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ECONOMIC SUMMIT

**REGIONAL
BRIEFING
BOOK**

DECEMBER 2023

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Executive Summary

As 2023 draws to a close, the U.S. economy appears to have averted a recession—at least this year. This resilience in the face of continued interest rate hikes is driven by strong consumer spending and robust employment. The SCAG region, consisting of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura counties, generally mirrors the national economic trend and has overcome challenges including tech layoffs, inflation, rising interest rates, labor disputes and vacant office buildings.

Year-over-year inflation in the region was 3.2 percent in September—down from 7.9 percent a year earlier, and below the 3.7 percent national rate. Despite strikes in key sectors, the region remained at full employment, with the unemployment rate hovering between 4 and 5.5 percent this year, ending September at 4.7 percent. In 2022, the region added a record 420,000 jobs following the restoration of pandemic-impacted businesses and saw continued strong job growth in 2023 (178,000 additional jobs).

The delivery and ongoing construction of housing, commercial, industrial and office space, and infrastructure projects continues to generate jobs, income, spending, and accommodations for new and existing residents, businesses, and workforces. During the first nine months of 2023, housing permits were on track to match 2022 numbers despite high interest rates. Employment in advanced manufacturing, software development and scientific and technical consulting has continued growing steadily. Out-of-region tourists have returned and local demand for leisure services is strong as consumer spending has increasingly shifted from durable goods toward services consumption.

State policies have supported new development: 120 of the region's 197 local jurisdictions now have state-certified 6th cycle housing elements—local planning documents which collectively identify sites for over 1.3 million potential new housing units. New High Road Transition Collaboratives from the California Jobs First initiative have been established across the state's regions to support high-quality jobs in sustainable industries, especially in traditionally disinvested communities.

There appears to be enough momentum in the region's economy to begin 2024 with a strong labor market, continued development, revitalized tourism and increased foreign trade. Job growth is expected to moderate in 2024 as the labor supply hits constraints and inflation and high lending costs for homebuyers and small businesses take their toll. The region's GDP growth is expected to slow to less than 1 percent by mid-2024 and recession risk remains elevated.

Since 2009, SCAG's team of independent economists representing the region's counties and key specialty areas have collaborated with SCAG's in-house experts and staff to assess the economic landscape of Southern California from a regional point-of-view.

Last year, the renamed Economic Roundtable began meeting quarterly to discuss trends, data and current events impacting the region's economy. Quarterly reports can be found on the [SCAG news feed](#) and all accompanying economic data for the region can be visualized on and exported from the [SCAG Econ Trends Tool](#). This "Regional Briefing Book" is SCAG's comprehensive annual report and near-term outlook on Southern California's economic landscape.

This year's Briefing Book immediately follows the release of SCAG's draft regional plan, [Connect SoCal 2024](#). The Briefing Book helps form a basis for understanding the regional economy today and in the coming year, and informs the implementation of the policies and strategies in Connect SoCal 2024 that will help guide our region to 2050 in the areas of mobility, communities, environment and economy. The

Connect SoCal 2024 “Economic Impacts Analysis” technical report contains an economic assessment of plan strategies.

Chapter 1 of this Briefing Book provides an overview of the state of the SCAG region economy. Chapter 2 replicates a nationwide equity analysis conducted by the San Francisco Federal Reserve that demonstrates how redressing gender and racial wage gaps can spur comprehensive and equitable economic growth in the diverse Southern California region. Chapters 3 through 7 provide snapshots of the individual economies of the region’s counties.

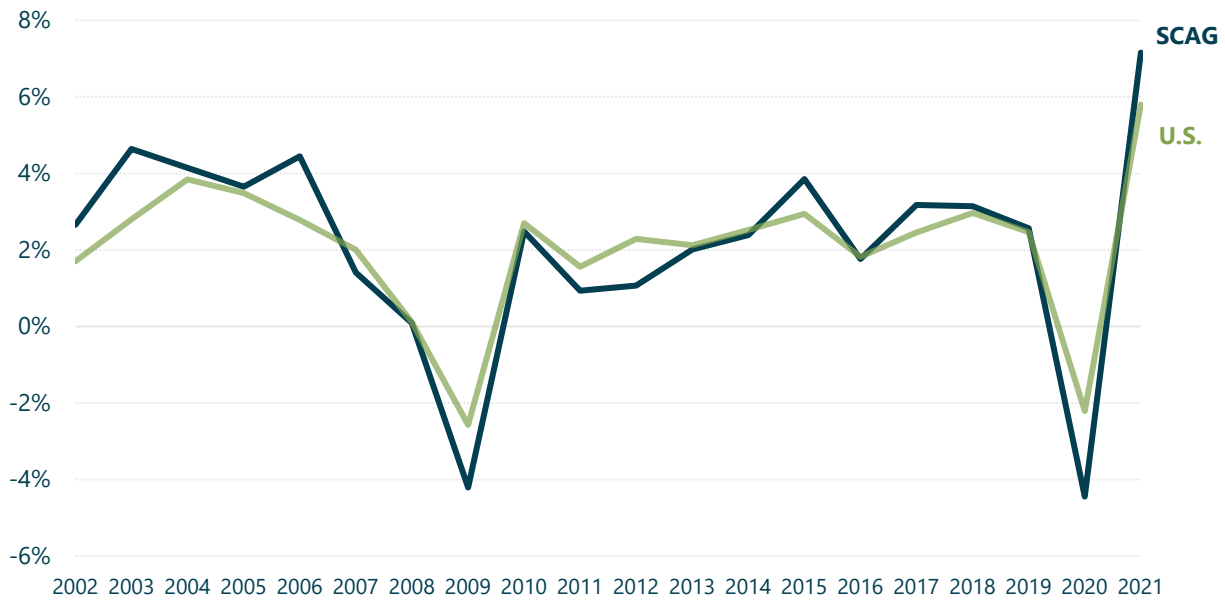
1. SCAG Region Economy

OVERVIEW: STATE OF THE SCAG REGION ECONOMY

The economic progress of the Southern California Association of Governments (SCAG) region has mirrored broader national economic trends. Currently, economic indicators at the national level suggest the U.S. has averted a recession—at least in 2023. This resilience persists despite the most aggressive monetary tightening in 40 years. As shown in Exhibit 1.1, the SCAG region’s Gross Domestic Product (GDP) generally follows U.S. GDP, and both the regional and national economies continued to grow in 2023. Consumer spending and robust employment conditions have significantly contributed to this economic resilience.

Exhibit 1.1: SCAG Region and U.S. Growth in Gross Domestic Product

Year-over-Year Percent Change



Source: U.S. Bureau of Economic Analysis (2023).

In the SCAG region, employment is holding strong and thriving, with an annual employment growth rate of 2.1 percent in 2023. Despite the headlines, layoffs among California tech firms did not materially impact the SCAG region. Moreover, the Professional, Scientific, and Technical Services sector and the Manufacturing sector have demonstrated remarkable resilience and consistent growth all year. The acceleration of e-commerce during the COVID-19 pandemic has also been a robust driver of regional growth.

Labor disputes affecting dockworkers, writers and actors have now been resolved with relatively limited economy-wide adjustment costs. Resolution of these labor disputes will likely strengthen commerce and job growth at the ports, in the region's Transportation and Warehousing sector, and on television, sound, and film recording sets in the San Fernando Valley, Burbank, Santa Clarita and Los Angeles.

In line with national trends, SCAG region households have been impacted by high and persistent inflation. Notably, the region's inflation rate, at 3.2 percent as of September, is lower than the national inflation rate (3.7 percent). Interest rates have peaked in this business cycle and have cooled consumer spending on goods. Yet, the observation that higher financing costs have not significantly deterred regional home building is encouraging. Moreover, home values in the region have remained high in 2023, indicating enduring consumer confidence.

Whereas the restoration of pandemic-impacted business activity primarily drove the SCAG region's historic economic growth in 2022, the economy in 2023 demonstrated the region's tenacious resilience against various challenges, including high-profile layoffs, persistent inflation, rising interest rates, labor disputes and vacant office buildings. However, this pace of growth may not be sustainable if persistently high interest rates take their toll on consumer purchasing power and small businesses. Recession risks will remain elevated into next year. Further rate hikes by the Federal Reserve or unexpected economic shocks could still push it to a tipping point in 2024.

CONTINUED POST-PANDEMIC RECOVERY

The pandemic continued to reverberate through the SCAG regional economy, evidenced by high inflation, supply chain and labor market disruptions, and the slow recovery of tourism in the region. In the final months of 2023, however, sectors with delayed pandemic recovery appear to be rebounding.

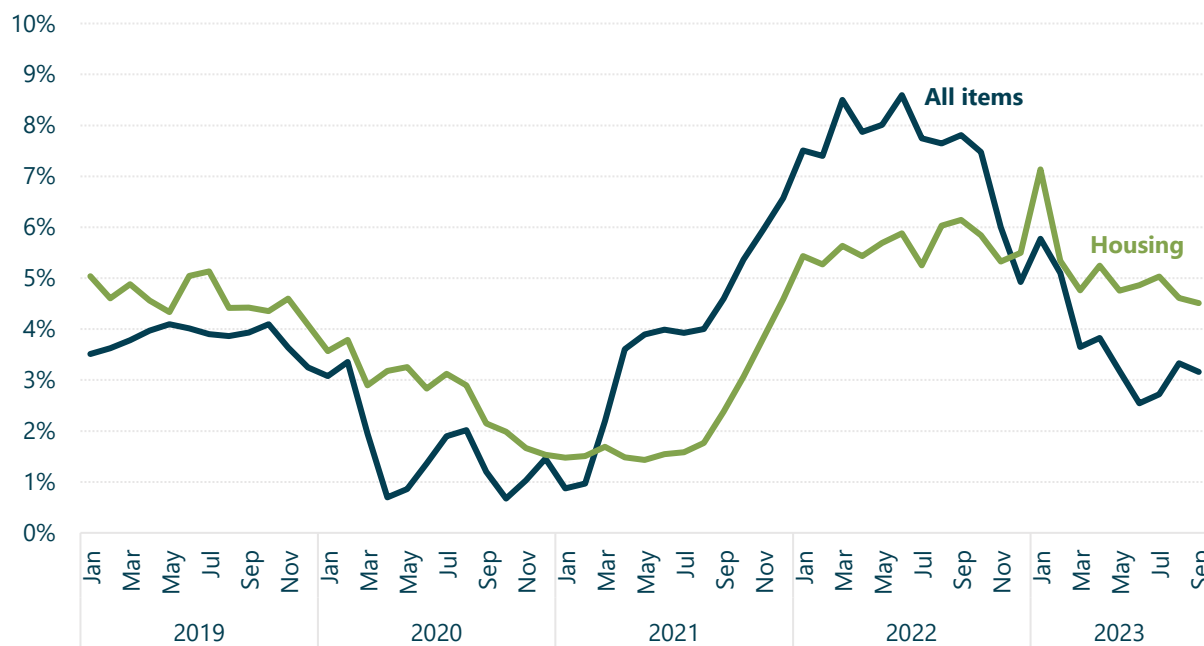
INFLATION

As of September 2023, year-over-year inflation in the SCAG region was at 3.2 percent, below the national headline rate of 3.7 percent, but still stubbornly high. Exhibit 1.2 shows headline year-over-year inflation for the SCAG region and the United States. However, the housing component of local inflation, which includes owners' equivalent rent and rent of primary residences, has shown marginal improvement. Growth in housing costs eclipsed overall inflation (all item inflation) throughout 2023. While a temporary price correction in home sale prices was observed in 2022 and early 2023, prices have been rising since March in all SCAG counties. Rental housing prices have also increased, though momentum here has temporarily slowed.¹

¹ See housing discussion below.

Exhibit 1.2: SCAG Region Overall and Housing Price Inflation

Year-Over-Year Inflation Rate



Source: U.S. Bureau of Labor Statistics, Consumer Price Index, Los Angeles Area. (2023).

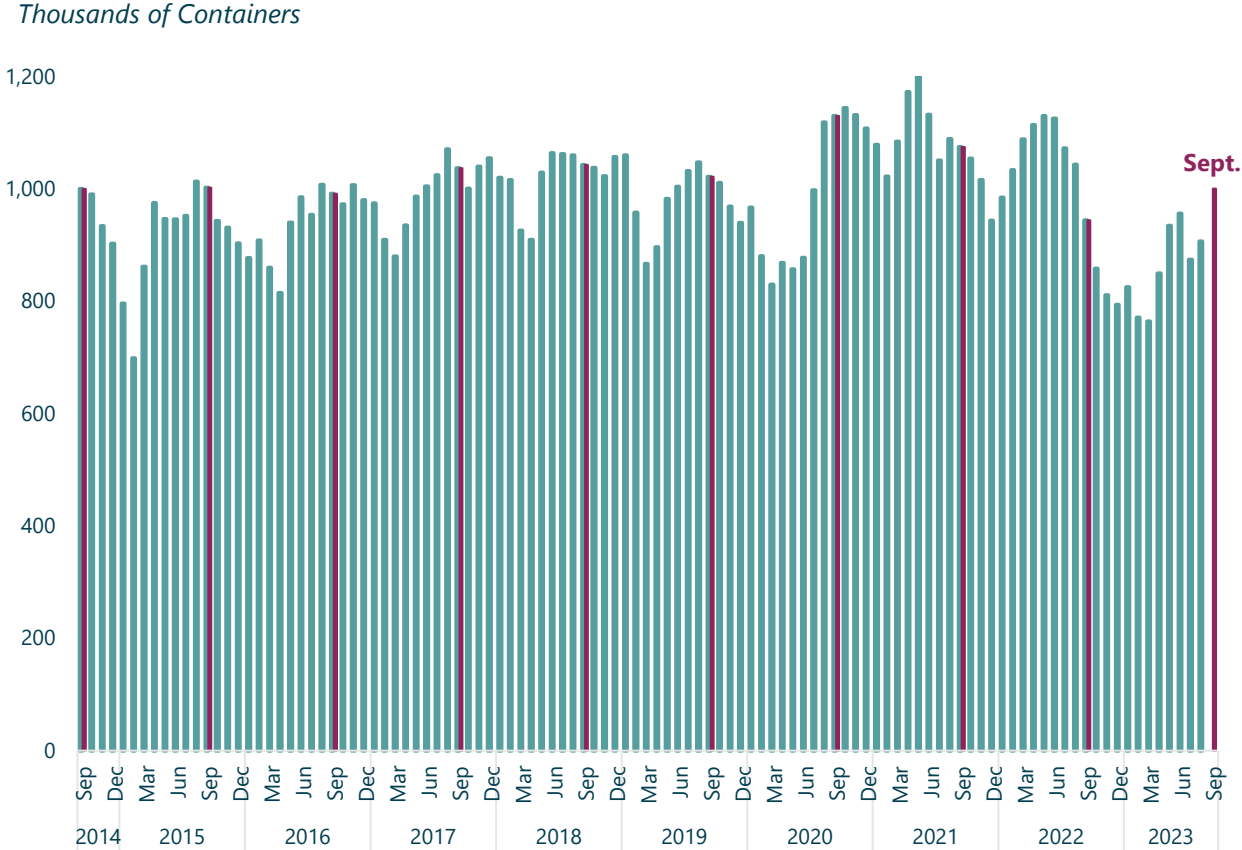
A related issue is high interest rates, particularly mortgage rates, which soared in 2023. In mid-October, the weekly rate on the 30-year fixed rate mortgage reached 7.79 percent—the highest rate since November 2000. Compounding pressures of robust prices and mortgage rates on buyers in the housing market, along with high interest rates for car loans and consumer and business credit, will likely continue to undermine spending.

