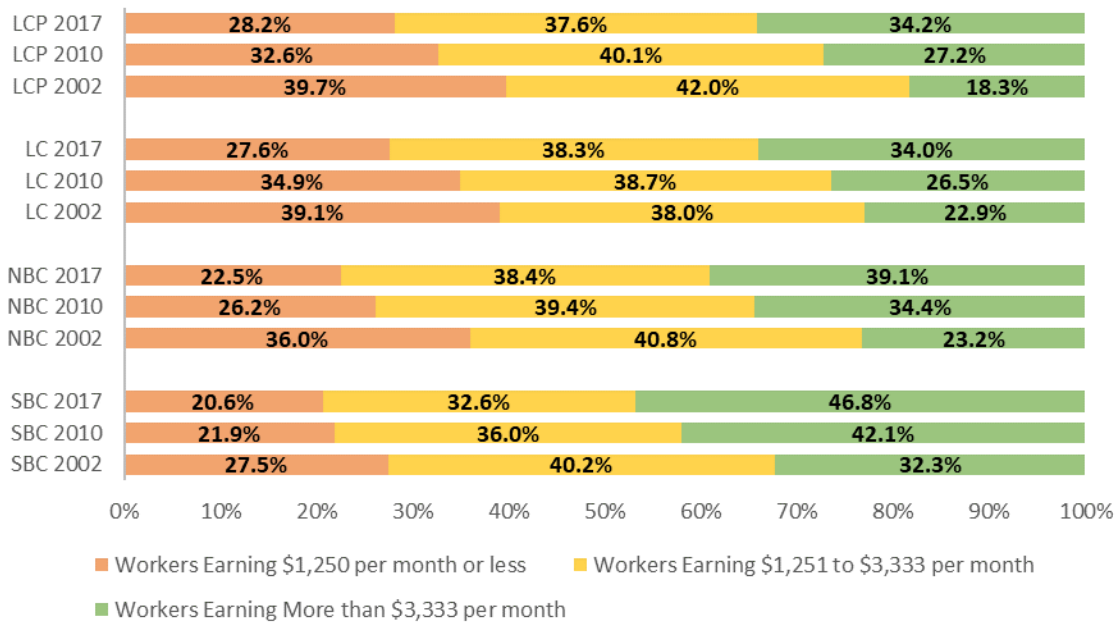
Inflow jobs represent the internal jobs in a selection area filled by outside workers. The following two charts present the inflow job characteristics by age and earnings, respectively.



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the largest age category of outside workers in Lake County Places is 30 to 54 years old (50% of the total). However, this age group of workers has declined since 2002.
- In Lake County Places, the share of 55 years and older outside workers has grown since 2002 (17.2% to 29.5%)
- Similarly, since 2002, the share of 55 years and older outside workers has grown in Lake County and surrounding counties.
- As of 2017, the share of 55 years and older outside workers is relatively higher in the Lake County Places (29.5%) as compared to those in the north bordering counties (26.8%) and south bordering counties (22.1%).

Inflow Work Characteristics by Worker Earnings, 2002-2017

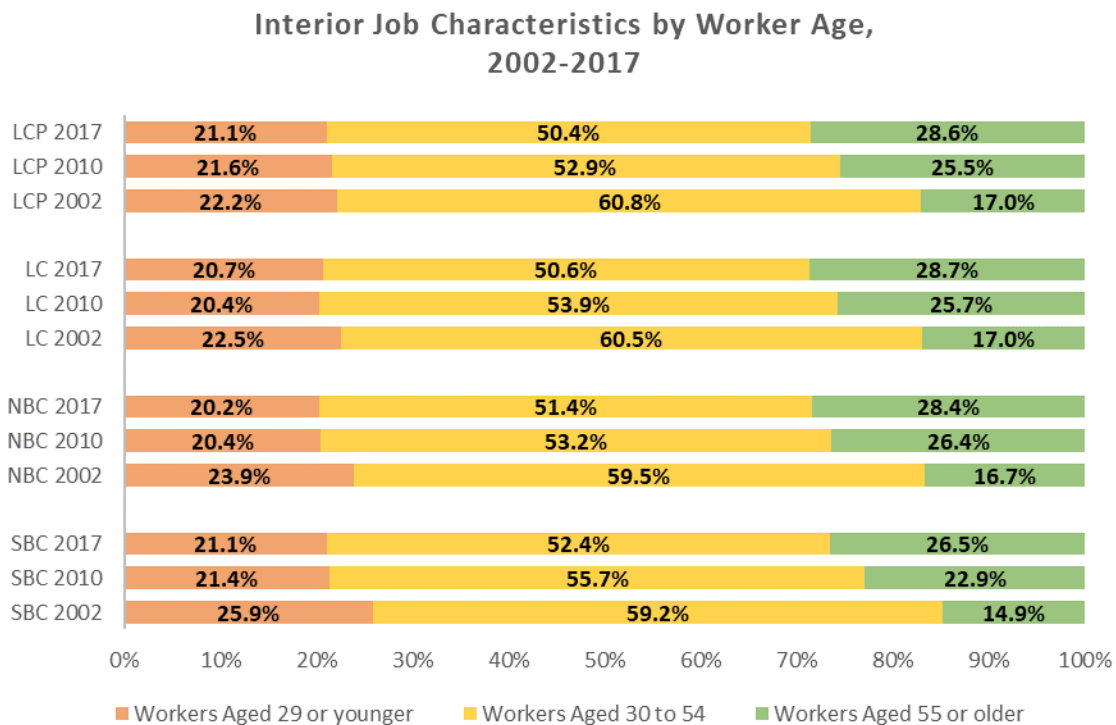


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- In 2017, outside workers earning \$1251 to \$3,333 per month have the largest share in Lake County Places (37.6%).
- In Lake County Places, the share of outside workers earning more than \$3,300 per month has grown since 2002 (18.3% to 34.2% of the total).
- Similarly, since 2002, the share of outside workers earning more than \$3,300 has increased in Lake County and surrounding counties. However, in 2017, the share of outflow workers earning more than \$3,300 per month in the south bordering counties (46.8%) is noticeably higher than the share of workers earning more than \$3,300 per month in Lake County Places (34.2%).
- In Lake County Places, the share of workers earning \$1250 per month or less has declined since 2002 (39.7% to 28.2% of the total)
- Similarly, since 2002, the share of workers earning \$1250 per month or less has declined in Lake County and surrounding counties. However, in 2017, Lake County Places has a noticeably higher share of workers earning \$1250 per month or less (28.2%) in comparison to the south bordering counties (20.6%).

Interior Job Characteristics

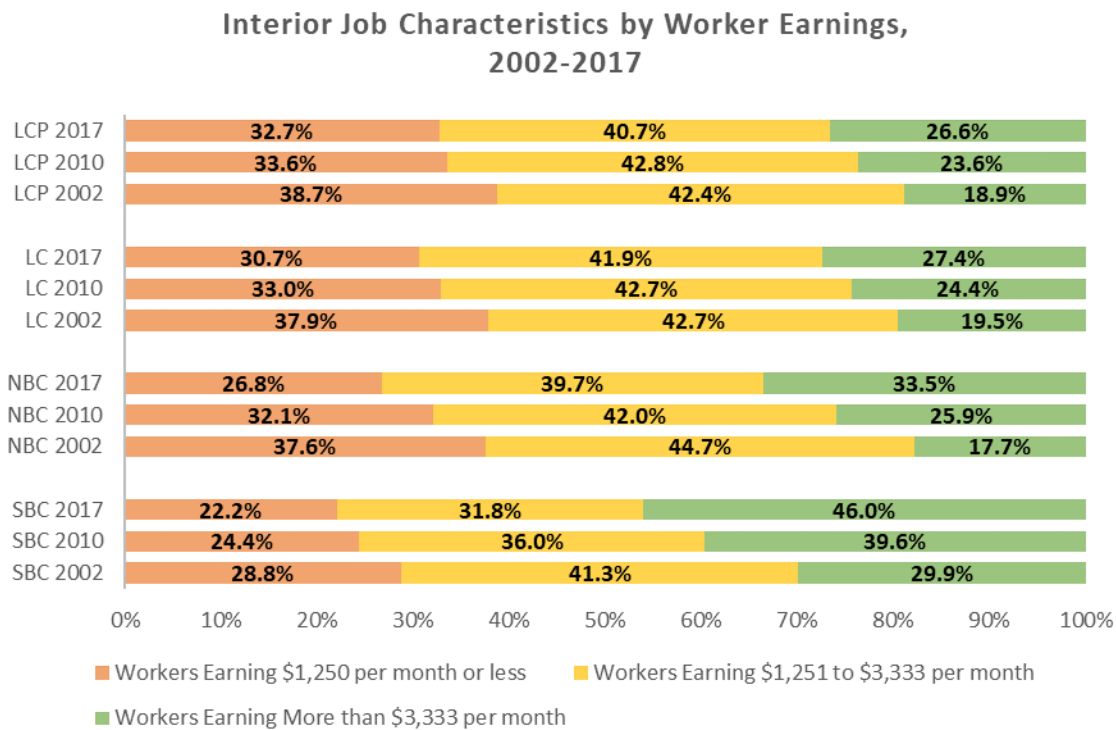
Interior jobs represent the internal jobs filled by residents. The following two charts present the interior job characteristics by age and earnings, respectively.



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the largest age category of interior workers in Lake County Places is 30 to 54 years old (50.4% of the total). However, this age group of workers has declined since 2002.
- In Lake County Places, the share of 55 years and older interior workers has grown since 2002 (17% to 28.6%)
- Similarly, since 2002, the share of 55 years and older interior workers has grown in Lake County and surrounding counties.
- As of 2017, the share of 55 years and older interior workers is relatively higher in the Lake County Places (28.6 %) as compared to those in the south bordering counties (26.5%).