THE PORTS

Goods movement through the ports of Los Angeles and Long Beach is on a path to recovery following 13 months of tense labor negotiations between the International Longshore and Warehouse Union and the West Coast ports.² September container volume moved noticeably higher, eclipsing container volumes in all previous months since August 2022 (Exhibit 1.3). A return to 2020 or 2021 volumes is expected to be delayed as shippers need time to reroute their containers back to Los Angeles and Long Beach from their interim detour routes through the Panama Canal to East Coast ports. Compounding this recovery is the need to unwind global container inventory imbalances created by the COVID-19 shock to trade flows. The rise in container volume at the region's ports is encouraging, yet with consumer spending forecasted to pull back in the 2023 holiday season, the full recovery at the ports will be difficult to achieve over the next two years.

² Goods movement at Port Hueneme is discussed in detail in the c Ventura County chapter.

Exhibit 1.3: Total Inbound and Outbound Container Traffic at the Ports of Los Angeles and Long Beach (September Volumes Highlighted)



Source: Port of Los Angeles (2023), Port of Long Beach (2023)

TRAVEL AND TOURISM

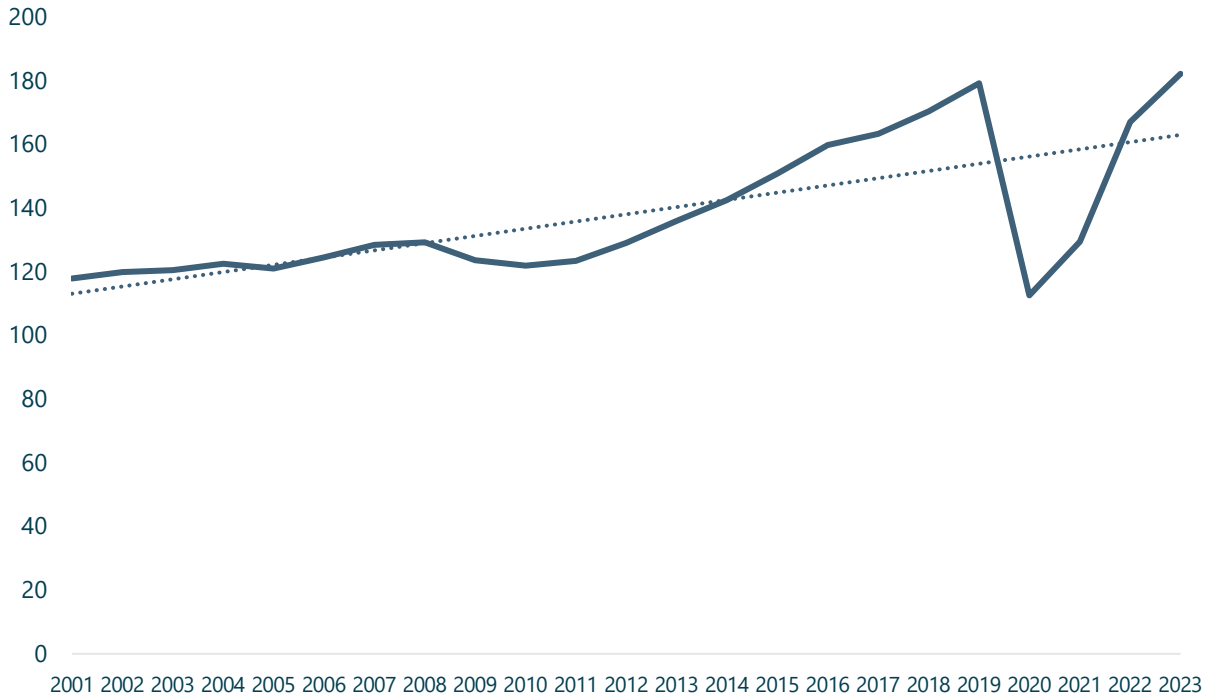
Travel and tourism, key economic engines in the region, have slowly recovered from the COVID-19 pandemic. In 2022, the region's major theme parks—Disneyland, California Adventure, Knott's, Universal Studios and Six Flags—restored visitor attendance after pandemic closures, beginning with an attendance surge in 2022. At the same time, employment in the amusement and recreation sector rebounded strongly, nearly reaching full recovery.

The region's sports venues have also restored normal attendance volumes. Attendance at Dodgers games for the just-completed 2023 season was the fifth highest on record. The Angels reported their highest attendance since 2019, despite losing 89 games. The Anaheim Ducks drew their largest attendance since 2019, and the Lakers matched their 2022 attendance in 2023.

Defying the labor market disruptions this year, the amusement and recreation subsector of the broader Arts, Entertainment, and Recreation sector (NAICS 71) is on pace to create 13,000 new jobs in the region this year, an 8 percent increase over 2022, see Exhibit 1.4.

Exhibit 1.4: SCAG Region Employment in the Arts, Entertainment, and Recreation Sector (with Trendline)

Thousands of Jobs

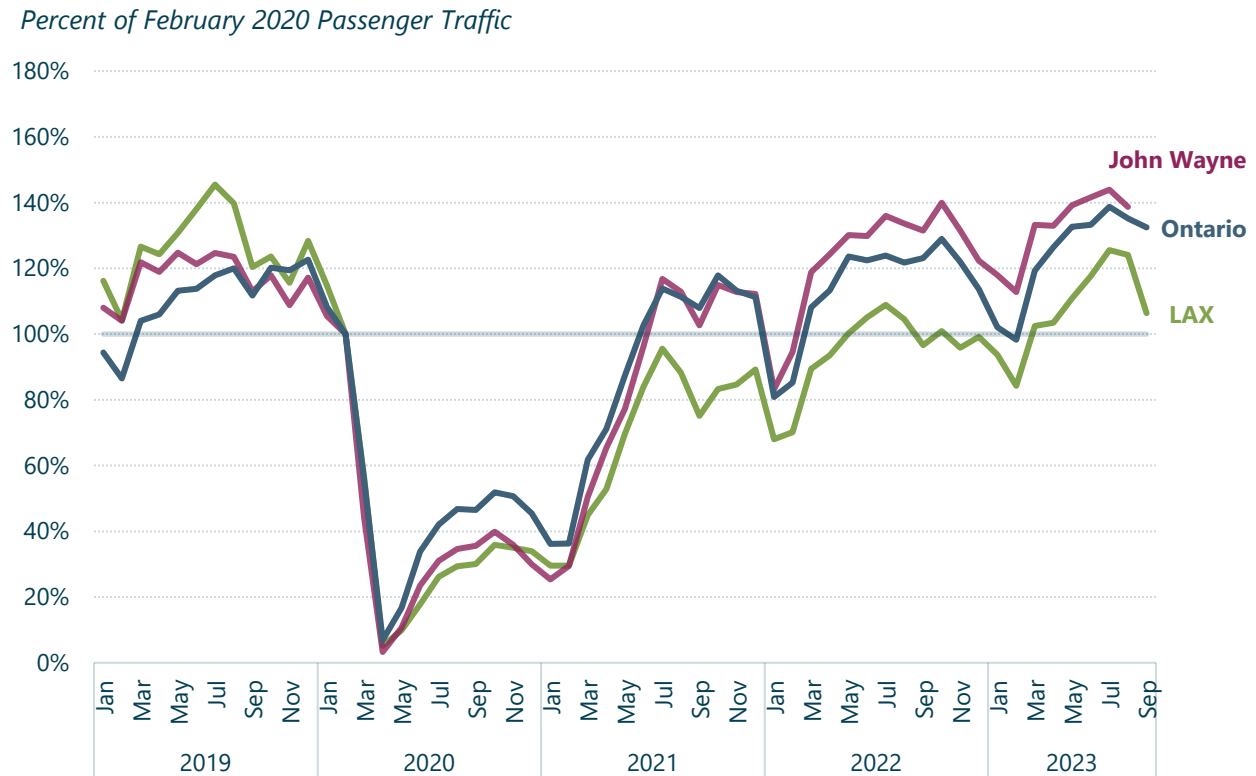


Notes and sources: Values for 2023 are annualized based on data from Jan. to Sept. 2023. Data from California Employment Development Department (2023).

Passenger traffic flowing into and out of the region through the local airports continues to surge in 2023. As demonstrated in Exhibit 1.5, passenger enplanements and deplanements at John Wayne Airport in Orange County are at record levels this year. Total passengers through the Los Angeles International Airport have rebounded strongly from the pandemic recession. Similarly, the Ontario International Airport is seeing record levels of passenger traffic. Even with historically high airfares, passenger counts are at or near record levels at all principal airports in the SCAG region—the Consumer Price Index for airfare in calendar 2023 has increased 26 percent from the average price level in 2021.³

³ The CPI for U.S. Airfares (CUSR0000SETG01 in FRED) is averaging 272.7 in 2023 (first 9 months). In 2021, the CPI averaged 217.1, and in 2020, the average was 217.7.

Exhibit 1.5: SCAG Region Airport Traffic at Pre-Pandemic Levels



Sources: Los Angeles World Airports (2023), John Wayne Airport Orange County (2023), Ontario International Airport (2023).

Hotel occupancy has leveled off in 2023 relative to 2022. Average occupancy in the first eight months of 2023 is slightly higher than in 2021 and 2022 during the same period in all SCAG counties except those in the Inland Empire, where hotel occupancy is still slightly below pre-pandemic levels. Consequently, indicators tracking tourist activity in the region show that travel and tourism have not slowed and continue to drive job and income growth for the SCAG region.

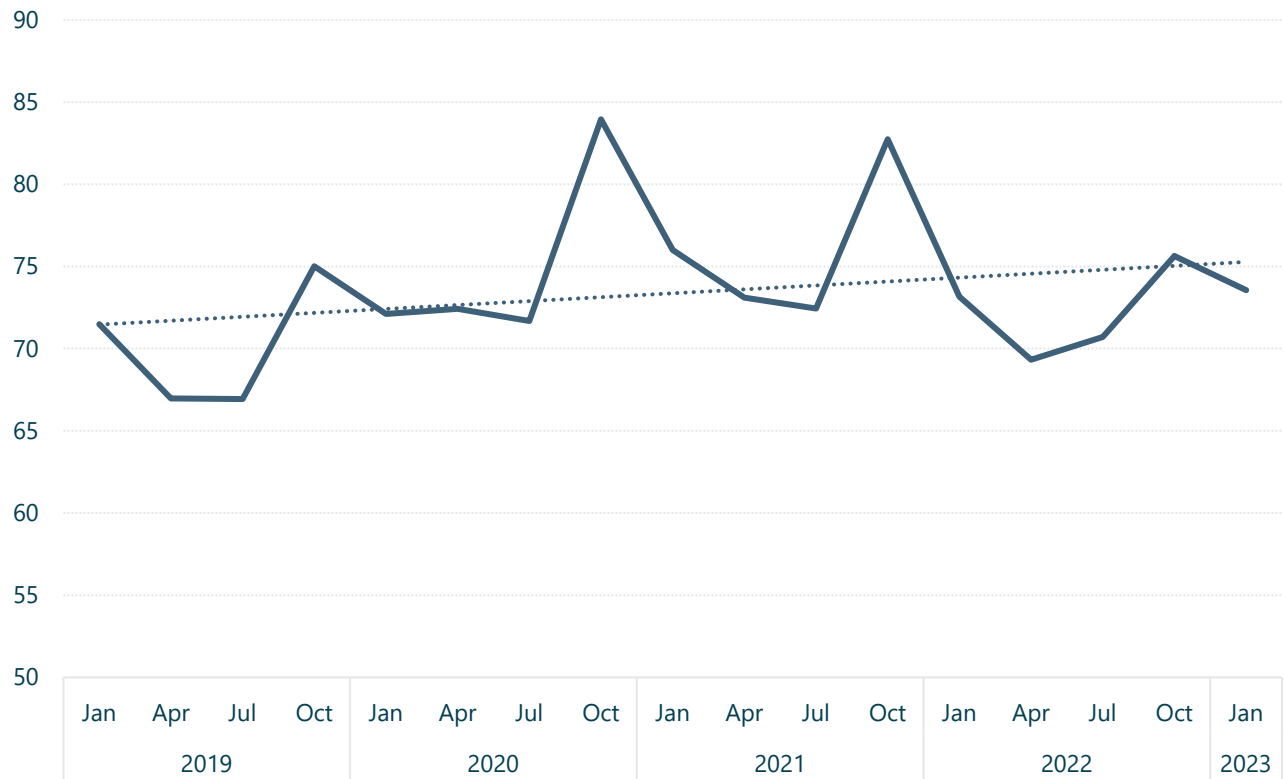
THE POST-PANDEMIC ECONOMY

WAGES AND SPENDING

Real wage rates in the region have been generally flat, as shown in Exhibit 1.6. Moreover, in the most recent quarter, also shown in Exhibit 1.6, average real wages fell by 3.2 percent. This decline is consistent with the general economy of California and the nation. Inflation and higher interest rates erode purchasing power, meaning families can buy less with the same amount of money. While there has been a clear decline in regional average wages, the resulting contraction in consumer spending has been modest. This suggests that families offset declining real wages with one or more of the following: additional work hours, other income, taking on debt and drawing from savings or public assistance.

Exhibit 1.6: SCAG Region Average Annual Real Wages (with Trendline)

Thousands of 2022 Dollars

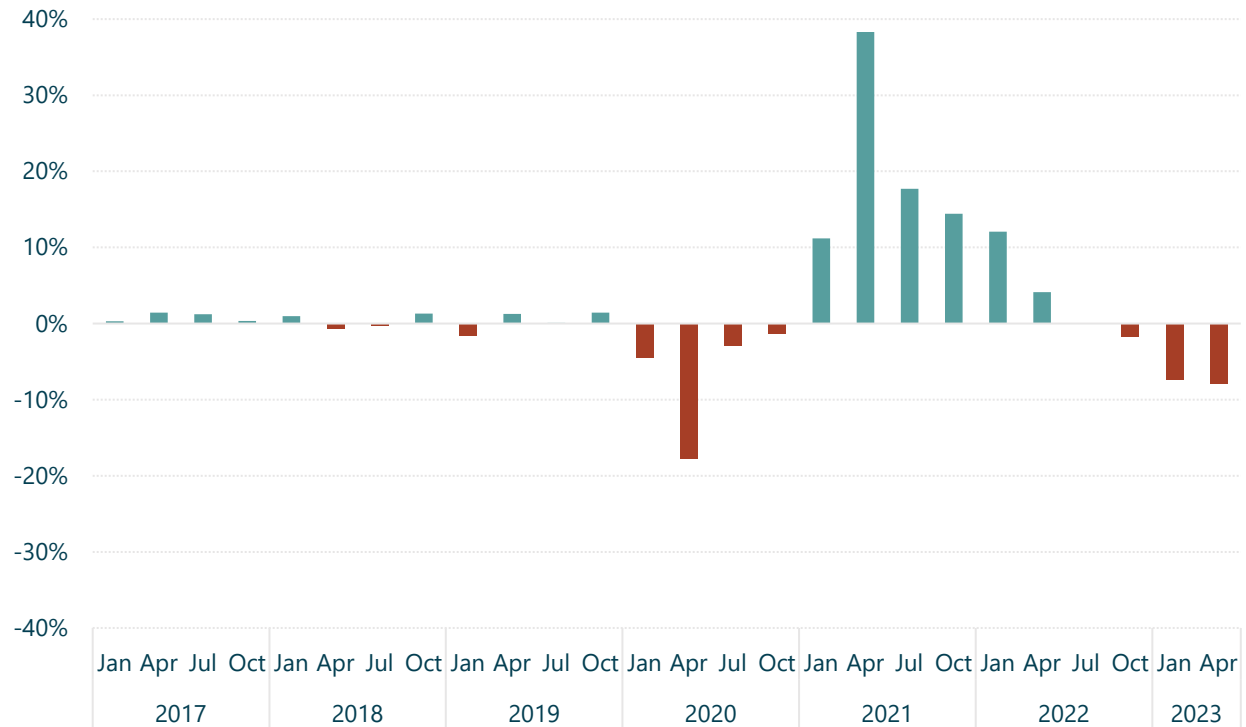


Source: U.S. Bureau of Labor Statistics (2023)

TAXABLE SALES

Changes in taxable sales serve as a proxy for changes in consumer spending. Current evidence on retail goods expenditures strongly suggests that consumers in the SCAG region have pulled back on their overall outlays this year, including expenditures for vehicles, furniture and furnishing, general merchandise, gasoline, clothing, and even grocery and liquor stores. Exhibit 1.7 shows that the region's real consumption of taxable goods is falling, further supporting the above perspective on declining purchasing power and a consumer spending "pullback." Despite the contraction in taxable sales, labor markets in the region have not materially contracted.

Exhibit 1.7: SCAG Region Growth in Real Taxable Sales on Retail Goods



Source: California Department of Tax and Fee Administration (2023).

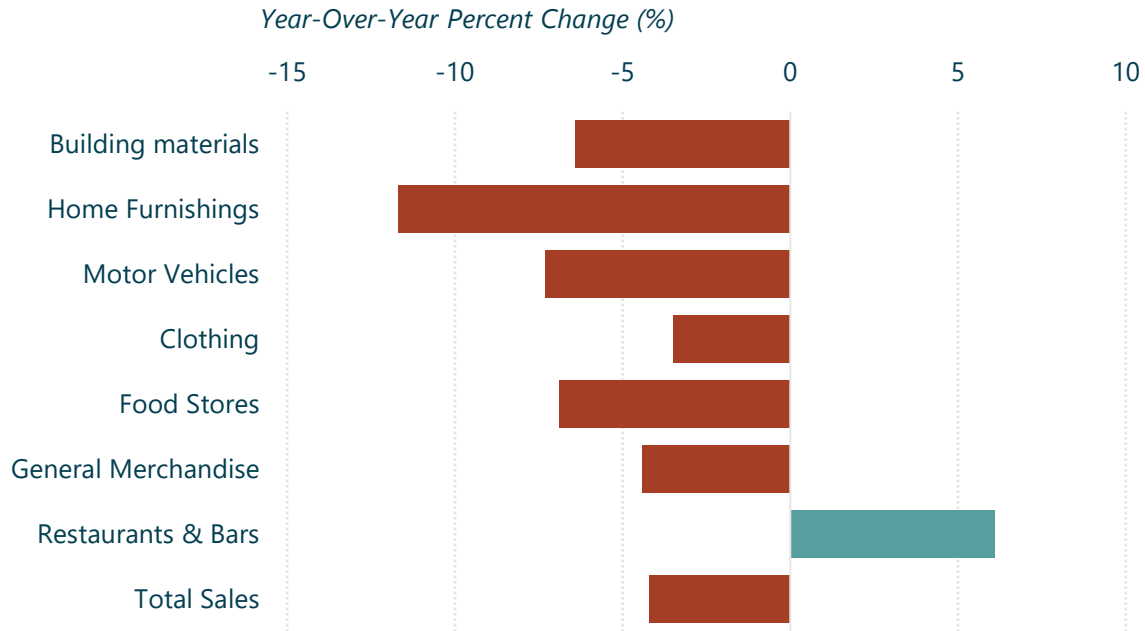
Exhibit 1.7 does not include services because most services are not taxable and not included in the Taxable Sales data. However, a proxy for demand for services is spending on restaurants, bars, and clubs, or "experiences."⁴ Products within these establishments are taxable. Analysis of food and drinking establishment sales tells a different story than overall taxable sales. Consumers do not appear to have pulled back on experiential consumption, including travel.⁵ Year-over-year increases in constant dollar spending on food and drink show double-digit increases in the first and second quarters of 2023.

Moreover, employment continues to increase in the Accommodation and Food Service (NAICS 72) and the Arts, Entertainment, and Recreation (NAICS 71) sectors, which provide experiential consumption alternatives for consumers. In this way, and as suggested in Exhibit 1.8, consumers appear to be diversifying expenditures to compensate for reductions in outlays on (interest-bearing) durables and other conventional merchandise. Year-over-year increases in spending on food and drink at restaurants and bars are the only retail sales category to show growth in the first half of 2023.

⁴ At the national level, we can analyze personal consumption expenditures every month. This series includes all expenditures by households and is not limited to taxable spending. Personal consumption expenditures. Through September 2023, personal consumption has slowed, but it continues to show positive growth, which is the main driver of the economy this year.

⁵ See the Tourism section of this report. There is no evidence that the level of tourism has abated in the SCAG region during the first nine months of 2023.

Exhibit 1.8: SCAG Region Retail Sales Growth

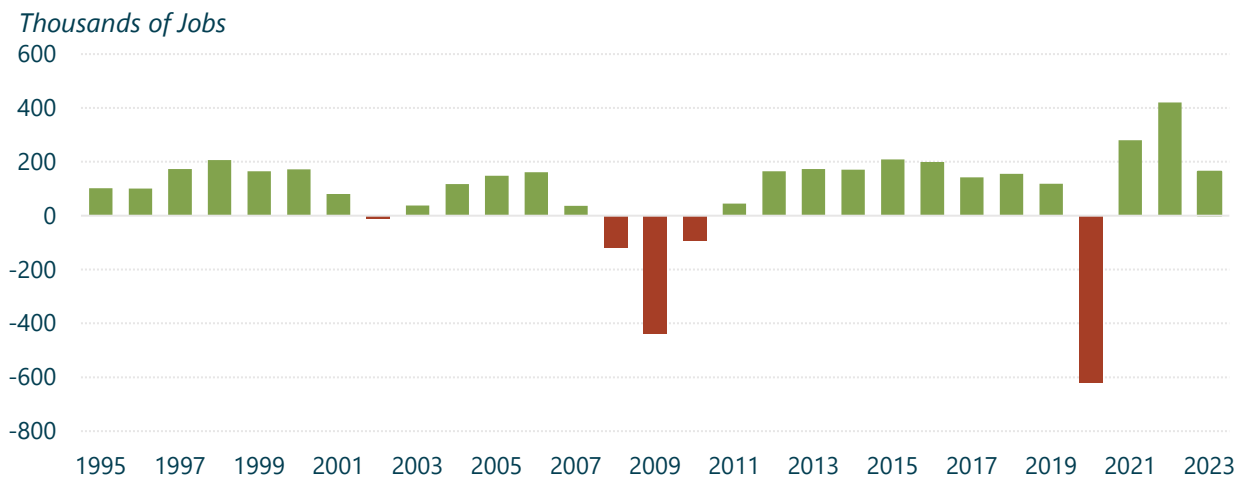


Source: California Department of Tax and Fee Administration (2023).

LABOR MARKET

The SCAG region is expected to create approximately 178,000 jobs in 2023, building on the record job growth in 2022 (Exhibit 1.9). This surge in job growth includes a rebound of employment in the Accommodation and Food Service sector (NAICS 72), devastated by pandemic closures and restrictions in 2020 and 2021. This year, jobs in leisure and hospitality have returned to pre-pandemic levels.

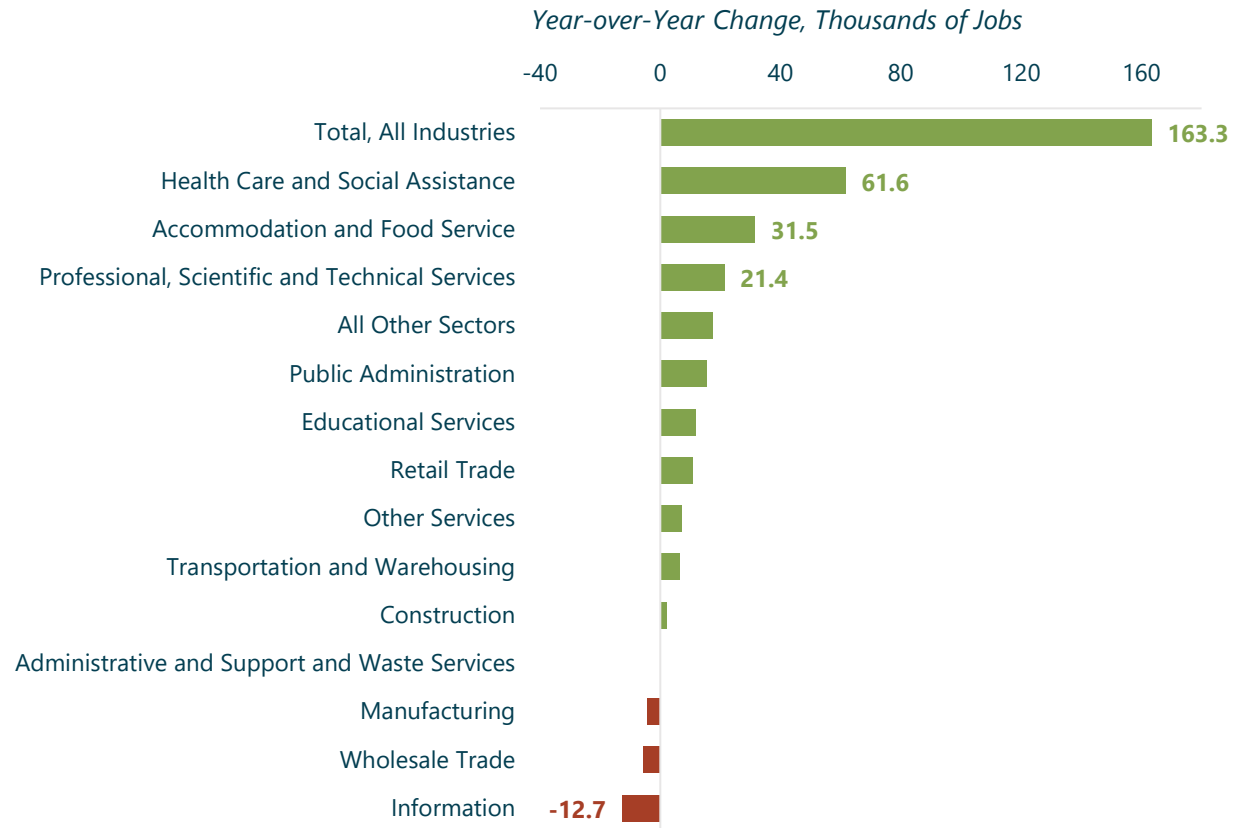
Exhibit 1.9: Employment Growth in the SCAG Region 1995-2023



Notes and sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

As shown in Exhibit 1.10, in 2023, most sectors contributed to job growth in the SCAG region, with a moderate overall annual increase of 2.1 percent. A moderation in overall economic growth can generally explain the moderation in job growth, but the U.S. GDP recorded growth in the first half of 2023 at an annualized rate of 2.1 percent. This growth jumped sharply in the third quarter. Another factor in moderating job growth is that the region's labor market is nearing full employment, given the current labor supply, with a September 2023 unemployment rate of 4.7, constraining job growth, as available workers are more difficult to match with vacancies.