Interior Job Characteristics by Earnings

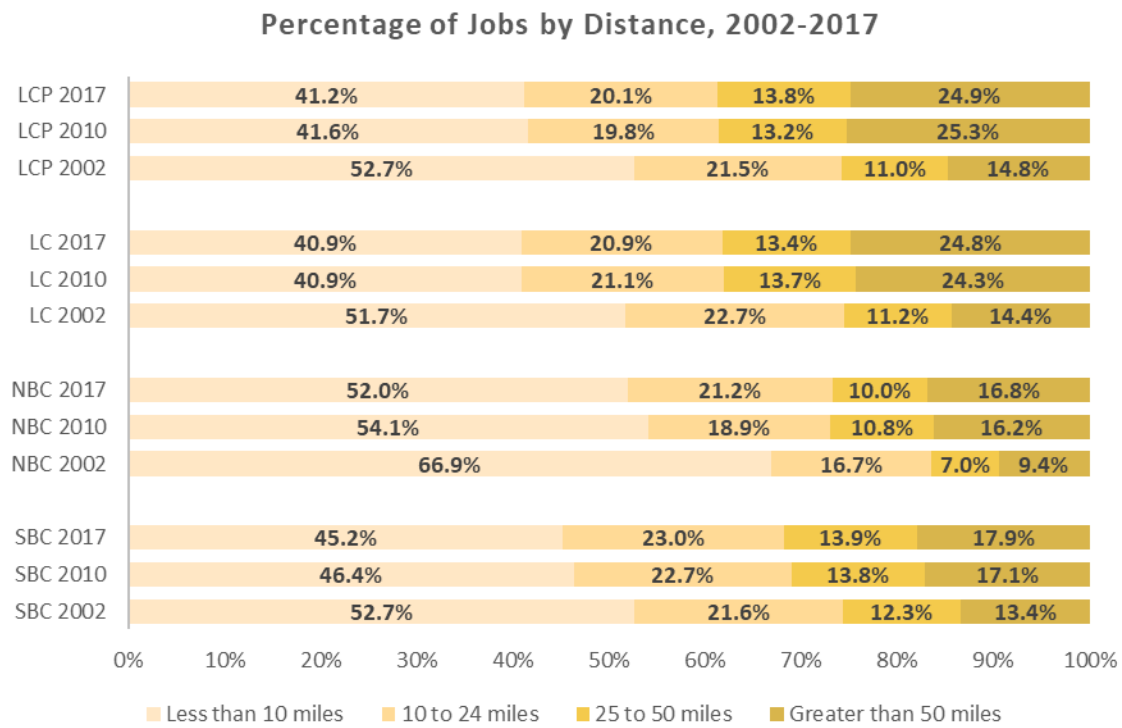


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, interior workers earning \$1251 to \$3,333 per month have the largest share in Lake County Places (40.7%).
- In Lake County Places, the share of interior workers earning more than \$3,300 per month has grown since 2002 (18.9% to 26.6% of the total).
- Similarly, since 2002, the share of interior workers earning more than \$3,300 has increased in Lake County and surrounding counties. However, in 2017, the share of interior workers earning more than \$3,300 per month in the south bordering counties (46 %) is noticeably higher than the share of workers earning more than \$3,300 per month in Lake County Places (26.6%).
- In Lake County Places, the share of workers earning \$1250 per month or less has declined since 2002 (38.7% to 32.7% of the total)
- Similarly, since 2002, the share of workers earning \$1250 per month or less has declined in Lake County and surrounding counties. However, in 2017, Lake County Places has a noticeably higher share of workers earning \$1250 per month or less (32.7% of the total) in comparison those of the north (26.8%) and south bordering counties (22.2% of the total).

Jobs by Distance

This measure indicates the percentage of jobs by distance for a given area.



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthejob.ces.census.gov>. LODS 7.4 [version]

- As of 2017, in Lake County Places, jobs within 10 miles account for the largest share (41.2%).
- In Lake County Places, the share of jobs within 10 miles has declined since 2002 (52.7% to 41.2% of the total). In contrast, the share of jobs beyond 50 miles has grown since 2002 (14.8% to 24.9%)
- Similarly, since 2002, the share of jobs within 10 miles has declined in Lake County and surrounding counties. However, as of 2017, the share of jobs in LCP within 10 miles (41.2%) is lower than those in the south bordering counties (45.2 %) and north bordering counties (52%). In contrast, as of 2017, the share of jobs in LCP beyond 50 miles (24.9%) is relatively higher than those in the north (16.8%) and south bordering counties (17.9%)

Work Destination

This measure identifies the top five cities where Lake County Places residents are employed.

Work destination by cities, 2002-2017

Top 5 cities for LCP Residents	2017	2002
Lakeport city, CA	12.5%	21.8%
Clearlake city, CA	11.8%	9.0%
Santa Rosa city, CA	4.1%	4.0%
Ukiah city, CA	2.9%	2.3%
Hidden Valley Lake CDP, CA	2.9%	1.2%

Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://ontheemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the top five cities where LCP employed residents work are cities of Lakeport (12.5%), Clearlake (11.8%), Santa Rosa (4.1%), Ukiah (2.9%), and Hidden Valley Lake CDP (2.9%).
- The share of LCP employed residents working in the City of Lakeport has declined since 2002 (21.8% to 12.5%). In contrast, since 2002, the share of LCP employed residents working in Clear Lake City and Hidden Valley Lake CDP has grown since 2002. The other two cities have remained relatively the same.

Main Takeaways

- In Lake County Places, the share of employed residents 55 years and older has grown since 2002. Furthermore, the share of employed residents 55 years and older is relatively higher in Lake County Places than those in the north and south bordering counties.
- In Lake County Places, the share of employed residents earning more than \$3,300 per month has grown since 2002. Since 2002, the share of employed residents earning more than \$3,300 has increased in Lake County and surrounding counties. However, in 2017, the share of employed residents earning more than \$3,300 per month in the south bordering counties is noticeably higher than the share of employed residents earning more than \$3,300 per month in the Lake County Places. Alternatively, as of 2017, Lake County Places has a noticeably higher share of employed residents earning \$1250 per month or less compared to the share of those in the south bordering counties.
- Since 2010, the share of non-white employed residents has grown in Lake County Places. Lake County Places also experienced the highest increase in the percentage of Hispanic or Latino employed residents compared to the increase of

Hispanic or Latino employed residents in Lake County, the north bordering and the south bordering counties.

- As of 2017, the share of employed residents with a bachelor's degree or advanced degree in Lake County Places is noticeably lower than that of employed residents with a bachelor's degree or advanced degree in the south bordering counties.
- As of 2017, Lake County Places demonstrates a net outflow of workers for employment. Additionally, in Lake County Places, the share of LCP residents employed outside LCP is higher than the share of residents employed in LCP. The percentage of LCP residents working outside LCP has relatively grown since 2002.
- In LCP, the share of workers (outflow, inflow, and interior), earning more than \$3300 per month, has grown since 2002. However, as of 2017, the share of outflow workers (37.7%) earning 3300 per month is noticeably higher than LCP outside workers (34.2%) and LCP interior workers (26.6%).
- In Lake County Places, the share of jobs within 10 miles has declined since 2002. In contrast, the share of jobs beyond 50 miles has grown since 2002. Furthermore, as of 2017, the share of jobs in LCP beyond 50 miles is relatively higher than that in the north and south bordering counties.

Industry Profile

Introduction

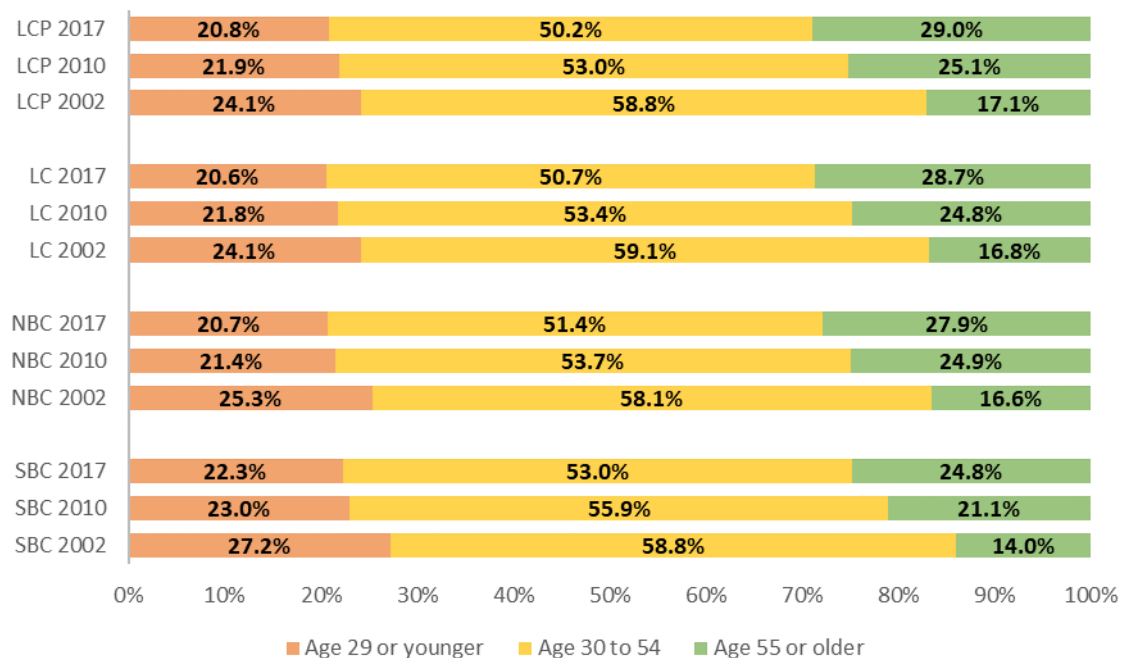
Industries provide employment and stimulate the local economy, creating opportunities for more supporting businesses. For this domain, we assess industries and firms' presence in the respective communities to help inform policy to promote economic growth. This presence is measured based on the characteristics of the employees working in these communities and the attributes of the private firms in these communities. This section provides an overview of the industries and firms' presence in Lake County Places and how their attributes have changed over time, compared to the broader region.

We compared Lake County Places (LCP) to three larger regions:

1. Lake County (LC).
2. The counties adjacent to the Northern border of Lake County (NBC; Colusa, Glenn, and Mendocino).
3. The counties adjacent to the Southern border of Lake County (SBC; Napa, Sonoma, and Yolo).

Employee Characteristics

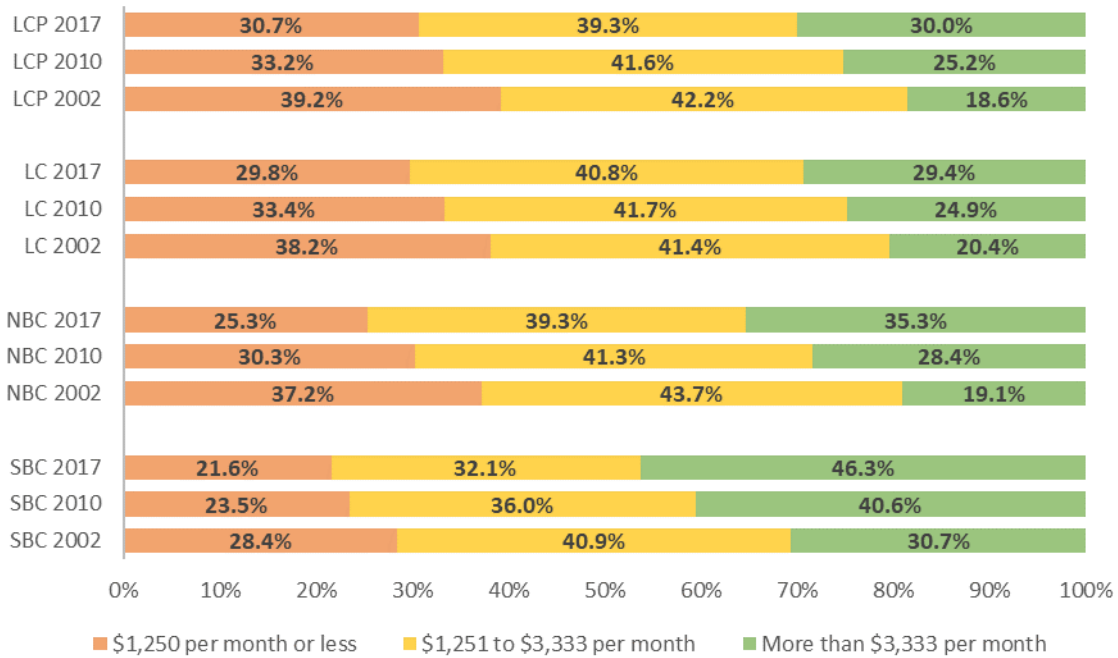
Jobs by Worker Age, 2002-2017



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the largest age category of workers in the Lake County Places is 30 to 54 years old (50.2% of the total)
- In LCP, the share of workers 55 years and older has grown since 2002 (17.1% to 29% of the total)
- Similarly, since 2002, the share of workers 55 years and older has grown in Lake County and neighboring counties.
- The share of workers 55 and older is relatively higher in Lake County Places (29%) as compared to Lake County (28.7%), north bordering counties (27.9%) and south bordering counties (24.8%)

Jobs by Worker Earnings, 2002-2017



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, workers earning \$1251 to \$3,333 per month have the largest share in Lake County Places (39.3%)⁹.
- In LCP, the share of workers earning more than \$3,300 has grown since 2002 (18.6% to 30% of the total).
- Similarly, since 2002, the share of workers earning more than \$3,300 has increased in Lake County and surrounding counties. However, in 2017, the share of workers earning more than \$3,300 (46.3%) in the south bordering counties is relatively higher than the share of workers earning more than \$3,300 (30%) in LCP.
- In LCP, the share of workers earning \$1250 per month or less has declined since 2002 (39.2% to 30.7% of the total)
- Similarly, since 2002, the share of workers earning \$1250 per month or less has declined in Lake County and neighboring counties. However, in 2017, LCP has a higher share of workers earning \$1250 per month or less (30.7%) in comparison to

⁹ The chart presents salary categories predefined by LEHD.

the share of those workers in the north bordering counties (25.3%) and south bordering counties (21.6%).

Jobs by Worker Race, 2010-2017

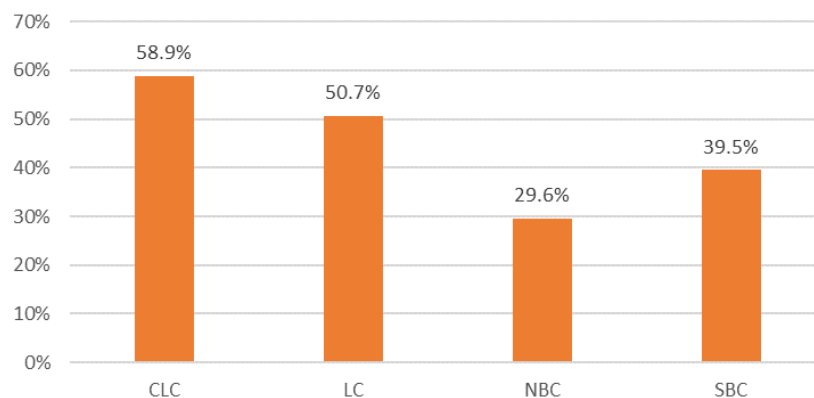
	White Alone	Black or African American Alone	American Indian or Alaska Native Alone	Asian Alone	Native Hawaiian or Other Pacific Islander Alone	Two or More Race Groups
LCP 2017	86.1%	3.0%	3.8%	3.6%	0.2%	3.3%
LCP 2010	88.1%	2.6%	3.2%	3.2%	0.3%	2.6%
LC 2017	85.7%	2.9%	4.4%	3.4%	0.3%	3.3%
LC 2010	87.8%	2.5%	3.6%	3.2%	0.3%	2.5%
NBC 2017	88.0%	1.7%	3.7%	3.7%	0.3%	2.6%
NBC 2010	88.9%	1.8%	3.2%	3.6%	0.3%	2.1%
SBC 2017	81.3%	4.3%	1.4%	9.3%	0.5%	3.2%
SBC 2010	82.8%	3.8%	1.2%	9.4%	0.4%	2.4%

Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- Since 2010, the share of non-white workers has grown in Lake County Places.
- Similarly, since 2010, the share of non-white workers has grown in all geographies.
- As of 2017, the share of non-white workers in LCP (13.9%) is relatively higher than north bordering counties (12%) but relatively lower than Lake County (14.3%) and the south bordering counties (18.7%).

Jobs by Hispanic Ethnicity

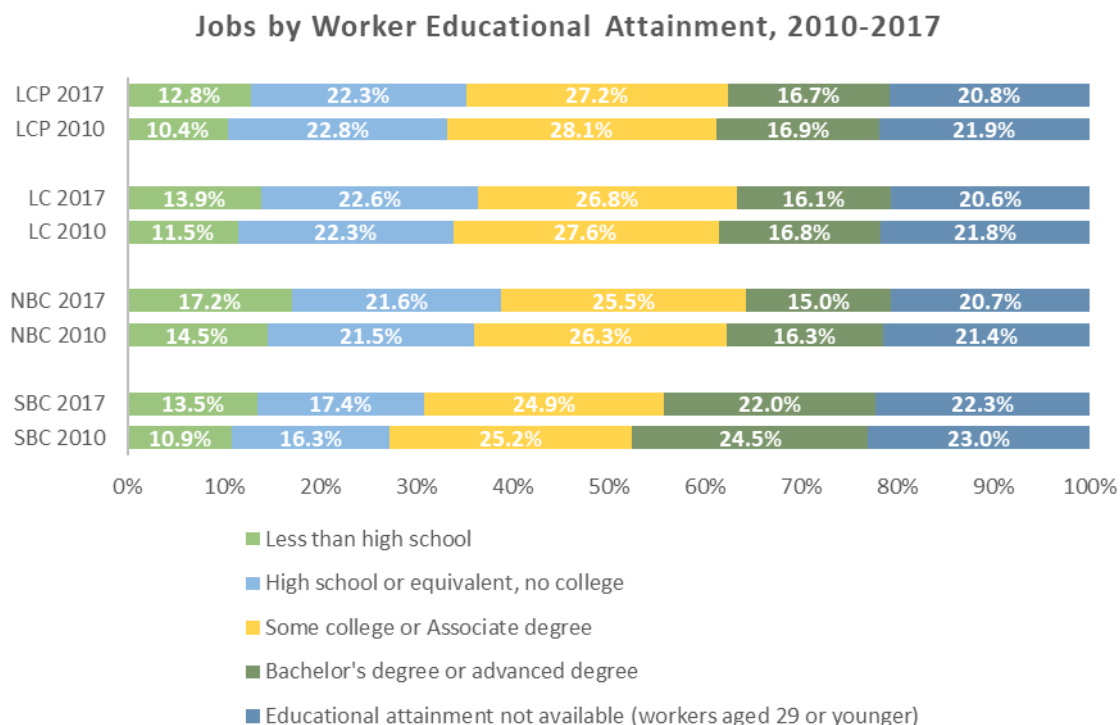
Percent Change in Hispanic or Latino Workers, 2010-2017



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- The percentage of Hispanic workers has increased by 58.9% in Lake County Places since 2010.
- LCP has the highest increase (58.9%) in the percentage of Hispanic or Latino workers in comparison to the increase of Hispanic or Latino workers in the north bordering counties (29.6%) and south bordering counties (39.5%).

Jobs by Worker Educational Attainment



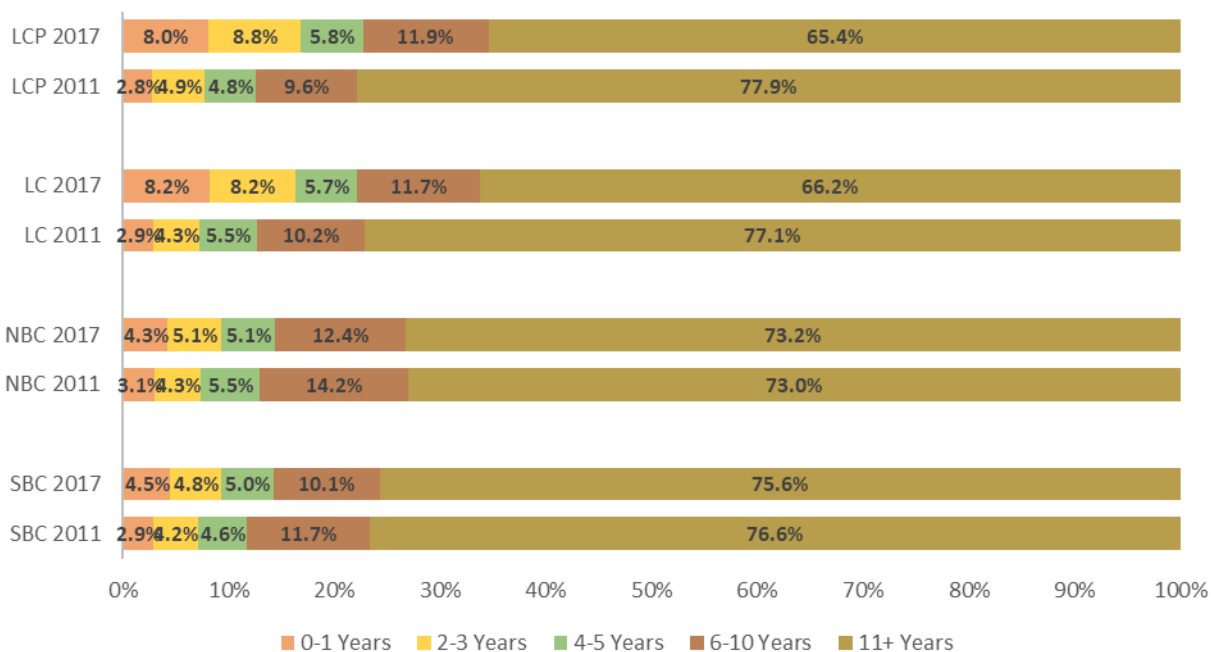
Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- In Lake County Places, the share of workers with less than a high school degree has grown since 2010 (10.4% to 12.8% of the total).
- Similarly, since 2010, the share of workers with less than a high school degree has grown in Lake County and surrounding counties. However, in 2017, the share of workers with less than a high school degree in LCP is lower as compared to those in Lake County (13.9%), north bordering counties (17.1%), and south bordering counties (13.5%).
- As of 2017, the share of workers with a bachelor's degree or advanced degree in LCP (16.7%) is noticeably lower than that of workers with a bachelor's degree or advanced degree in south bordering counties (22%).