Exhibit 1.10: SCAG Region Employment Growth from 2022 to 2023

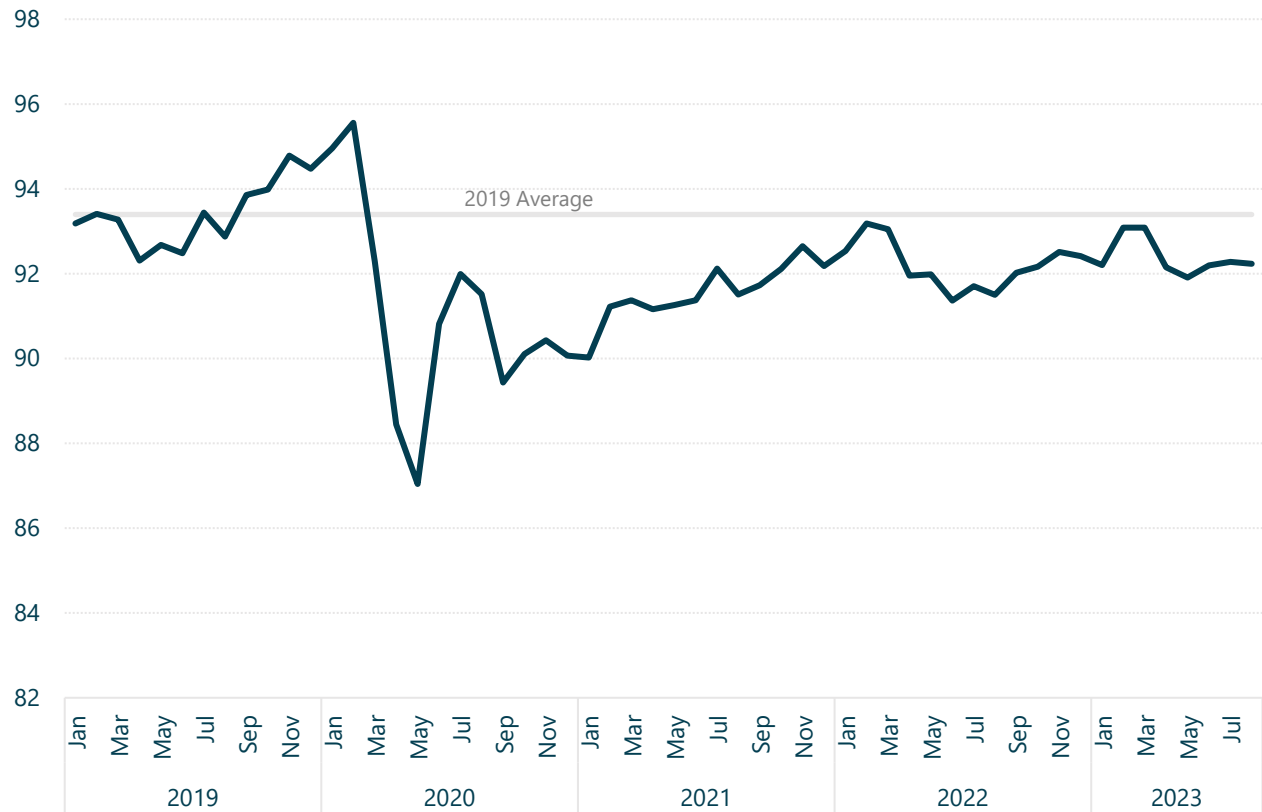


Notes and sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

The slow recovery of the region's labor supply has compounded the aggregate jobs recovery problem. Labor supply, measured by labor force participation, remains below pre-pandemic levels, as shown in Exhibit 1.11. Over the past two years, labor force participation in the region has stagnated—except in the Inland Empire counties. Labor force participation has not returned to pre-pandemic levels in Los Angeles, Ventura, Orange or Imperial counties. Consequently, filling job vacancies is challenging for employers trying to keep up with the growing demand for their products and services. Labor force expansion depends on the age and demographics of the region's population. Population decline has accelerated in the region—as well as the state and the nation—and is expected to follow a downward trend. The region's employment growth will be constrained if this trend continues without a demographic or structural shift.

Exhibit 1.11: SCAG Region Monthly Labor Force Participation

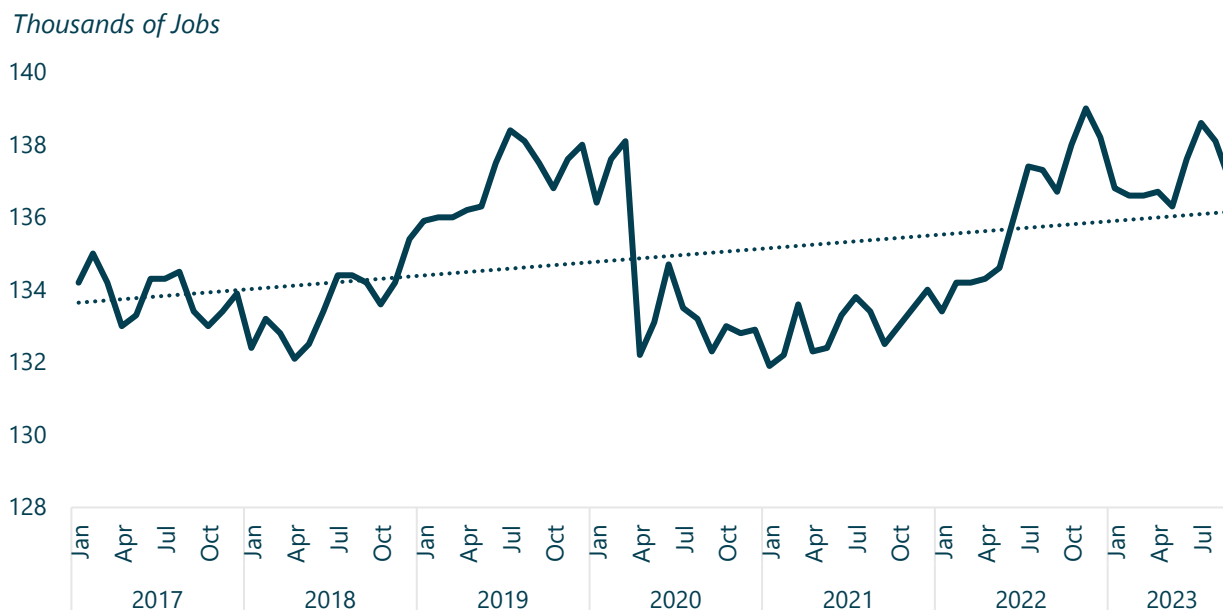
Millions of Labor Force Participants



Notes and sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

The Professional, Scientific and Technology Services sector encompasses most technology jobs and has been a strong engine of growth in the region, particularly in Orange and Los Angeles counties. Over the last 18 months, the region has notably returned to a growth trend of employment in advanced manufacturing, encompassing industries such as computer and electronics, and transportation equipment manufacturing. In the SCAG region, advanced manufacturing primarily includes aerospace products, sensors and components. The continued growth in these sectors is a testament to the region's ability to attract workers, highlighting its competitive edge.

Exhibit 1.12: Employment in Advanced Manufacturing in Los Angeles and Orange Counties (with Trendline)



Notes and sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

The Transportation and Warehousing sector contributed to double-digit job growth from 2017 to 2021, and 8 percent in 2022. However, in 2023, total employment in the Transportation and Warehousing sector only grew by 1.4 percent. Manufacturing and wholesale trade jobs, dependent on cargo passing through local ports, contracted in 2023. In 2022, 63 percent of new jobs in the Transportation and Warehousing sector were in the Inland Empire, as millions of square feet of warehouses and distribution space opened to support the rapidly expanding logistics and e-commerce industries.

Los Angeles, Orange and Ventura counties led employment growth in the region. Los Angeles and Orange Counties dominate the region's recent job growth, adding 153,000 jobs. Historically, all counties in the region move in lockstep, but starting in February 2023, the Inland Empire diverged with a significant decrease in employment, driven by contraction and automation in the Transportation and Warehouse sector. This year, the Inland Empire's contribution to the region's labor market has been relatively muted. At the current rate (January-September), the Inland Empire is expected to add 16,300 jobs.

Distribution and warehousing space, and its attendant employment, has dominated new industrial development throughout the SCAG region. The rapid emergence of e-commerce transformed the need for retail space into fulfillment centers. Amazon has been the dominant company in building new facilities throughout Southern California, but Walmart, Lowes, Home Depot and Costco have also been active in this effort. The steep decline of cargo volumes at the ports impeded this new hiring engine, as did slowing 2023 goods consumption, which reduced the need to store product inventories.

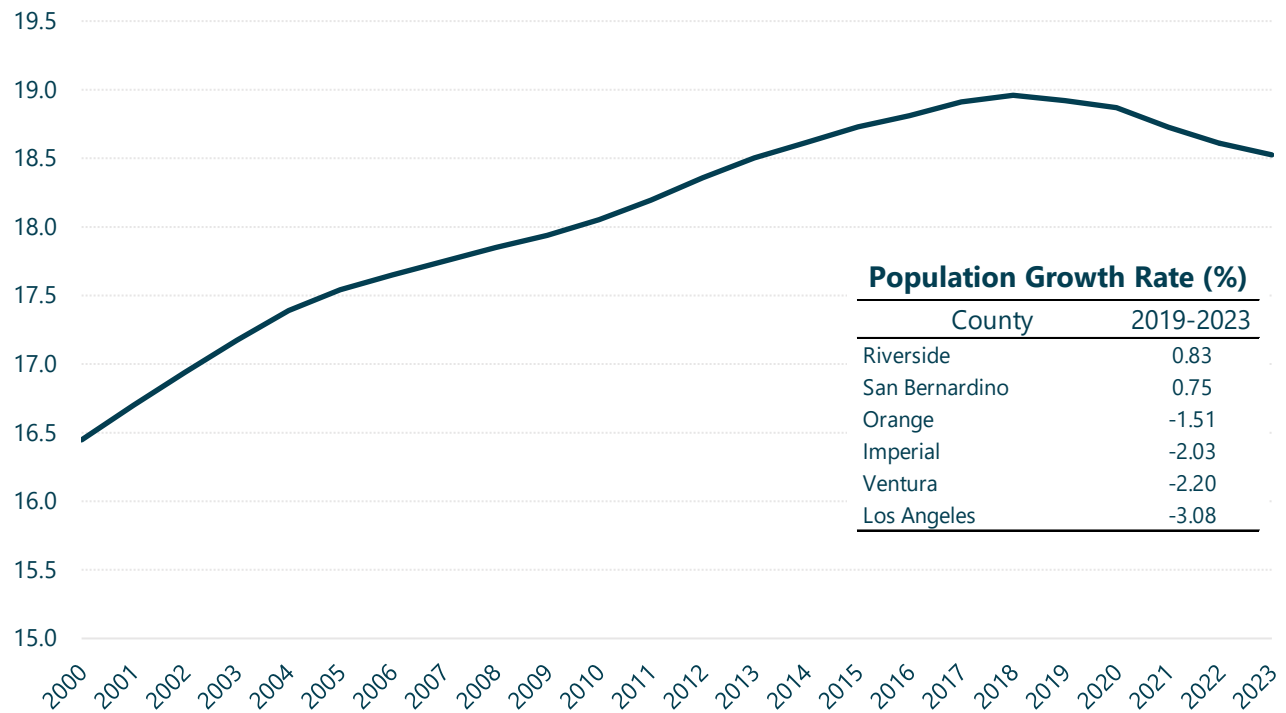
This year, the SCAG region has seen widespread job growth across diverse sectors, indicating a strong and resilient labor market. The leaders of this expansion have been the Healthcare, Accommodation and Food Service, and Professional, Scientific, and Technical Services, together creating 115,000 new jobs. However, the Information sector (including film, TV and sound recording) has experienced the most significant decline. It is widely anticipated that these jobs will be restored with an end to the actors' strike.

DEMOGRAPHICS

Exhibit 1.13 shows a declining regional population, due to the increasing exodus from Los Angeles, Orange, Imperial and Ventura counties. Los Angeles and Imperial have seen more people leaving than arriving for the past decade, and Ventura and Orange counties since 2016, as detailed in Exhibit 1.14. This accelerating outflow and a decrease in natural population growth suggest a continued population decline in the region if these demographic trends persist.

Exhibit 1.13: SCAG Region Population and County Population Growth Rates

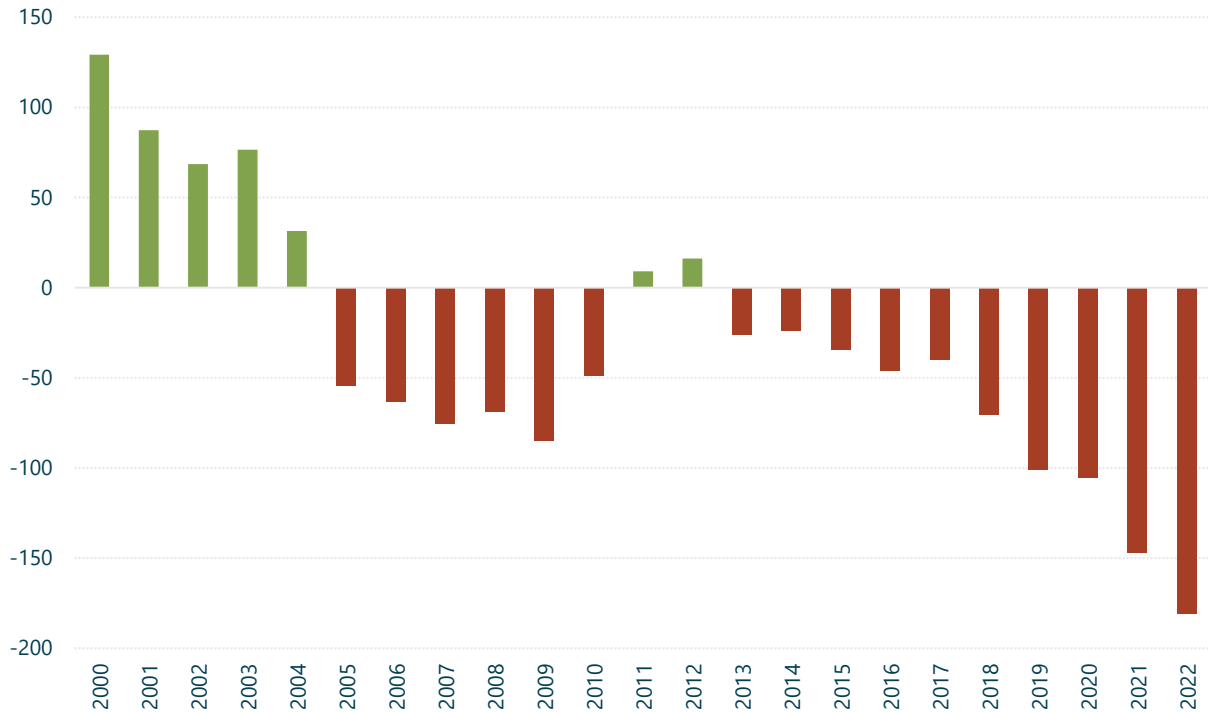
Change, Millions of Residents



Source: California Department of Finance (2023).

Exhibit 1.14: Net Domestic Migration in the SCAG Region, 2000-2022

Thousands of People



Source: California Department of Finance (2023).