Business Characteristics

Jobs by Firm Age

Jobs by Firm Age, 2011-2017



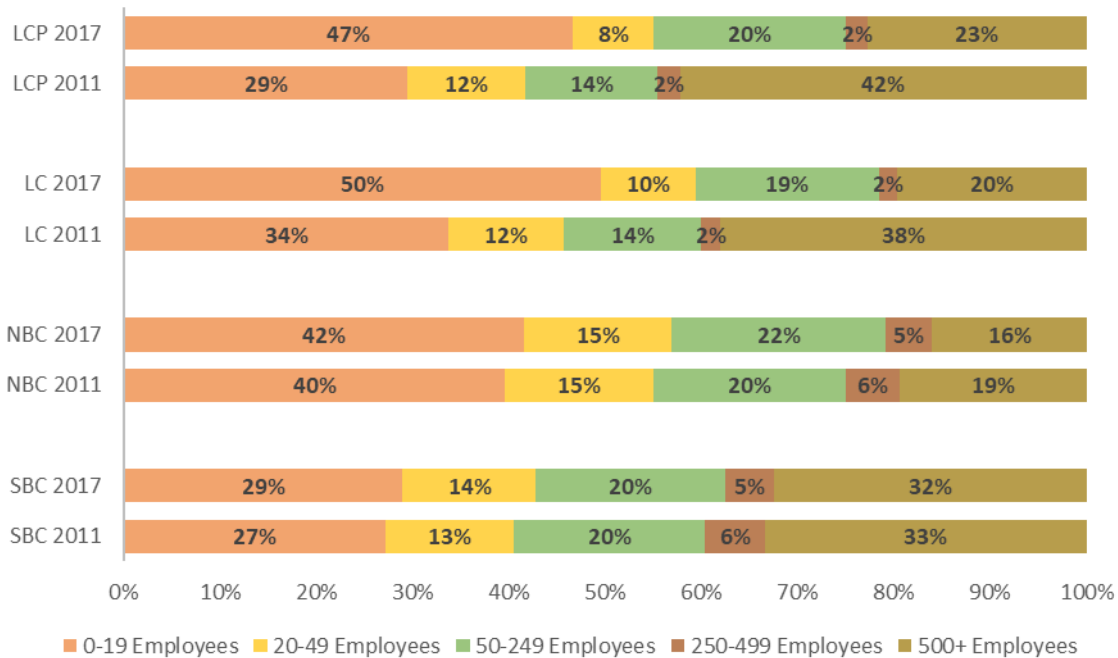
Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (05/18/20) at <https://onthemap.ces.census.gov>. LODES 7.4 [version]

- In Lake County Places, firms 11 years or older have the highest share of jobs (65.4%) in 2017¹⁰.
- In LCP, the share of jobs generated by firms 11 years and older declined since 2011 (77.1% to 66.2%). Whereas, the share of jobs generated by younger firms (startups) has grown since 2011. Specifically, the share of jobs generated by firms about a year old (2.8% to 8%) and firms one to three years (4.9 to 8.8%) old has noticeably grown since 2011.
- Similarly, the share of younger firms (startups) of the total has grown in the bordering counties. However, the increase in the share of jobs generated by younger firms is relatively lower in the north and south bordering counties than the increase in the share of jobs generated by these firms in LCP.

¹⁰ Firm age is the national age of the firm (specifically, the age of the oldest establishment), which may differ from the age of local establishments affiliated with the firm (U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017)).

Jobs by Firm Size

Jobs by Firm Size, 2011-2017

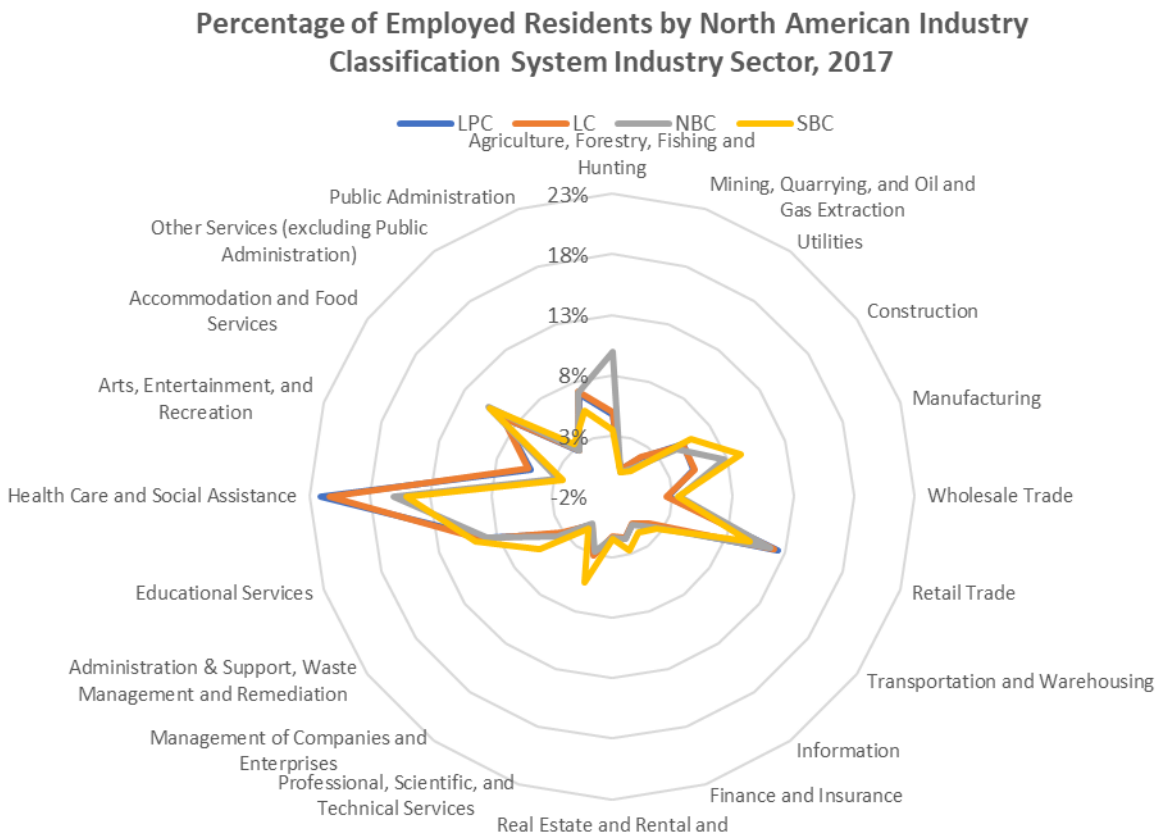


Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (05/18/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- In Lake County Places, firms with 19 or fewer employees have the highest share of jobs in 2017.
- In LCP, the share of jobs generated by small firms (19 or fewer employees) of the total has grown since 2011.
- Similarly, in the north and south bordering counties, the share of jobs generated by small firms (19 or less employees) of the total has grown since 2011. However, the increase in the share of jobs generated by smaller firms is relatively lower than the increase in the share of jobs generated by these firms in LCP.

Jobs by North American Industry Classification System (NAICS) Industry Sector

Federal agencies use the North American Industry Classification System (NAICS) to classify business establishments mainly for tabulation and statistical analysis. The 2-digit NAICS represent industry sectors.



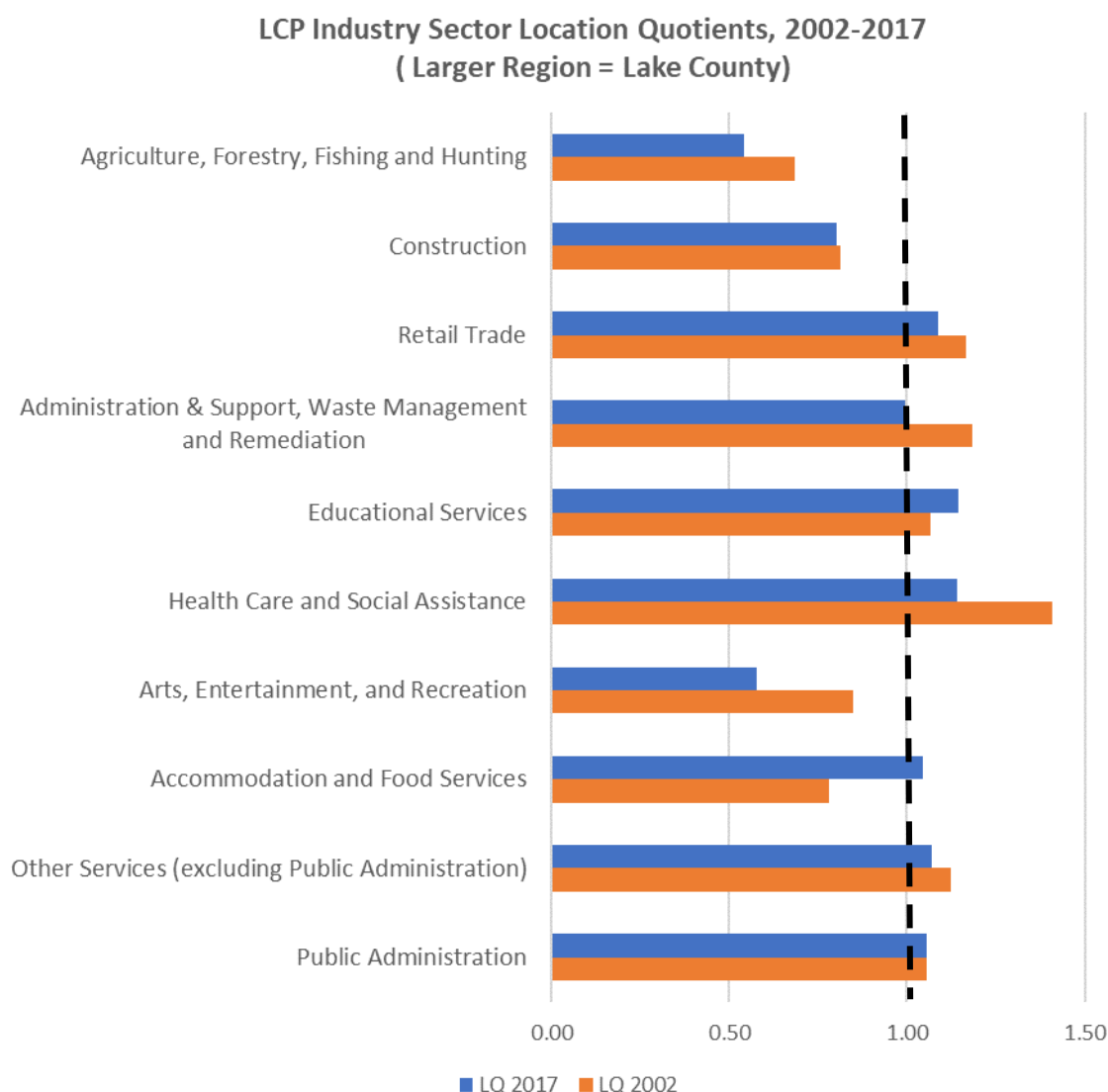
Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthermap.ces.census.gov>. LODS 7.4 [version]

- As of 2017, the Health Care and Social Assistance sector has the highest share of workers (30.8%) in the Lake County Places.
- Similarly, the Health Care and Social Assistance sector has the highest share of workers in other communities. However, the share of Health Care and Social Assistance sector workers (30.8%) in LPC is higher as compared to those in Lake County (26.9%) and the surrounding counties (NBC:15.1%; SBC: 14.7%).