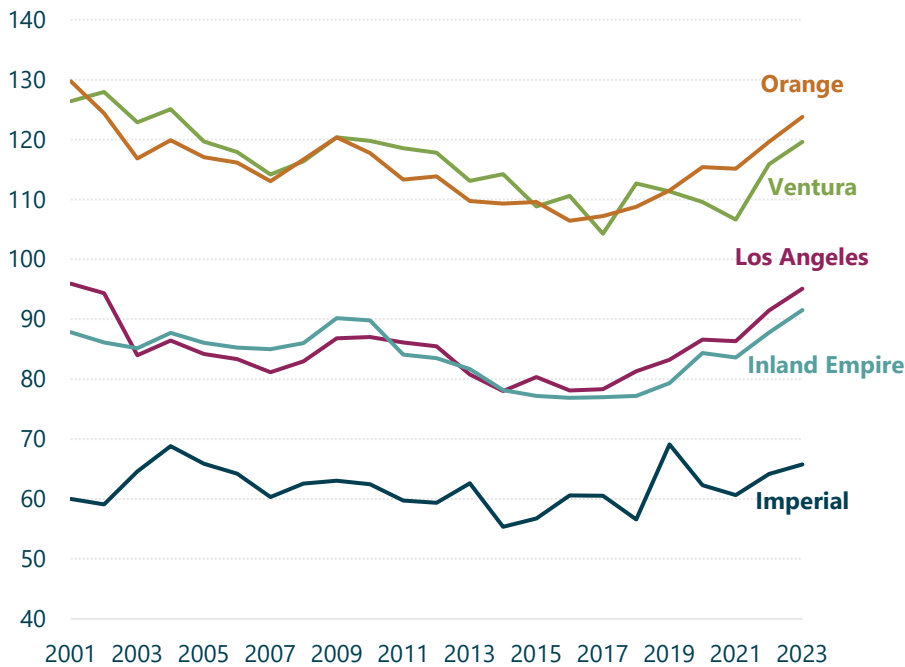
HOUSEHOLD INCOME

Exhibit 1.15 shows that incomes vary across the SCAG counties, with Orange County families reporting incomes nearly double the averages in Imperial County. Exhibit 1.15 also shows disparate income growth across the region's counties. Inland Empire and Los Angeles families have reported the highest income growth. Ventura County families have reported the lowest increase.

SCAG average real family incomes were generally stagnant or decreasing, at least since the Great Recession (or earlier) until 2021. The most recent income shift is due to wage increases, strong stock market performance, and stimulus payments from the Coronavirus Aid, Relief, and Economic Security Act and American Rescue Plan Act. Also contributing to increased family income are the adjustments made by the Social Security Administration, which increased payments to all recipients by 5.9 percent in 2022 and 8.7 percent in 2023.

Exhibit 1.15: Real Median Family Income in SCAG-Region Counties

Thousands of 2022 Dollars



Percent Change in Family Income	
County	2015-2023
Inland Empire	18.6%
Los Angeles	18.3%
Imperial	15.8%
Orange	13.0%
Ventura	9.9%

Source: HUD (2023)

NEW DEVELOPMENT IN THE REGION

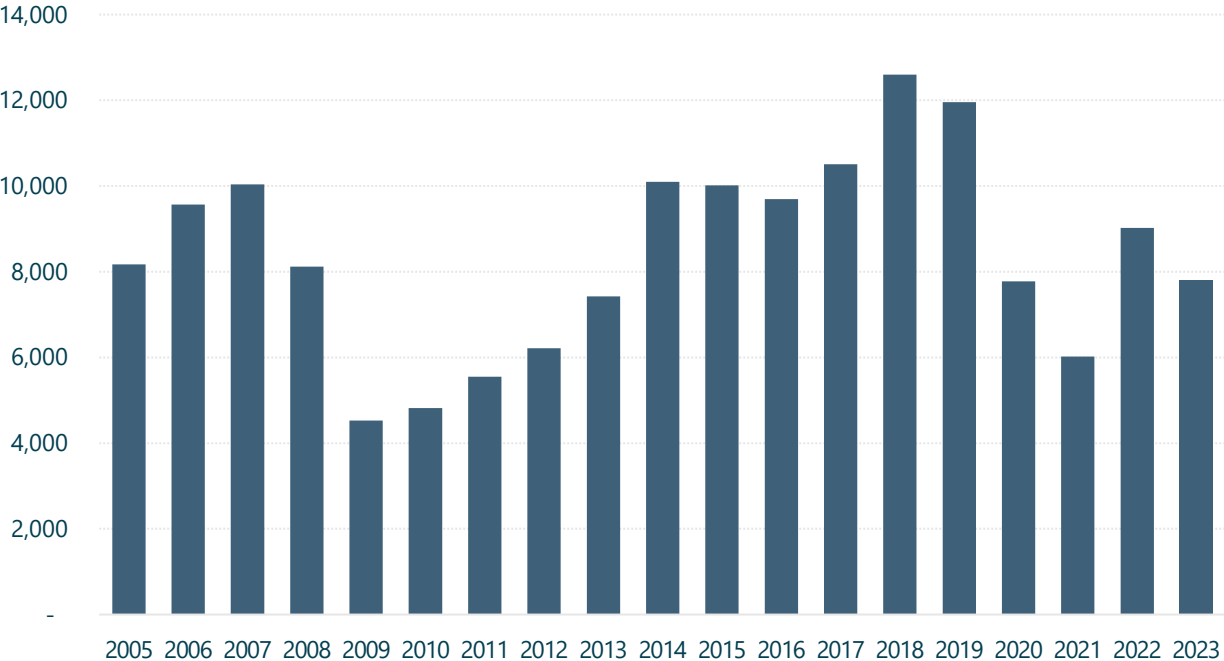
Non-Residential Development

Investment dollars in commercial and industrial buildings proliferated in the region between 2014 and 2020 (Exhibit 1.16). Commercial development following the pandemic resumed with significant activity in 2022. Annualized for the year, the value of non-residential building investment is running close to last year's level. The value of new industrial permits in San Bernardino County alone was \$400 million for the first half of this year, more than three times the level of industrial activity in Los Angeles County. Currently, 31.4 million square feet of industrial projects are under construction in the Inland Empire market.⁶ The extent of industrial projects in the Inland Empire, Los Angeles and Orange counties suggests that the industrial market is not cooling off. Considering the dramatic decline of commercial occupancy during the COVID-19 pandemic, persistent office vacancies in city centers, and today's adverse interest rate environment, industrial construction is a relatively bullish trend for commercial property.

⁶ One of the largest projects recently completed phase 1 in June 2023. The Palomino Ranch Business Park will be the largest industrial real estate development in the history of Norco, with 2 million square feet across 24 buildings.

Exhibit 1.16: Non-Residential Investment in the SCAG Region

Billions of Nominal Dollars



Notes and sources: Values for 2023 are annualized based on actual data from January through September 2023. Based on data from CIRB. (2022) and U.S. Bureau of the Census (2023).

Despite having over 100 floors of empty office space, Downtown Los Angeles' high-rise development has continued through 2023, including thousands of apartments and mixed-use office and commercial buildings. Large warehouse and distribution space development in the Inland Empire is expected to create thousands of new jobs over the coming decade. The ultimate extent of this upside depends on the logistical technology choices, including automation and accommodation of environmental restrictions on trucking operations (and future permitting of warehouse space) in both San Bernardino and Riverside counties.

New energy projects around the Salton Sea in the Coachella and Imperial valleys represent a boon in new investment coming, principally for Imperial County, including hundreds of construction jobs and, ultimately, permanent operating jobs. Imperial County's resource base presents opportunities and challenges with abundant renewable energy potential but increasingly acute water scarcity. The first utility-grade solar facility became operational in the county in 2011. Over the ensuing 12 years, Imperial County has approved more 50 solar facilities, with 16,107 acres for solar. Imperial County has also developed wind power and several battery-energy storage system facilities. The county is also a producer of geothermal energy. Historically, agriculture has been an important guarantor of livelihoods in Imperial County, but substantial investments in productivity and water-use efficiency will be needed to sustain this sector and increase agrifood value added to support higher real wages.

The production of geothermal and lithium mining are combined industry activities. Officials and industry professionals envision a "Lithium Valley" in Imperial County that would establish California as a global

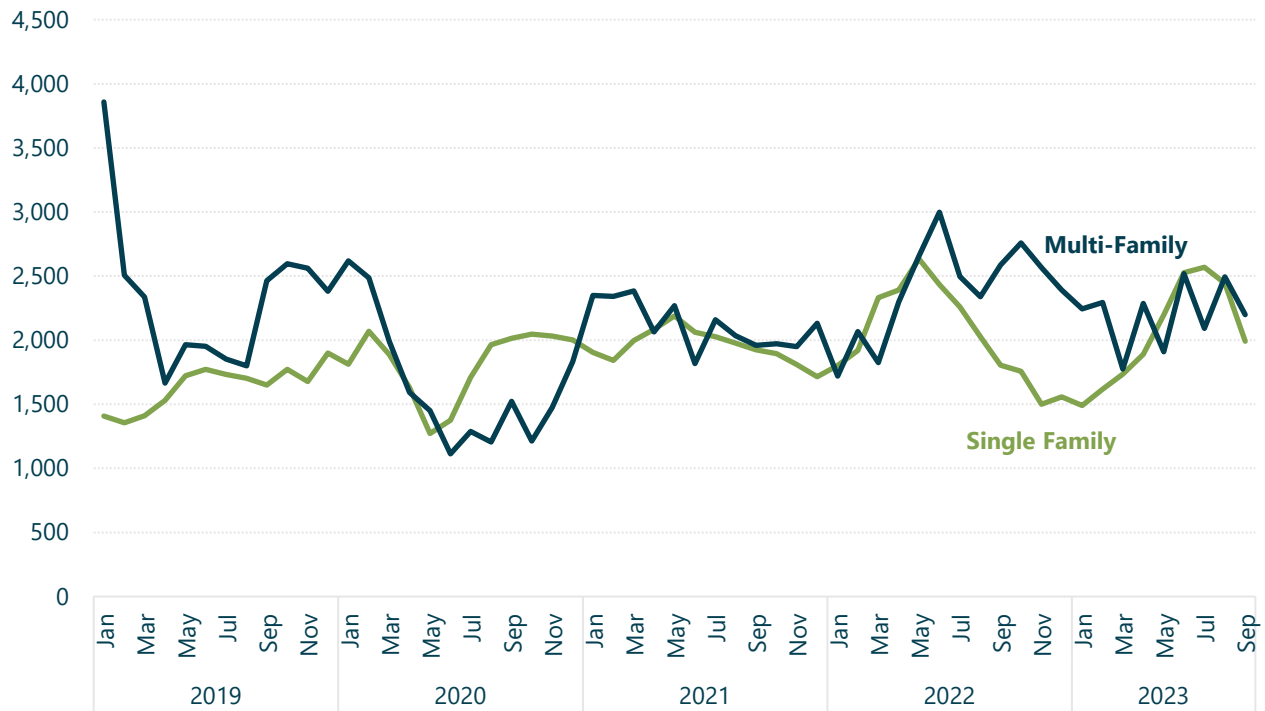
production hub that could employ thousands of workers and propel the economic future of Imperial County residents for generations to come.⁷

New Development in Housing

The pace of new residential building for the last six months shows an apparent acceleration in new housing units throughout California but more prominently in the SCAG counties. The number of new permits issued for housing units in the six-county region this year is on a path toward matching or even eclipsing new housing unit totals in 2022. The risk of permit delays, particularly those due to CEQA actions, may temper housing development, but the momentum of investor commitment remains very strong.

Exhibit 1.17: New Residential Units from Permits per Month in the SCAG Region

Monthly Residential Units from Permits (3-Month Moving Average)

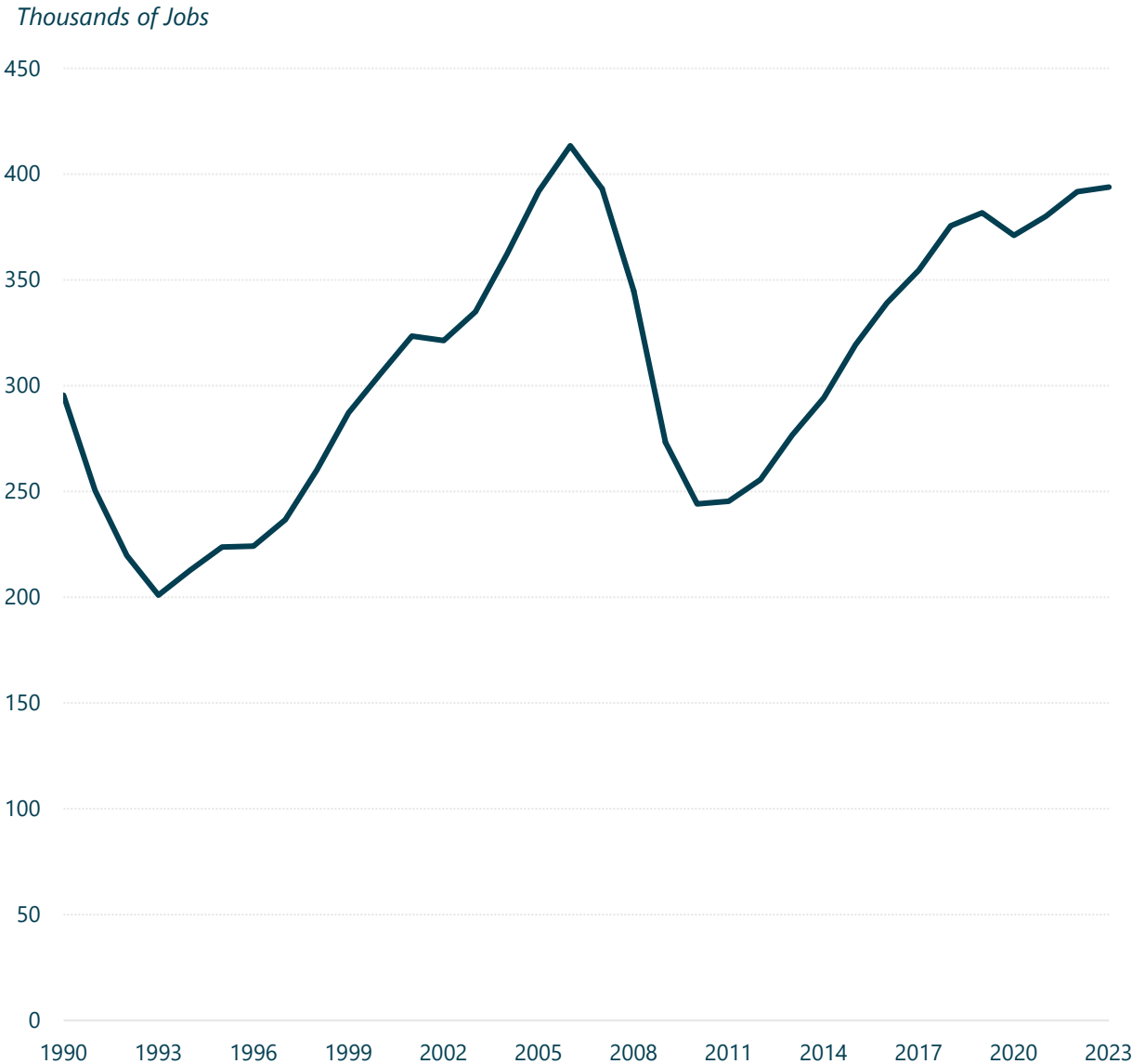


Notes and sources: Values for 2023 are annualized based on actual data from January through September 2023. Based on data from CIRB. (2022) and U.S. Bureau of the Census (2023).