Industry Sector Location Quotient

Location quotients measure the concentration of jobs by industry in Lake County Places relative to the larger region. The following charts present the concentration of jobs by industry sector in Lake County Places relative to the concentration of jobs by industry in Lake County, north bordering counties, and south bordering counties, respectively. A value of one represents a similar concentration of jobs by industry in Lake County Places

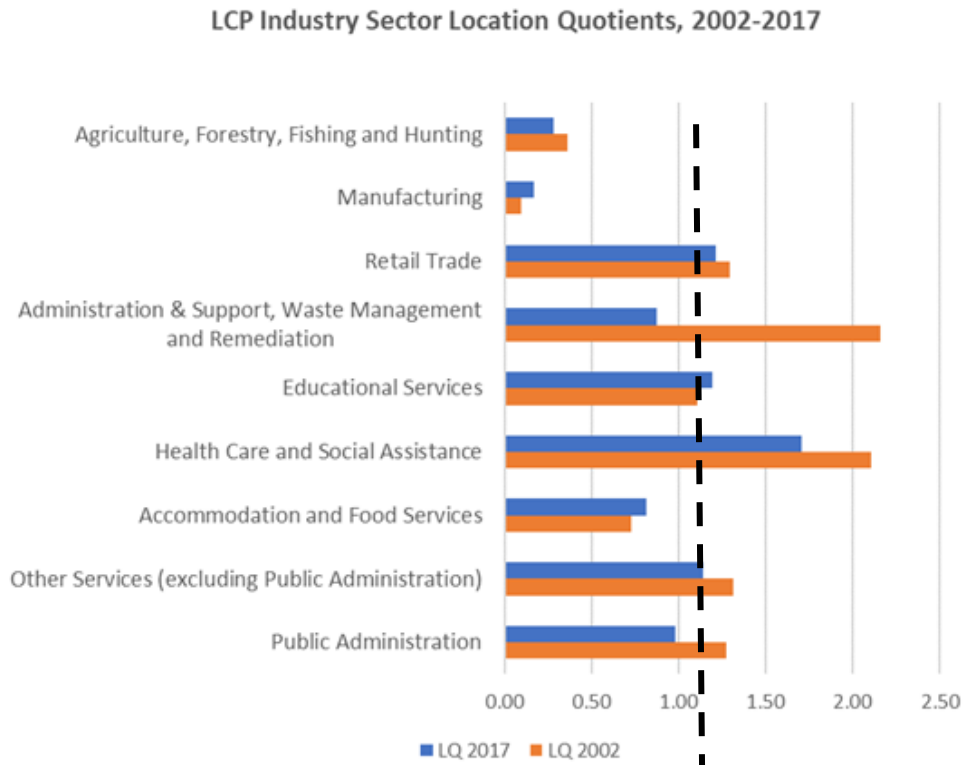
and the larger region. Location quotients were calculated for industry sectors that accounted for 5% or more jobs of the total for both regions and both years (2002 and 2017).



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- A location quotient (LQ) of 1 indicates that the concentration of jobs by a specific industry sector is the same in LCP as the larger area (LC). As of 2017, jobs related to the Health Care and Social Assistance (LQ = 1.14), Educational Services, Finance and Insurance (LQ = 1.15), and Retail Trade (LQ = 1.09) sector are slightly more concentrated in LCP than in Lake County. On the other hand, jobs related to the Arts, Entertainment, and Recreation (LQ = 0.58) and Agriculture, Forestry, Fishing, and Hunting (LQ = 0.54) sector are less concentrated in LCP than in Lake County.

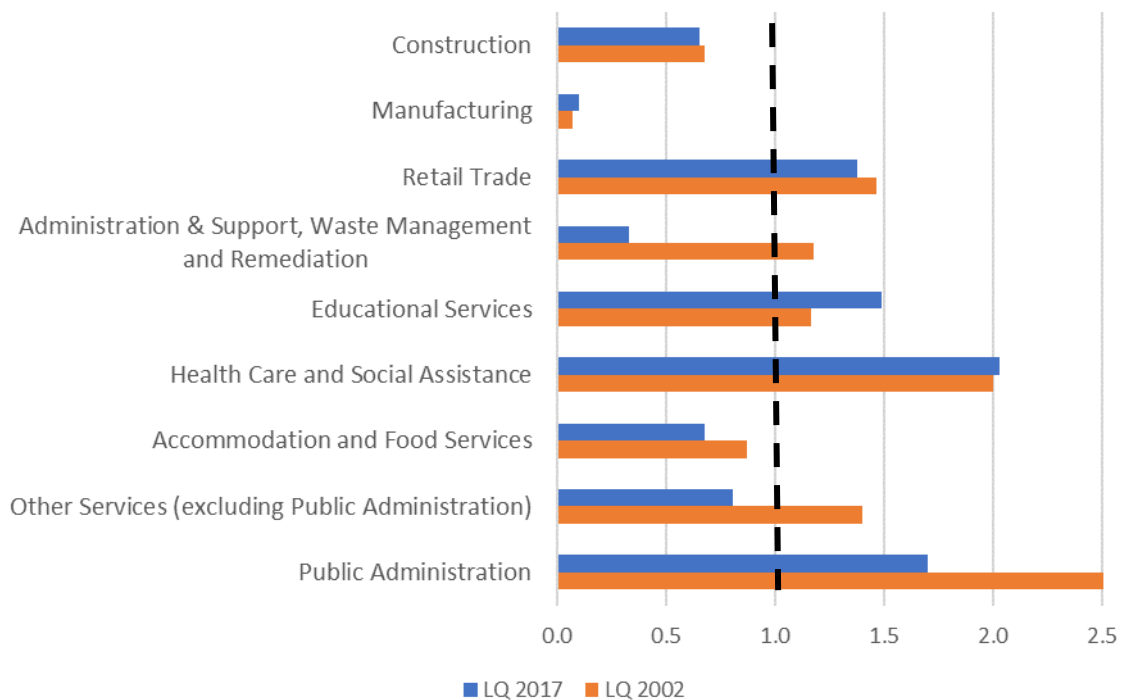
- Since 2002, in LCP, the location quotient of Health Care and Social Assistance, and Retail Trade sector has declined. However, since 2002, in LCP, the location quotient of Educational Services, and Accommodation and Food Services sector has increased.



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

- A location quotient (LQ) of 1 indicates that the concentration of jobs by a specific industry sector is the same in LCP as the larger area (NBC). As of 2017, jobs related to Health Care and Social Assistance (LQ = 1.71) and Retail Trade (LQ = 1.22) sectors are more concentrated in LCP than in the north bordering counties. On the other hand, jobs related to the Manufacturing (LQ = 0.17) and Agriculture, Forestry, Fishing, and Hunting (LQ = 0.28) sector are less concentrated in LCP than in the north bordering counties.
- Since 2002, in LCP, the location quotient of the Health Care and Social Assistance, Administration and Support, Waste Management and Remediation, and Professional, Scientific, and Technical Services sector has declined. However, in LCP, the location quotient of the Educational Services has increased since 2002.

LCP Industry Sector Location Quotients, 2002-2017 (Larger Region = SBC)



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://ontheemap.ces.census.gov>. LODS 7.4 [version]

- A location quotient (LQ) of 1 indicates that the concentration of jobs by a specific industry sector is the same in LCP as the larger area (SBC). As of 2017, jobs related to the Public Administration (LQ = 1.7), Health Care and Social Assistance (LQ = 2), Public Administration (LQ = 1.7), and Educational Services (LQ = 1.5) sector are more concentrated in LCP than in the south bordering counties.
- On the other hand, employment related to Administration and Support, Waste Management and Remediation (LQ = 0.3), and Manufacturing (LQ = 0.1) are less concentrated in LCP than in the south bordering counties.
- Since 2002, in LCP, the location quotient of the Administration and Support, Waste Management and Remediation, and Public Administration sector has declined.

Main Takeaways

- In Lake County Places, the share of workers earning \$3300 or more per month has grown since 2002. Simultaneously, in LCP, the share of workers earning \$1250 per month or less has declined since 2002. Similarly, since 2002, the share of workers earning \$1250 per month or less has declined in Lake County and

neighboring counties. However, in 2017, LCP has a higher share of workers earning \$1250 per month or less in comparison to the share of these workers in the north bordering counties and south bordering counties.

- In Lake County Places, the share of jobs generated by firms 11 years and older declined since 2011. Whereas, the share of jobs generated by younger firms (startups) has grown since 2011.
- In Lake County Places, firms with 19 or fewer employees have the highest share of jobs in 2017.
- As of 2017, the share of workers with a bachelor's degree or advanced degree in LCP is noticeably lower than that of workers with a bachelor's degree or advanced degree in south bordering counties.
- As of 2017, the Health Care and Social Assistance sector has the highest share of workers in Lake County Places. Health Care and Social Assistance jobs are more concentrated in LCP relative to Lake County, north, and south bordering counties. Since 2002, the concentration of Health Care and Social Assistance related jobs in LCP has declined relative to those in Lake County and north bordering counties. Alternatively, the concentration of these jobs in LCP has remained similar over the years relative to those in the south bordering counties.

Conclusion

The report aims to provide an overview of the demographic and socioeconomic conditions in the Clear Lake region. Our focus was on a comparative analysis of five socioeconomic domains of community opportunity across multiple geographic scales over a 18-year time period. We conclude the report by highlighting eight key takeaways, with implications for regional development.

- 1. Aging Population.** The resident population in Lake County Places is older compared to the populations living in bordering counties, and has become increasingly older since 2010. The implication is that there should be an increase in the provision of health care and social services for these older age groups, including adequate access to health care, housing, and transportation services. Another implication of an aging resident population is an aging workforce. The findings suggest the need to retain and create the types of jobs with competitive wages that are suitable for older employees. Furthermore, these findings emphasize the need to diversify job opportunities in existing and growing industries that will allow the Clear Lake area to be economically competitive with the larger region if the job opportunities in bordering counties skew more towards a younger workforce.
- 2. Changes in Racial and Ethnic Composition.** Although the Clear Lake area is predominantly white compared to the larger region, it has diversified between 2000 and 2018, experiencing a significant decrease in percent white and a near identical increase in percent Hispanic during this period. The foreign-born population has also increased, and the area's overall racial/ethnic diversity, although lower relative to bordering areas, has increased since 2000. Although the trend towards greater diversity has been gradual, local agencies should be aware of these changes and monitor them moving forward. As the racial and ethnic composition of the area continues to evolve, agencies should adapt current and introduce new policies and programs that can account for the differential social, health, cultural, workforce and economic needs of new population groups, particularly those that are historically disadvantaged.
- 3. Decreasing Regional Economic Competitiveness.** Lake County Places have a similar or more advantaged economic profile compared to Lake County as a whole. However, they are more disadvantaged compared to bordering counties, specifically those in the south, with the gap widening since 2010. For example, Lake County places compared to the south bordering counties have higher poverty rates, lower median household incomes, and smaller increases in percentage of college graduates.

In terms of job wages, the share of residents and workers in Lake County Places earning more than \$3,330 is lower than the share in the north and south bordering counties, and the share earning \$1,250 or less is higher than in the south bordering counties. Furthermore, jobs within Lake County Places offer relatively lower wages for residents staying in the area for employment. These findings

emphasize the need to create more jobs with competitive wages in Lake County Places. The broader implication is that the area is losing ground economically relative to the region, potentially due to a slower recovery from the Great Recession, with the recent wildfires a likely factor. Note that although not as advantaged as the bordering counties, Lake County Places are still experiencing an increase in many socioeconomic indicators since 2010, including wages and income, indicating some bounce back from the recession.

4. Health Care and Social Assistance Industry as a Key Source of Employment.

Lake County Places has a substantial presence of Health Care and Social Assistance sector-related jobs. Although this sector contributes to the largest share of employment in all regions, the share of Health Care and Social Assistance sector-related jobs in Lake County Places is noticeably higher than the share of these jobs in the other areas. Health Care and Social Assistance sector-related jobs are twice as concentrated in Lake County Places than those in the south bordering counties. The concentration of these jobs has declined over the years relative to Lake County and north bordering counties. In contrast, it has remained relatively the same in comparison to the south bordering counties. Since this sector accounts for a large share of jobs, with the potential for growth given the area's aging population, it is essential to provide a mechanism to provide resources and training for workers needed in this field.

5. Support for Small New Businesses. Jobs generated by smaller firms have increased in all regions since 2011. However, the share of jobs created by smaller firms in Lake County Places is relatively higher than the share of jobs generated by these firms in the north and south bordering counties. Similar to small firms, the share of jobs generated by younger firms has noticeably increased in Lake County Places since 2011. In comparison, the increase in the share of jobs created by younger firms is relatively lower in the north and south bordering counties. The increase in the share of younger firms (startups) points to the need for resources for startups' growth and longevity to promote economic growth. Local governments need to examine how they can support startups and small businesses. Focus on both financial and regulatory mechanisms is necessary to encourage the growth of startups and small businesses. These mechanisms may take the form of providing small business loans, simplifying tax codes and payment systems, streamlining zoning approvals, and greater access to high speed internet.

6. Renter and Homeownership Cost Burdens. Lake County Places have greater renter and homeownership challenges compared to the broader region. In particular, the share of renters and homeowners burdened with housing costs is noticeably higher than the share in the north and the south bordering counties, and has grown significantly since 2000. A likely influencing factor is the recent wildfires, which forced residents who lost their homes to rent. The area also has higher vacancy rates, indicating an underutilization of local housing units despite increasing demand, and higher residential mobility rates, indicating high turnover and an unstable resident population. Note that the 2014-2018 ACS data do not

capture the effects of the more recent wildfires in Lake county (Mendocino Complex fire in 2018 and the LNU Lightning Complex and August Complex fires in 2020), and thus the results likely underestimate the area's housing and rental cost burdens.

- 7. Address wildfire risks in developments in the wildland-urban interface (WUI) through multijurisdictional plans, land use and development regulations.** The findings indicate that a large proportion of residential and commercial parcels fall within the high and very high fire hazard severity zones. Over the years, development in the wildland-urban interface (WUI) has drastically increased. WUI areas are those where human development borders or intermingles with wildland (for instance, grassland). Development in the WUI indicates an increase in the risk associated with the community's exposure to wildfire, loss of life, and economic loss due to property damage. Communities need to proactively address wildfire risks through plans, land use, and development regulations at different scales (regional, community, and neighborhood level). While developments in WUI plan to address wildfire, having consistency across plans (Hazard Mitigation Plan, Climate Adaptation Plan, Community Wildfire Protection Plan) strengthens the goals and policy recommendations to mitigate wildfire.¹¹ Lake County and the two incorporated cities have their own individual hazard mitigation plan and the tribal communities have developed the first multi-tribal hazard mitigation plan in the Clear Lake region. As wildfire hazards affect multiple jurisdictions, coordination of efforts in developing hazard mitigation plans across the county, cities, and tribal communities is highly encouraged.
- 8. Strengthening Current Data Systems.** A strong data collection, storage and dissemination system is integral to understanding the demographic and socioeconomic conditions in a community and monitoring their changes over time. A robust data system is particularly vital for the Clear Lake region given the regular occurrence of wildfires in the area in the past decade. The demographic, housing, and economic consequences of wildfires are often immediate, and thus data capturing these effects can inform how local government and other community stakeholders can quickly adapt and react to these changes. This report relied on publicly available data collected by state and federal government agencies. Although important sources given their reliability and statistical representativeness, state and federal data systems offer less timely (e.g. ACS is for 2014-2018), spatially granular (e.g. data do not go below the census tract level), and community specific (e.g. ACS data provide if people move, but not where) data than those that can be gathered at more local levels. By focusing on one or a handful of communities and equipped with a better understanding of the local context, local agencies have the ability to gather more timely and spatially focused data that are specific to the issues confronting their communities.

¹¹ American Planning Association. (2018). (rep.). *Multihazard Planning Framework for Communities in the Wildland-Urban Interface*. Retrieved from https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/WUI-Hazards-Framework.pdf

However, collecting information using the current data systems within Clear Lake is challenging for several reasons. First, data on important characteristics are significantly outdated or not collected at all. For example, reliable data on where individuals who were displaced by wildfires moved are not available. Second, many datasets are not publicly available, and are either difficult to obtain or are barred or restricted from use. Third, when data are made available, they come in formats that are difficult to clean and manage. Relatedly, data collected by one agency will come in a different format than data collected by another agency, thus linking variables across datasets is challenging and, in some cases, impossible. One key factor contributing to these challenges is the lack of coordination across agencies. Currently, there is no single agency responsible for collecting, managing, and disseminating demographic and socioeconomic data. Better collaboration and coordination across agencies, particularly with tribal communities, is needed in order to determine (1) the datasets that are already collected by local agencies; (2) the data that need to be gathered if they are not currently collected; (3) how that data will be collected and who will be involved in the data collection and; (4) how the data will be disseminated in a transparent, timely, and accessible manner.

The eight implications outlined above are based on secondary data and should be supplemented by more in-depth analyses incorporating local knowledge and perspectives. The analysis also does not directly examine tribal communities. These additional analyses will be addressed in the community economic development and tribal engagement portions of the Center for Regional Change report. Our secondary data assessment of conditions in the Clear Lake Region provides a useful information base for future research and development efforts.

Appendix

Data Sources

We relied on publicly available secondary data sources to construct the domain profiles. The measures selected under each domain have data available at the place and county levels. Where possible, we collected data for three time points: 2000, 2010 and 2018. For measures whose data do not align with these specific years, we collected data for the closest year.

The list below contains the data sources used in this report:

Decennial Census and American Community Survey

United States Census Bureau

<https://www.census.gov/data.html>

We collected 2000 data from the 2000 decennial Census, 2010 data from the 2006-2010 American Community Survey and 2018 data from the 2014-2018 American Community Survey. Data were gathered using the Census API (<https://www.census.gov/data/developers/data-sets.html>) through the statistical program R (<https://www.r-project.org/>).

Longitudinal Employer-Household Dynamics Program (LEHD)

United States Census Bureau

<https://lehd.ces.census.gov/>

The LEHD data provides information on where workers are employed and where they live. It also provides companion reports on age, earnings, industry distributions, race, ethnicity, educational attainment, and sex. The earliest possible year for most measures was 2002. Race/ethnicity and educational attainment data are available starting in 2010. Private firm data (e.g. firm age, firm size) are available starting in 2011. The primary tool for extracting LEHD data is OnTheMap (OTM), a web-based mapping and reporting application. (<https://onthemap.ces.census.gov/>)

Lake County, CA GIS Data Portal

<https://filebox.lakecountycalifornia.gov/d/8ab2162e69a84915a8d5/>

We collected data from Lake County, California GIS Data Portal as well as contacted the GIS Specialist of Lake County to obtain data on zoning and fire hazard severity zones. We obtained most recent zoning data for Lake County (updated 01/2021), parcel assessor data (accessed 01/2021) and fire hazard severity zones (created in 2008)¹².

City of Lakeport and City of Clearlake

¹² A Fire Hazard Severity Zone (FHSZ) is a mapped area that designates zones (based on factors such as fuel, slope, and fire weather) with varying degrees of fire hazard (i.e., moderate, high, and very high). FHSZ maps evaluate wildfire hazards, which are physical conditions that create a likelihood that an area will burn over a 30- to 50-year period (California State Geodata Portal, 2021)

We contacted the planners/managers from each city to obtain the most recent zoning data for City of Clearlake (updated 12/2020), and City of Lakeport (updated 05/2018).