⁷ Tax subsidies are offered to encourage lithium manufacturing operations in the county. Los Angeles-based StateVolt has committed to building a \$4 billion battery manufacturing plant, along with other companies now expressing interest. EnergySource Minerals is steaming ahead with plans to build a lithium facility, which could be ready for commercial use by 2025. The company is planning to break ground on a billion-dollar facility in 2023. Warren Buffett’s BHE Renewables runs 10 geothermal energy plants in the region. There’s another on the drawing board by an Australian company, Controlled Thermal Resources. Estimates of the amount of lithium in the region are massive. Recovery of the metal is estimated to support 7.5 million electric vehicles a year, which is half of the total car and truck sales in the U.S. currently.

The surge in building activity has generated a 16-year high in construction employment. Indeed, a principal problem within the SCAG region and California is filling construction job vacancies and new openings. Despite the sharp rise in financing costs in 2022 and 2023, there is no discernable slowdown in new building construction or the voracious demand for construction workers in the data or in anecdotal evidence. The nationwide unemployment rate for the construction industry is 3.8 percent (September 2023), making it very difficult to import workers to meet California's insatiable demand.

Exhibit 1.18: SCAG Region Employment in the Construction Sector (NAICS 22)

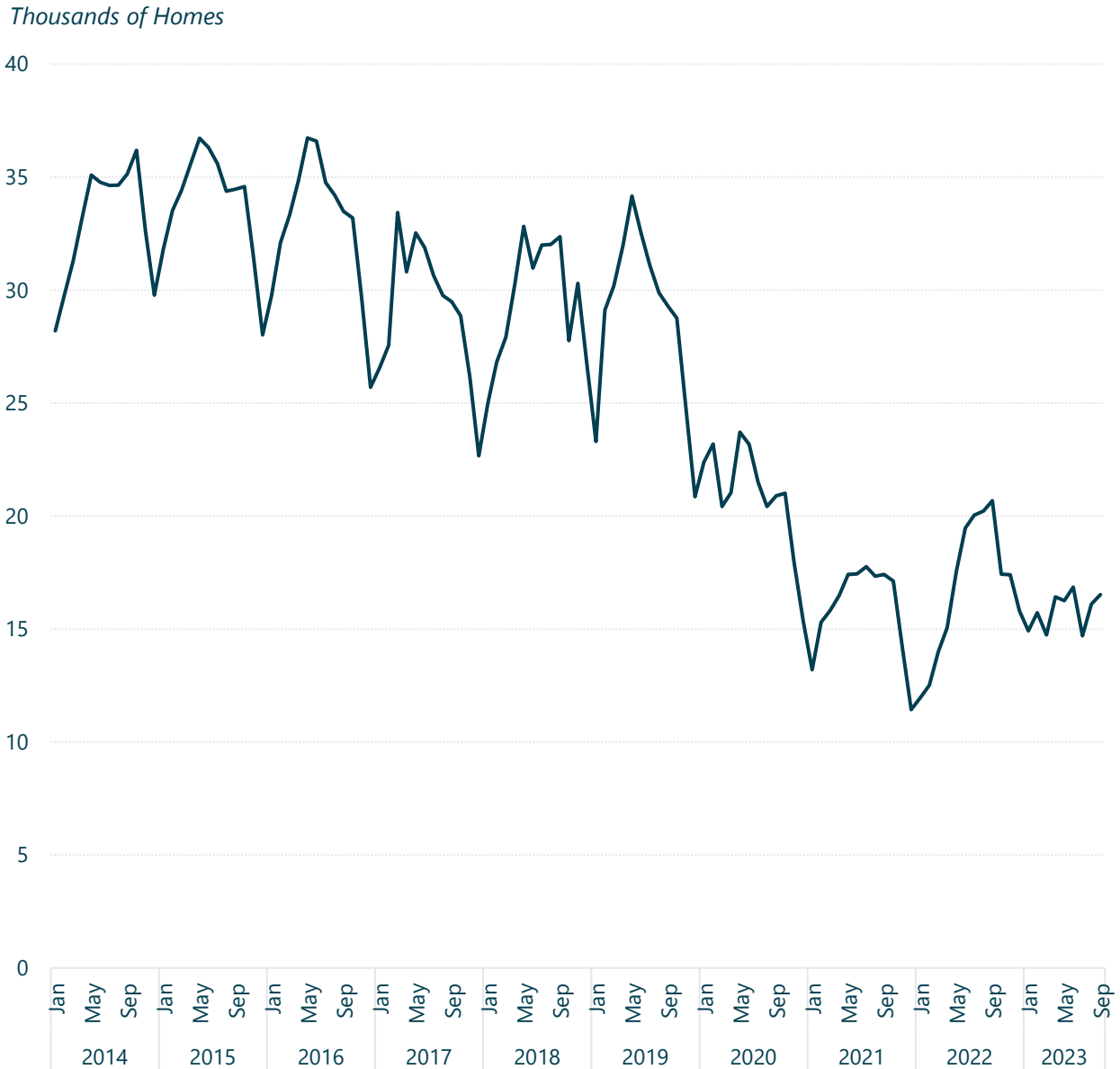


Notes and sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

Existing Housing Market

Existing home sales for the six-county SCAG region in September 2023 are off 51 percent from transaction volume in September 2020. Higher financing costs have affected both buyer and seller, the latter to a greater degree. Housing inventory is currently at an all-time low in the region; sellers are reluctant to place their homes on the for-sale market because they, too, face loan servicing costs that are 100 percent higher today than two years ago.

Exhibit 1.19: Existing Home Monthly Inventory SCAG Region

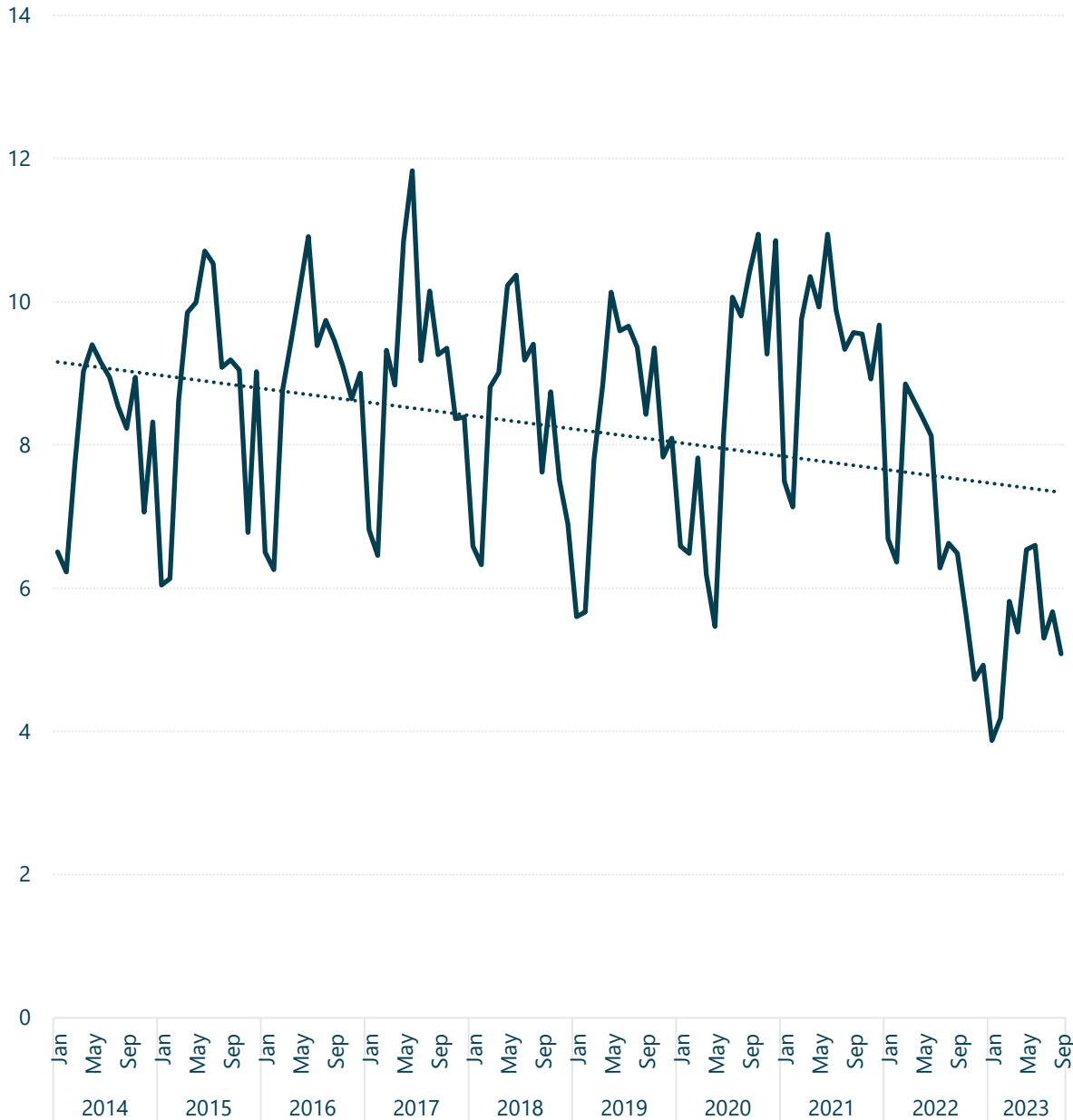


Source: California Association of Realtors (2023)

With the highest mortgage rates in more than two decades, existing home sales have significantly declined. This trend has been particularly pronounced since the fall of 2021 (Exhibit 1.20). In 2022, sales dropped by 27.4 percent, even though the median sale price of homes increased by 8.5 percent. In 2023, home sales have declined another 27 percent through September, while the median sale price remained consistent with last year.

Exhibit 1.20: Existing Home Sales SCAG Region

Thousands of Homes

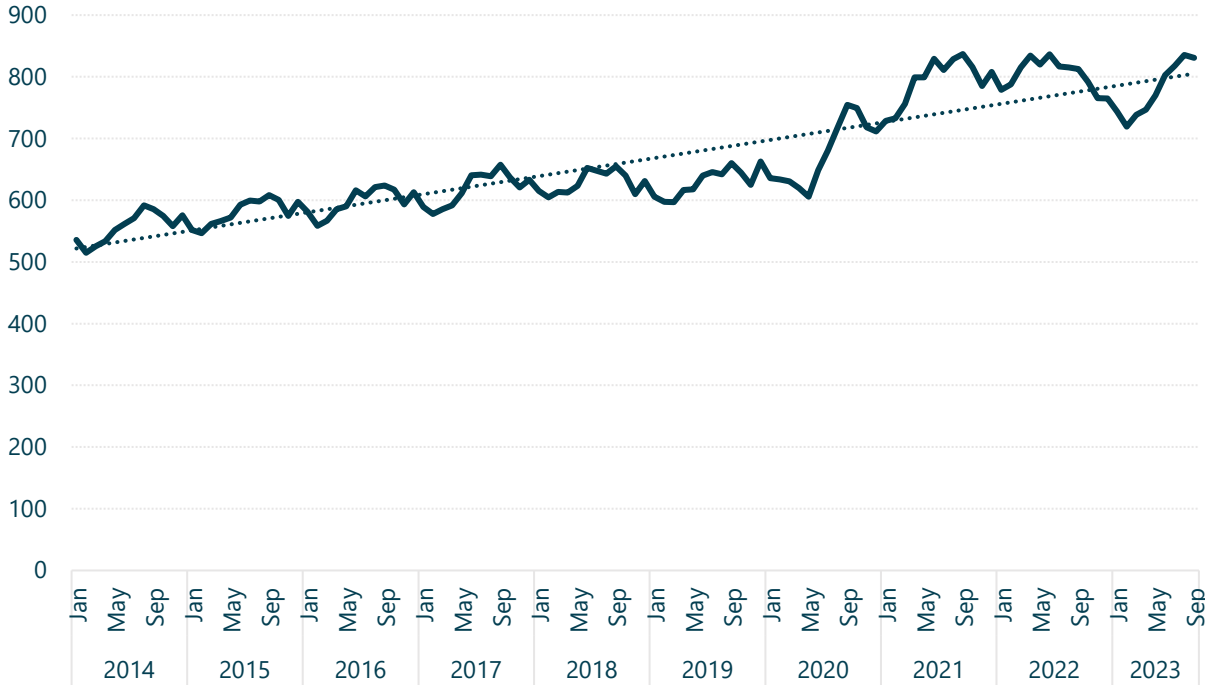


Source: California Association of Realtors (2023)

The number of home sale transactions has fallen 47 percent over two years. While jobs in real estate services are expected to drop accordingly, a significant decrease in jobs associated with offices of real estate agents or brokers has not been observed in Orange or Los Angeles counties. However, the fallout can still be detected in the mortgage brokerage sector in these two counties. Combined, employment in "credit intermediation activities" has declined by 7,000 jobs.

Exhibit 1.21: Median Home Selling Price SCAG Region

Thousands of 2022 Dollars



Source: California Association of Realtors (2023)

The initial response to price corrections was expected, and while median selling values started to move lower in the spring of 2022, the extent of their decline was modest. Furthermore, prices had reversed by March 2023, and increased sales had been recorded through September 2023. The long-expected correction in housing prices does not appear to have occurred, at least so far. There is reason to expect that housing will likely soften further in 2024 as the highest financing rates in 20 years begin to weigh on the willingness and capacity of potential home buyers. However, because supply and demand determine price, low inventories extending into 2024 will likely moderate downward demand pressure on prices unless demand collapses.