Methods

Lake County Places

We sought a geographic scale below the county level in order to capture a more localized measure of the Clear Lake region. The geographic scale must match a Census defined boundary as most of our measures rely on Census data. We selected the place level because prior work has used places to represent small areas in rural settings. Doing so not only reduces the statistical uncertainty present in small census geographies such as block groups and tracts, but also provides a better representation of population centers within a region. Moreover, places align with practical understandings of community boundaries, as they must have a name and be locally recognized. The brief “Defining the Clear Lake Community: Navigating Statistical Uncertainty when Using American Community Survey Data in Rural Areas” describes in greater detail the process in selecting places.

There are two incorporated places in Lake county: Clearlake and Lakeport. There are 13 CDPs: Clearlake Oaks, Clearlake Riviera, Cobb, Hidden Valley Lake, Kelseyville, Lower Lake, Lucerne, Middletown, Nice, North Lakeport, Soda Bay, Spring Valley, and Upper Lake. Clearlake Riviera, Soda Bay, and Spring Valley did not exist as Census Designated Places in 2000. We used areal interpolation to appropriate 2000 block group data to the three place boundaries.

Jobs vs Employed Residents

The workforce profile uses LEHD data on employed residents living in the region regardless of where they work. The employed residents data are used to generate a profile of residents’ employment characteristics. The industry profile uses LEHD data on jobs in the region regardless where employees live. The jobs data are used to generate a profile of industries in the region. That is, we measure industry characteristics through the lens of employees. In other words, rather than firm-level data, we use employee-level data to capture the characteristics and concentration of industries within a region.

North American Industry Classification Systems (NAICS)

We use the North American Industry Classification System (**NAICS**) to classify industries. The NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. NAICS uses a production-oriented conceptual framework to group establishments into industries based on the activity in which they are primarily engaged. Establishments using similar raw material inputs, similar capital equipment, and similar labor are classified in the same industry. In other words, establishments that do similar things in similar ways are classified together. NAICS was

introduced in 1997 and is periodically revised to reflect changes in the industrial structure of the U.S. and the North American economy. The 2-digit code represents the industry sector.

Adjustments from Current to Real dollars

Because a dollar in the past was worth more than a dollar today, data reported in current dollar terms should be adjusted for inflation. All income data in this profile were adjusted to real (or constant) dollars using the Consumer Price Index inflation factor.

Location Quotient

A Location Quotient (LQ) is a simple ratio used to determine the concentration or dominance of a particular group in an area in comparison to a larger reference or benchmark region. In this profile, the local area is Lake county places and the benchmarks are Lake county, Northern bordering counties, and Southern bordering counties. For the calculation of LQ alone, we included Lake County in the list counties that define the north bordering and south bordering counties.

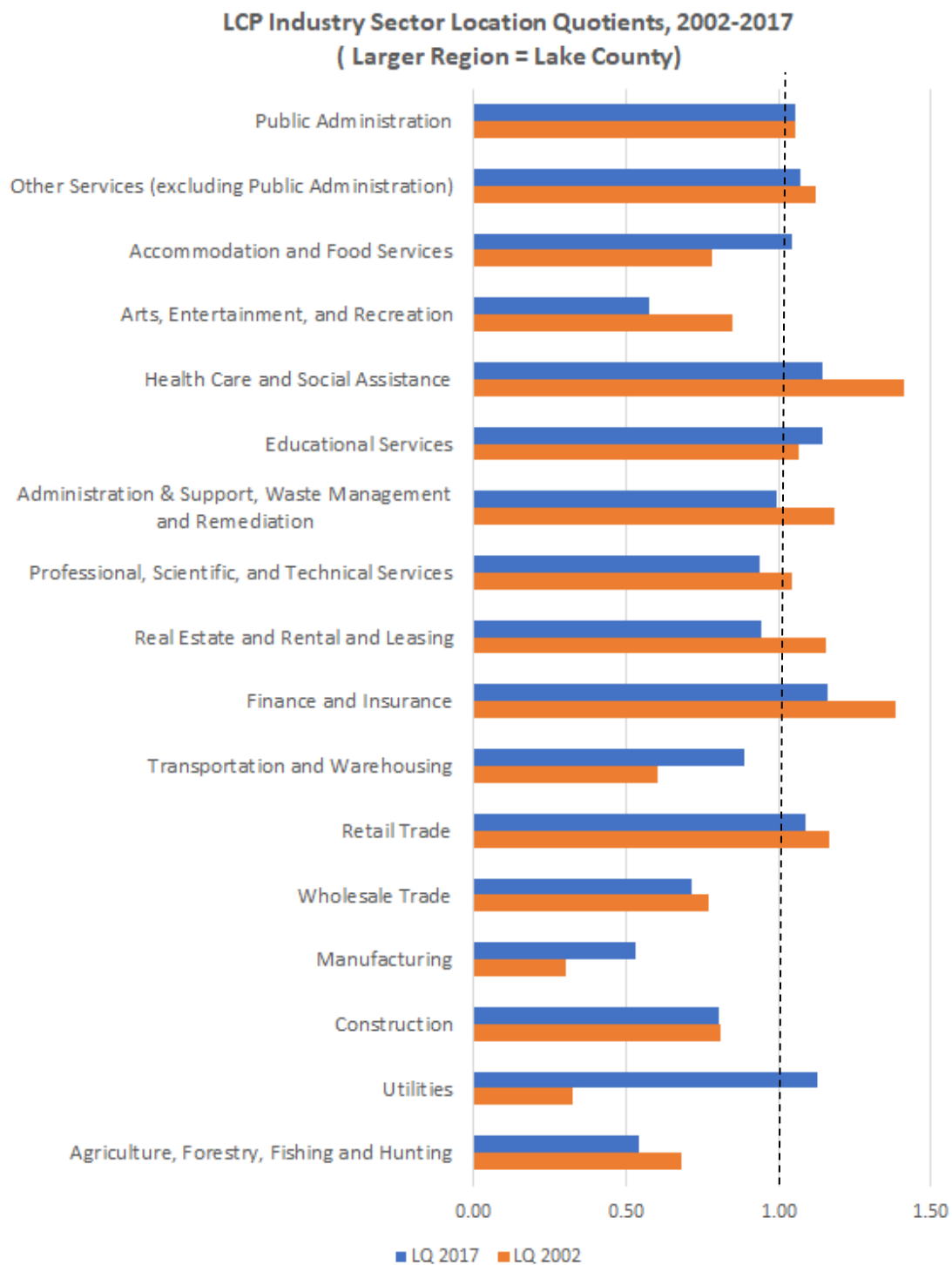
We used LQs to measure LCP's share of regional employment by industry sector.

$$LQ_i^R = \frac{Jobs_i^{LCP}}{Jobs_i^R}$$

where LQ_i^R is the location quotient for industry i using the benchmark region R , $Jobs_i^{LCP}$ is the percent of jobs in Lake county places that are in Industry i , and $Jobs_i^R$ is the percent of jobs in region R that are in Industry i . LQs greater than 1 indicate a higher concentration of industry jobs in LCP relative to region R .

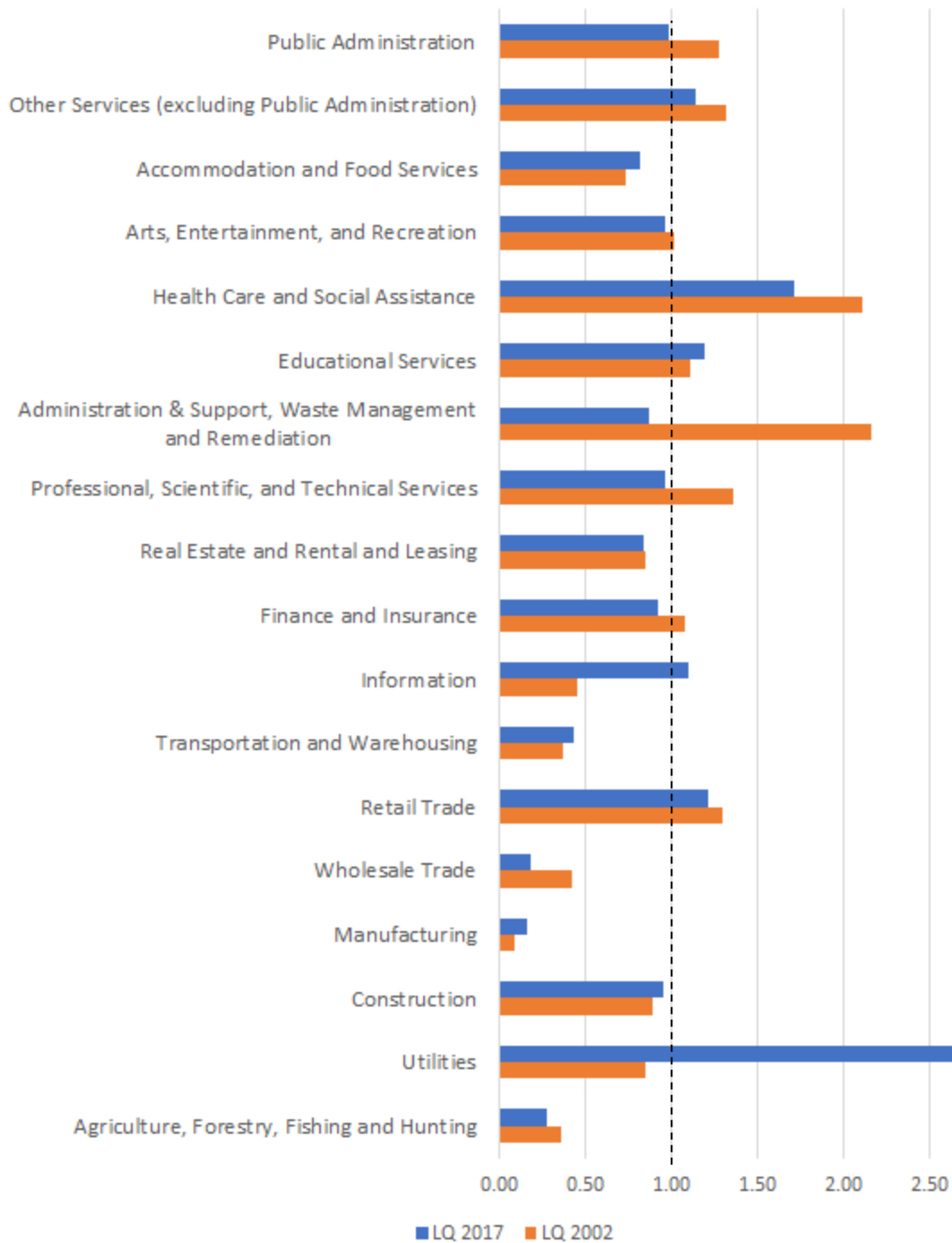
For the location quotient calculations, we initially excluded industry sectors that accounted for either 1% or less share of the total jobs in each region. The results indicated the location quotient for the Utilities sector-related jobs in Lake County Places is 8.4 relative to the Utilities related-jobs in the south bordering counties. Although the Location Quotient for Lake County Places' Utilities sector-related jobs is high, it only accounts for 4% of the employment in LCP and less than 1% share of the total jobs in the south bordering counties. Given this, we recalculated the location quotient for industry sectors using a new threshold. We excluded industry sectors that accounted for 5% or less than a 5% share of total jobs in each region.