Demand could still decline further if financing costs continue to rise. Also, any downside risks that may prevail in 2024 could create more significant uncertainty in the economy and a larger-than-expected pullback on consumption—including the demand for homes.

The Rental Market

Many aspiring homeowners have had to stay in rental housing, as prices for home purchases in the region have soared over the past three years. Average monthly rents followed by moving sharply higher during

the mid-2020 to mid-2022 period. Rents since mid-2022 have leveled off, particularly in the Inland Empire counties.

The September rental averages represent the highest ever recorded in Orange County, which reported an unexpected surge in September 2023. Despite the surge, rental contract volumes in Orange County have been rising throughout 2023, along with Ventura County, probably due to the expansion of new apartment units with higher asking rent. A spate of new apartment projects has been delivered to both the Orange and Ventura markets over the last 18 months. In all SCAG counties, rental inflation has slowed to low single digits in 2023. Before 2023, average monthly rent growth was akin to home price appreciation.⁸

Exhibit 1.22: Average Rents by County

Year	Los			San		
	Imperial	Angeles	Orange	Riverside	Bernardino	Ventura
2020		\$2,415	\$2,399	\$1,905	\$1,825	\$1,825
2021		\$2,515	\$2,656	\$2,230	\$2,136	\$2,136
2022	\$2,111	\$2,802	\$3,052	\$2,516	\$2,381	\$2,381
2023	\$1,969	\$2,883	\$3,154	\$2,557	\$2,450	\$2,450
----- percent change -----						
2021		4.1	10.7	17.0	17.0	17.0
2022		11.4	14.9	12.8	11.5	11.5
2023	-6.7	2.9	3.3	1.6	2.9	2.9

Source: Zillow (2023)

DISCUSSION AND OUTLOOK

The SCAG region's economic growth in 2023 shows an apparent slowdown, generally in sync with the state and national economies. While unemployment rates for all counties have risen, labor markets continue to generate more employment, especially for skilled healthcare, technology and manufacturing positions.

New development activity is a leading growth engine in the region. Development of housing and commercial/industrial structures and infrastructure continues to generate jobs, income, spending and accommodations for new and existing residents, businesses and workforces. While recent development has slowed in 2023, the magnitude is not material to the overall market.

Tourism throughout Southern California has recovered and looks to remain robust. Despite some slight cooling observed in 2022, 2023 is still a crowded year for local theme parks, and aggregate jobs in the Arts, Amusement and Recreation sector have entirely recovered. Other evidence that supports the strength of tourism includes rebounding levels of passenger flow at the region's airports and increased occupancy within the region's transient lodging market.

⁸ Imperial County average rents which show a decline from 2022 to 2023 are based on a small sample of monthly reported rents. The chart of average rents shows wide variation over time.

Inflation remains a challenge across the national, state and regional economies, although local inflation rates are relatively lower. The effects of inflationary price levels have already undermined consumer purchasing power—observed in relatively stagnant year-over-year retail sales. Price inflation compounds hardships for lower-income households in the SCAG region. If inflation significantly moderates going forward, the Federal Reserve could pause or end its aggressive interest rate policy in place since early 2022. Today, the region is likely to see a soft landing.

There appears to be enough momentum in the SCAG region economy to push into 2024 with continued strength in the labor markets, the property development market, foreign trade activity through the ports and tourism. However, the regional economy is still forecast to slow. Headline inflation remains persistently near three percent, and mortgage rates could stay high throughout 2024, beginning to contract only in 2025. The decline in real wages is also indicative of the general economy of California and the nation, as inflation erodes household purchasing power. Ultimately, declining purchasing power will feed back to labor markets, as consumers demand fewer goods or services at the same or higher spending levels. Fewer goods translate into lower production, lower demand for workers, and downward pressure on wages and work opportunities, increasing the risk of recession. Without relief from inflation and high interest rates, the 2 to 4 percent growth in 2023 could slow to less than 1 percent by mid-2024.

While the region and the nation may have averted a recession in 2023, regional forecasters have forecasted a slowdown lasting two quarters. Escalating global conflict adds to downside macroeconomic risks. Moreover, additional rate increases by the Federal Reserve, pushing longer-term rates higher than the markets expect, can negatively impact capital markets, soften labor markets, and further reduce consumer spending—an essential catalyst for sustained and inclusive economic growth.

The financial sector has been relatively resilient in the aftermath of bank failures during the spring of 2023. However, uncertainty in the commercial real estate refinance market has not yet played out. To the extent this becomes a looming issue, financial market instability may return, creating heightened uncertainty, which generally increases the risk of both consumption and investment pullbacks.

The upside risk is that consumers do not retrench because their income and asset wealth remain high enough to sustain spending. To date, the evidence suggests that, though wages have eroded due to inflation, there has been an offset with other household income, coming not only from earnings at work, but also from transfers that are typically price-level adjusted or assets, such as the capital markets, the rental markets, and from extra hours and gig work.

2. Economic Impacts of Equity

This chapter written by Gigi Moreno, PhD, Senior Economist, and Huixin Zheng, Ph.D., Associate Planner, Southern California Association of Governments.

Before the COVID-19 pandemic, planning agencies had already begun discussing and adopting a greater focus on equity. However, the pandemic brought to light racial and gender inequities in health, transportation, housing, employment and broadband accessibility, exacerbated by historical planning practices that intentionally and unintentionally segregated and exploited communities of color. Since the beginning of the pandemic, planning agencies across the U.S. have taken deliberate steps to adopt equitable and inclusive planning practices with greater urgency. In July 2020, SCAG's Regional Council adopted Resolution No. 20-623-2, stating that racism is a human rights and public health crisis and reaffirming its commitment to advancing justice, equity, diversity and inclusion in the region. Among numerous other benefits, an equity perspective in planning is essential for long-term economic growth in metropolitan areas. This paper quantifies the economic impacts of an equity approach in metropolitan planning, focusing on the SCAG region.

The SCAG region includes six counties in Southern California, spanning more than 38,000 square miles. SCAG serves 18.7 million residents, accounting for 48 percent of California's population. The SCAG region has a gross domestic product (GDP) of \$1.6 trillion as of 2021, making it the 15th largest economy in the world. The analysis reported in this paper estimates that GDP would be 17 percent higher if we could eliminate the race and gender wage gap in the SCAG region. This gain is substantial compared to the rest of California and the rest of the United States, approximately 8 percent for both. This analysis also identifies the region's key drivers of wage inequities, providing insights to inform policy discussions and future program priorities focused on equitable and inclusive economic development.

BACKGROUND

Wage and income inequity poses a risk to economic prosperity and quality of life in the SCAG region. Persistent wage inequity based on race, ethnicity, and gender represents an inefficient use of resources, because it leads to underutilization of human capital, reduces consumer spending, and limits innovation and productivity, all of which are significant drivers of economic growth. Economic losses due to wage inequity would be more pronounced in areas with greater racial diversity. As one of the most racially and ethnically diverse metropolitan areas in the United States, the SCAG region would benefit from a better understanding of the economic impact of equity and inclusion. This paper quantifies the gains to the regional economy from eliminating race and gender wage inequity.

Exhibit 2.1 shows the race distribution shows the race distribution of the civilian labor force in the SCAG region, which is 29.4 percent white. The percentage of the white civilian labor force is higher in the rest of California (40.6 percent) and in the rest of the United States. (62.4 percent).

Exhibit 2.1: Race Distribution in the Labor Force

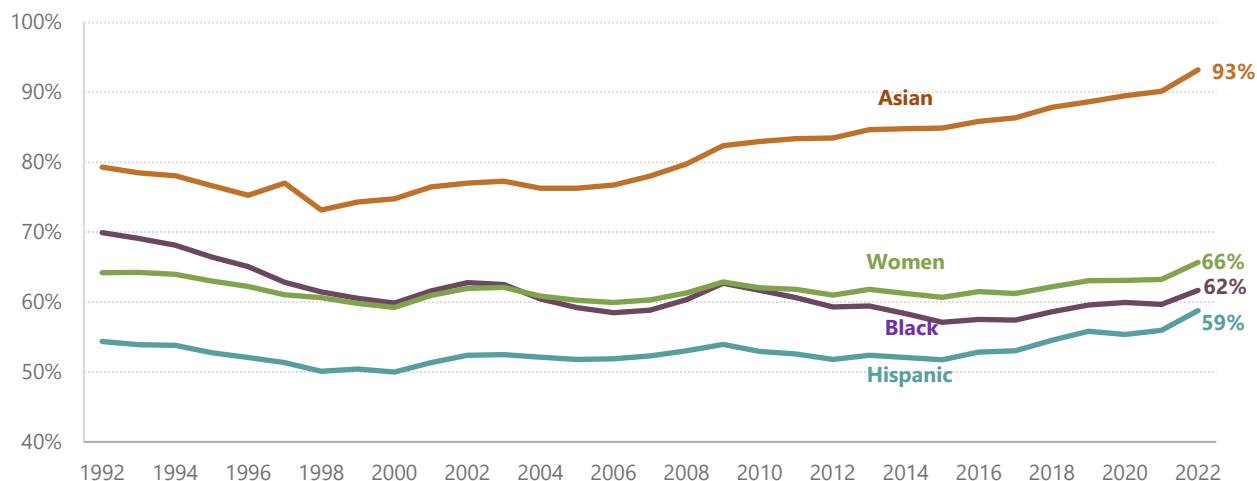
Race Distribution of Civilian Labor Force, Ages 25-64

Group	SCAG	Rest of California	Rest of U.S.
White	29.4%	40.6%	62.4%
Black	5.4%	4.1%	12.3%
Hispanic	47.1%	31.3%	15.4%
Asian	14.7%	19.2%	5.3%
Other	3.4%	4.8%	4.6%

Source: ACS PUMS

Exhibit 2.2 demonstrates the persistent wage inequities in the SCAG region by race and gender. In 1992, Black workers in the SCAG region, on average, earned 70 percent of white men's wages. The Black wage gap decreased to 60 percent in 2021 and increased to 62 percent in 2022. Hispanic workers, the largest race/ethnicity share of the region's workers, earned 54 percent (1992) and 59 percent (2022) of white men's wages. Asian workers have done better than other workers of color. However, in 2022, they still earned 93 percent of white men's wages. Women (all races) earned 64 percent of white men's wages in 1992 and 66 percent in 2022. For all groups, the wage disparities relative to white men have been persistent, and for most groups, the gap in wages is large. However, we observe an uptick in workers of color wages relative to white men between 2021 and 2022.

Exhibit 2.2: Average Weekly Wages as a Percent of White Men's Wages by Race and Gender, SCAG Region



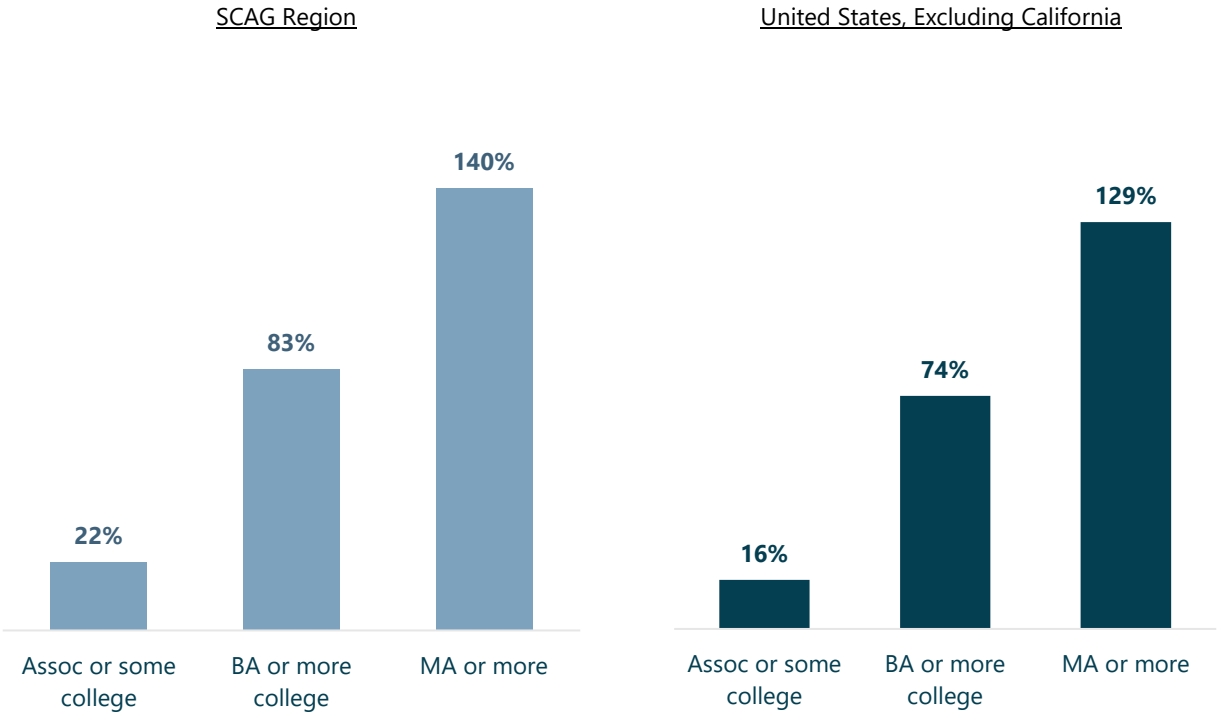
Notes and sources: Includes wage and salary workers only. Hispanic include all races. Based on data from U.S. Census Bureau, Quarterly Workforce Indicators (1990-2022).

Educational attainment is a key determinant of wages (Budig et al., 2021).

Exhibit 2.3 Exhibit 2.3 shows the education wage premium relative to wage income for workers with only a high school degree in the SCAG region. In the SCAG region, workers with at least an associate degree earn 22 percent more than those with only a high school diploma. Workers with at least a bachelor's degree earn 83 percent more than workers with only a high school education. This education wage premium jumps to 140 percent of high school graduates' wage income for workers with at least a master's degree. For comparison, Exhibit 2.3 also reports U.S. education wage premiums, excluding California. In the United States, college and graduate education also offer a significant wage premium. However, the premiums are lower than in the SCAG region.