The following charts present the initial location quotient calculations based on the exclusion of industry sectors that accounted for either 1% or less share of total jobs in each region.



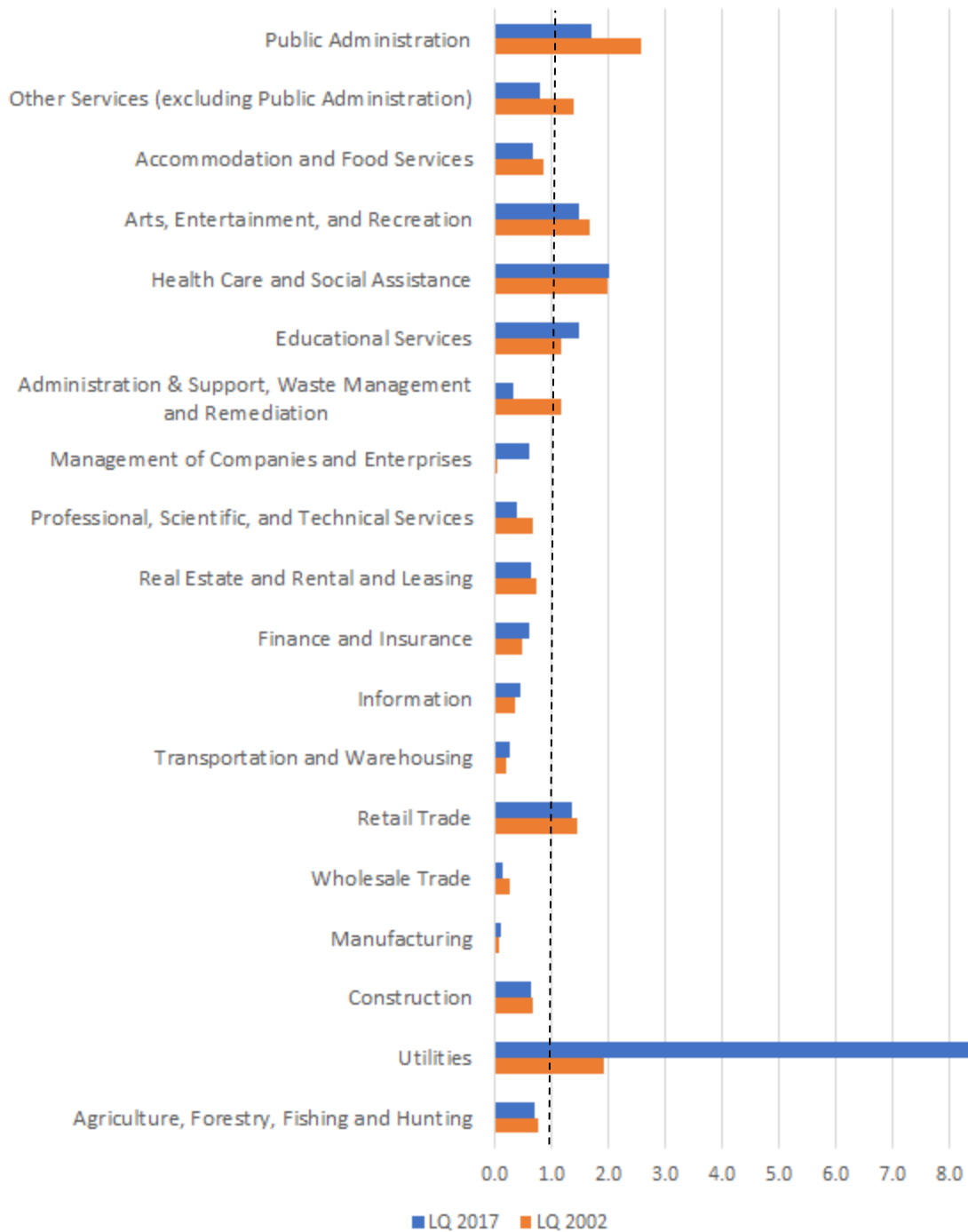
Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

LCP Industry Sector Location Quotients, 2002-2017
(Larger Region = NBC)



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

LCP Industry Sector Location Quotients, 2002-2017
(Larger Region = SBC)



Source: U.S. Census Bureau. (2020). LEHD Origin-Destination Employment Statistics (2002-2017) [computer file]. Washington, DC: U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on (03/23/20) at <https://onthemap.ces.census.gov>. LODS 7.4 [version]

We also calculated race/ethnic group LQs

$$LQ_r^R = \frac{r^{LCP}}{r^R}$$

where LQ_r^R is the location quotient for racial/ethnic group r using the benchmark region R , r^{LCP} is the percent of residents in Lake county places that are in racial/ethnic group r , and r^R is the percent of residents in region R that are in racial/ethnic group r .

Racial/Ethnic Diversity

We measure racial/ethnic diversity using the Herfindahl-Hirschman index

$$D = 1 - \sum r^2$$

where r is the percent of residents that are in racial/ethnic group r . The higher the value, the greater the diversity. A value of $D = 0$ indicates no diversity (an area is composed entirely of one race/ethnic group).

Housing and Commercial Parcels Susceptible to Wildfire

We assessed the number of housing and commercial parcels and the associated net value of these parcels by fire hazard severity zones. Data on fire hazard severity zones include five zones: urban unzoned, non-wildland/non-urban, moderate, high, and very high hazard severity zone. We conducted spatial analysis of zoning data and fire hazard severity zones data in the following manner. First, we spatially joined the zoning data for each incorporated city with the county level parcel assessor data to obtain parcel level zoning data and the associated net value for each parcel. Next, the zoning codes of each jurisdiction were grouped into three broad land use categories: Residential, Commercial, and Other. Tables 1, 2, and 3 illustrate the zoning code designations of broad land use categories created for each jurisdiction. Then, we spatially joined the parcel level zoning data with the fire hazard severity zones. For the purposes of this analysis, the fire hazard severity zone that intersected a parcel centroid was assigned for the entire parcel.

Table 1. City of Lakeport Zoning data grouped in three broad land use categories.

Code	Description	Broad Category
C-1	Light Retail	Commercial
C-2	Major Retail	Commercial
C-3	Service Commercial	Commercial
CB	Central Business	Commercial
I	Industrial	Other
OS	Open Space	Other
PCU	Public and Civic Use	Other
PO	Professional Office	Other
R-1	Low Density Residential	Residential
R-2	Medium Density Residential	Residential
R-3	High Density Residential	Residential
R-5	Resort/High Density Residential	Residential

Source: City of Lake Port

Table 2. City of Clearlake Zoning Data grouped in three broad land use categories.

Code	Description	Broad Category
C	Commercial	Commercial
CD	Downtown Commercial	Commercial
I	Industrial	Other
RR	Rural Residential	Residential
LDR	Low Density Residential	Residential
MDR	Medium Density Residential	Residential
HDR	High Density Residential	Residential
MUX	Mixed Use	Other
OS	Open Space	Other

Source: City of Clearlake

Table 3. Lake County Zoning Data grouped in three broad land use categories.

Code	Description	Broad Category
APZ	Agricultural Preserve	Other
A	Agriculture	Other
TPZ	Timberland Preserve	Other
O	Open Space	Other
U	Unclassified	Other
RL	Rural Lands	Residential
RR	Rural Residential	Residential
SR	Suburban Reserve	Residential
R1	Single Family Residential	Residential
R2	Two-Family Residential	Residential
R3	Multi-Family Residential	Residential
PDR	Planned Development Residential	Residential
CH	Highway Commercial	Commercial
CR	Resort Commercial	Commercial
C1	Local Commercial	Commercial
C2	Community Commercial	Commercial
C3	Service Commercial	Commercial
PDC	Planned Development Commercial	Commercial
M1	Commercial/Manufacturing	Other
M2	Heavy Industrial	Other
MP	Industrial Park	Other

Source: Lake County Data Portal

We analyzed an alternative scenario where zoning district RL (Rural Lands) in Lake County was not considered as residential land use, given the purpose of the district. As stated in the Lake County Municipal Code, the purpose of RL zoning district is “to provide for resource related and residential uses of the County’s undeveloped lands that are remote and often characterized by steep topography, fire hazards, and limited access. The chart below illustrates the analysis of zoning data and fire hazard severity zones, in which RL designated parcels are not included in the residential land use category. In this given scenario:

- 36,853 parcels fall in the very high fire hazard severity zone. 86.6% of the parcels in this zone are residential parcels and the net value of residential parcels in this zone is \$2,140,301,016.
- 9,988 parcels fall in the moderate zone. 70.0% of the parcels in this zone are residential parcels and the net value associated with the residential parcels is

\$1,149,165,138. 5.6% of the parcels in this zone are commercial parcels and the net value associated with these parcels is \$165,399,508.

Residential and Commercial Parcels by Fire Hazard Severity Zone.

Parcels By FHSZ	Count	Percentage	Net Value of Parcels
High	7,282	100.0	\$829,471,521
Commercial	315	4.3	\$99,953,248
Other	743	10.2	\$153,332,808
Residential	6,224	85.5	\$576,185,465
Moderate	9,988	100.0	\$1,903,621,944
Commercial	558	5.6	\$165,399,508
Other	2,436	24.4	\$589,057,298
Residential	6,994	70.0	\$1,149,165,138
Non-Wildland/Non-Urban	1,831	100.0	\$452,742,172
Commercial	60	3.3	\$41,373,097
Other	1,204	65.8	\$299,888,057
Residential	567	31.0	\$111,481,018
Urban Unzoned	8,082	100.0	\$1,148,923,107
Commercial	798	9.9	\$210,972,913
Other	999	12.4	\$161,555,557
Residential	6,285	77.8	\$776,394,637
	36,853		
Very High	3	100.0	\$2,877,756,860
Commercial	733	2.0	\$111,076,515
Other	4,220	11.5	\$626,379,329
Residential	31,907	86.6	\$2,140,301,016
	64,036		
Grand Total	6		\$7,212,515,604

Source: Lake County Data Portal; City of Lake Port, and City of Clearlake