Exhibit 2.3: Education Wage Premium Relative to High School Diploma

Percent Above High School Graduate's Average Annual Wage Income, 2021

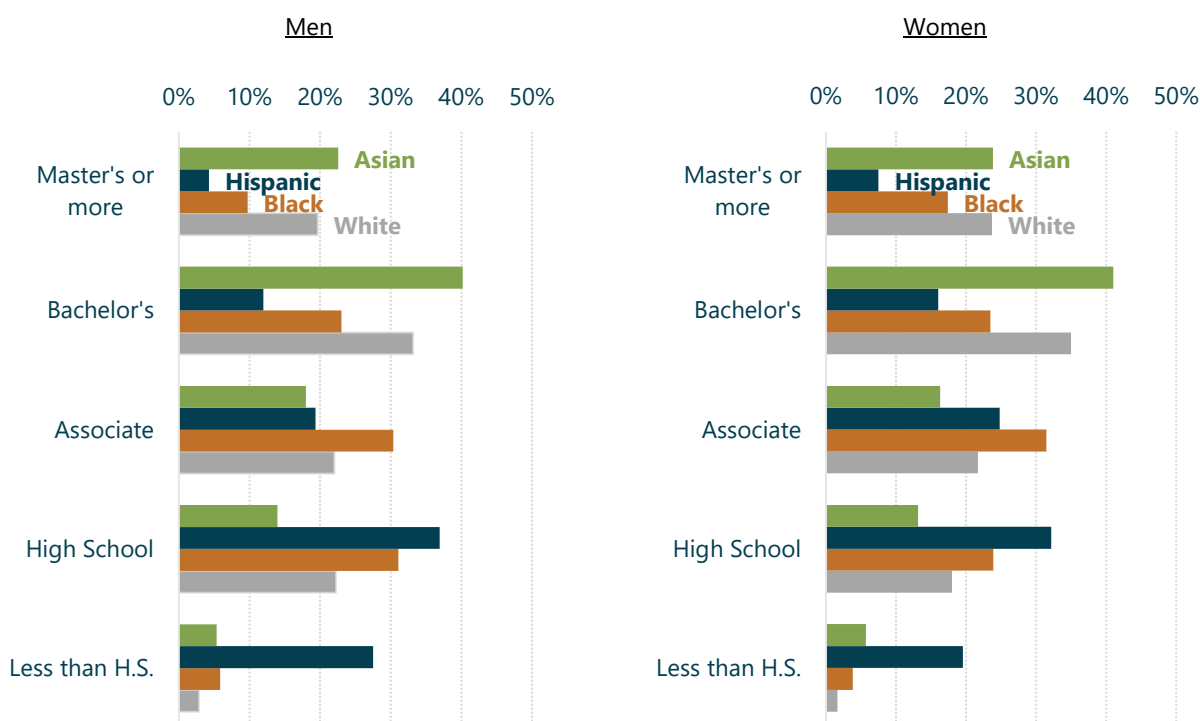


Source: American Community Survey PUMS 1-Year Survey, 2021 from Ruggles et al (2023) and U.S. Census Bureau (2023).

While the education wage premium can explain wage differences in the labor market, we observe disparities in educational attainment. Exhibit 2.4 reports educational attainment by race for men and women in the labor force in the SCAG region. The distributions of educational attainment for men and women are surprisingly similar, given the observed wage disparities for women. For all race groups, slightly more women have associate, bachelor's and master's degrees. This suggests that education is likely not a significant factor in explaining the wage gap for women. However, greater shares of white and Asian workers have bachelor's and master's degrees than Black and Hispanic workers, which explains some of the wage differentials between these groups. Black and Hispanic workers with lower educational attainment cannot enjoy the educational wage premiums observed in Exhibit 2.3.

Exhibit 2.4: Educational Attainment for Labor Force by Race and Gender

Percent of Labor Force Participants, Ages 25-64 in the SCAG Region, 2021



Source: American Community Survey PUMS, 1-year Survey, 2021 from data from Ruggles et al (2023) and U.S. Census Bureau (2023).

The disparities observed in Exhibit 2.2 through Exhibit 2.4 present a social and economic problem. From an economic perspective, such disparities are a "market failure" and suggest an inefficient use of resources and lost productive capacity (Buckman et al., 2021; Daly et al., 2020, Cook, 2020). Persistent wage gaps discourage workers and reduce labor force participation, which, in turn, decreases labor supply and increases the cost of labor. Moreover, a smaller, shallower pool of workers reduces innovation and economic growth (Bell et al., 2019). Racial and gender wage inequity reduces consumption because lower-paid workers have less disposable income and spend less on goods and services. As a result, economic growth slows, and lower earnings and spending lead to lower tax revenues for local jurisdictions. Persistent income inequality contributes to social unrest, which negatively impacts the quality of life in the region and the perception of the region. Indeed, income inequity can have significant impacts on the aggregate SCAG region economy.

A starting point for changing these trends and improving aggregate economic outcomes for the region is to measure the economic impacts and the drivers of wage inequities. Efforts to quantify the impacts of race and gender wage inequity have focused on quantifying the impacts of inequity at the national level. A 2019 study by McKinsey Consulting estimated the wealth inequity between non-Hispanic white and Black households in the country and found that closing the gap by 2028 would increase GDP by \$1.1-\$1.7 trillion. Another study published by RAND in 2020 documented the increased inequality in taxable income during the four decades following World War II. This study estimated that aggregate income among taxpayers earning below the 90th percentile would have been \$2.5 trillion higher in 2018 if personal income growth between 1975 and 2018 had remained as equitable as it had been in the first two post-war decades.

Buckman, Daly, Choi and Seitelman of the Federal Reserve Bank of San Francisco developed a straightforward method for estimating the impacts of wage inequities in terms of lost GDP, grounded in economic theory. They find that in 2019, U.S. GDP would have been \$0.65 trillion higher—a 10 percent increase—if race-based wage inequities were eliminated. Existing research has primarily focused on the potential economic impact of eliminating wage inequity for the U.S. economy. In places with diverse workforces, such as the SCAG region, we expect that the economic gains from closing race- and gender-based wage gaps will be more significant. This paper builds on the approach in the Buckman et al. paper and localizes the analysis of the benefits of an equitable and inclusive economy by computing the economic impacts of wage inequity in the SCAG region and its six counties.

In recent years SCAG has taken steps to integrate equity as a core focus of its overall work. In 2020, SCAG's Regional Council passed Resolution 20-623-2, reaffirming its commitment to advancing justice, equity, diversity and inclusion in the SCAG region (SCAG, 2022). In early 2021, SCAG adopted its Racial Early Action Plan to help facilitate consistent integration of equity in its planning work. In late 2021, SCAG's Regional Council adopted the Inclusive Economic Recovery Strategy (IERS) and received a \$3.5 million grant from the State of California to implement key IERS strategies for inclusive and equitable economic growth. The analysis in this report supports the grant deliverables by quantifying the economic impacts of equity and inclusion.

METHODS & DATA

This paper quantifies the gains to the regional economy from eliminating race and gender wage inequity by applying the counterfactual and shift-share approach proposed by Buckman et al. (2021) to the SCAG region. This approach compares the observed wage income to counterfactual wage income, where wage gaps by race and gender have been eliminated. Drawing on the American Community Survey microdata disseminated by IPUMS, we estimate gains in the region's GDP had wage inequity been eliminated. Next, we assess how various factors contribute to labor market inequity by race and gender, including employment rate, weekly work hours, education attainment and skill utilization.

This analysis relies on the American Community Survey Public Use Microdata Sample (PUMS), one-year survey data compiled by IPUMS (Ruggles et al., 2023), henceforth "ACS microdata." The ACS microdata is a subset of the American Community Survey conducted by the U.S. Census Bureau. It provides detailed and anonymized demographic, social, economic and housing information about a sample of U.S. households and individuals. Specifically, it contains information on an individual's age, gender, race, ethnicity and socioeconomic characteristics, including educational attainment, employment status and income.

Based on self-reported race and ethnicity in the ACS microdata, we divide the sample into six groups. First, we assign respondents to the Hispanic category regardless of race. We then grouped respondents who reported not being Hispanic into the race groups, including white, Black, Asian and all others. Respondents who report being mixed race or do not respond to the race question are categorized as "Other." Due to the small sample size, we aggregate Native American workers into the "Other" category. Finally, we categorize the sample by gender.

From the ACS microdata, we select civilian workers, regardless of employment status, aged 25 to 64 who are not self-employed (i.e., "wage and salary" workers). We exclude workers under age 25 because they are generally less experienced, might earn "training" wages, or might still be in college or other training programs, and are not representative of the broader labor force. We focus on wage and salary workers.

Since self-employment compensation includes wages and capital returns, we exclude self-employed workers from the analysis.

We compute each group's contribution to the region's GDP based on the group's average hourly wage. Using average hourly wage in our analysis allows us to explore differences in hours worked as a driver of wage gaps. However, the ACS microdata do not report hourly wage but do report annual wage income, typical weekly hours worked, and weeks worked in the previous year. To compute hourly wage from annual wage income, we follow Ross and Bateman (2019) and divide annual wage income by usual weekly hours worked and weeks worked. When computing wages, we further limit the sample to non-seasonal, full-time workers, which we assume to be workers who worked at least 14 weeks a year and 35 hours a week. In other words, while the shares of part-time or seasonal workers can vary across groups, we assume that everyone in the labor force is a candidate for full-time, year-round employment and, as such, can earn the estimated group average hourly wage.

COUNTERFACTUAL ANALYSIS

Following Buckman et al. (2021), we measure the economic gains from eliminating race and gender wage gaps using a counterfactual analysis. We measure the economic gains in terms of the region's gross domestic product (output) and compare this outcome as observed in the actual world to the estimated outcome in a counterfactual world where race and gender wage inequity are eliminated. As demonstrated in Exhibit 2.2, historically, white male workers have been paid higher wages compared to women and workers of color. Disparities in wages can be attributed to multiple factors, including education levels, occupation, industry, and historical and ongoing discriminatory practices in the labor market. In our counterfactual scenario, labor market outcomes for women and workers of color are at least as favorable as those for white male workers.

We compute each race and gender group's observed contribution to regional GDP, defined as the observed number of employed workers times the observed average annual wages. To construct each group's counterfactual contribution to GDP, we assume that in a world without race and gender wage gaps, all groups are employed at least at the same rate as white men and earn, on average, the same wages. For the actual and counterfactual scenarios, we sum labor's contribution to GDP across the race and gender groups. The gains to the regional economy from eliminating race and gender wage gaps are given by the difference between the counterfactual labor contribution to GDP and the actual contribution to GDP. Exhibit 2.5 shows this calculation for the SCAG region.

Exhibit 2.5: Aggregate Impacts in SCAG Region

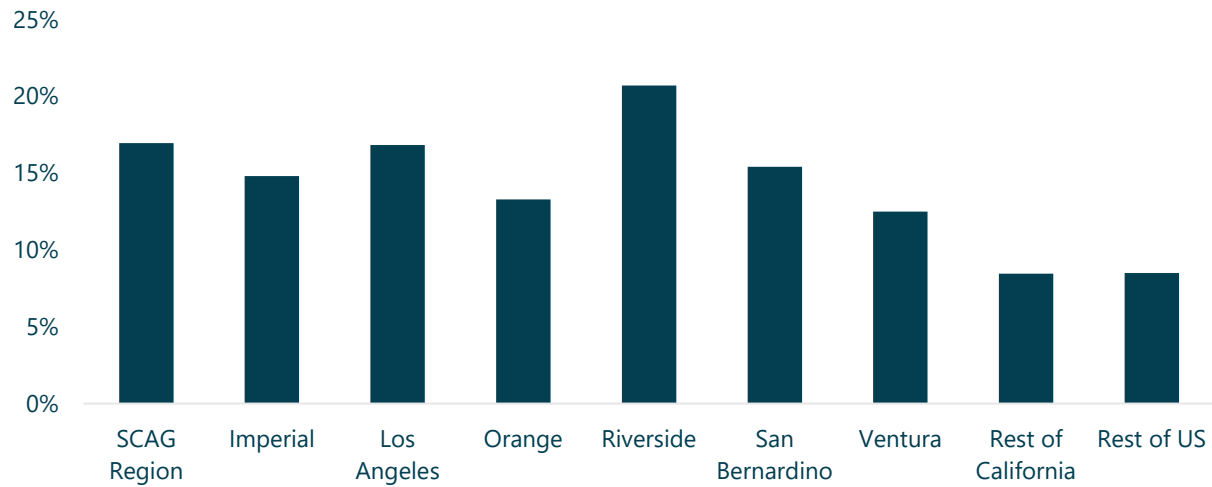
Group	Group Share of Sample	Actual in SCAG Region, 2021		Counterfactual: Full Equity			
		Group Average Annual Labor Income	Total Earnings Contribution to GDP (Billions of 2022\$)	Group Average Annual Labor Income	Total Earnings Contribution to GDP (Billions of 2022\$)	Incremental GDP Gains from Equity (Billions of 2022\$)	Equity Gains as a Percent of SCAG GDP
White Men	16.3%	97,127	111.2	97,127	111.2		
White Women	13.1%	71,057	66.0	97,127	90.2		
Black Men	2.6%	65,764	12.0	97,127	17.9		
Black Women	2.8%	59,593	11.5	97,127	19.0		
Hispanic Men	26.6%	51,777	97.9	97,127	183.7		
Hispanic Women	20.5%	41,377	59.7	97,127	140.2		
Native Am Men	0.1%	62,092	0.3	97,127	0.5		
Native Am Women	0.1%	57,051	0.2	97,127	0.4		
Asian Men	7.3%	81,677	42.7	97,127	50.8		
Asian Women	7.3%	64,359	33.6	97,127	50.7		
Other Men	1.7%	84,471	9.9	97,127	11.4		
Other Women	1.6%	65,901	7.4	97,127	10.9		
Total			452.4		686.8	\$234.3	17%

Notes: Analysis follows methods in Buckman et al (2021). Employment data from Ruggles et al (2023) and U.S. Census Bureau (2023).

We repeat this analysis for each SCAG county, the rest of California and the United States, excluding California. Exhibit 2.6 summarizes the economic gains of eliminating race and gender wage gaps. We report the gains as a share of 2021 GDP for each area to allow comparison across different-sized economies. We observe that gains from eliminating wage inequities vary by locality and level of aggregation. Within the SCAG region, the largest gains are in Los Angeles and Riverside counties. The gains in the SCAG region are also larger than in the rest of California and the rest of the United States. This is primarily driven by the diversity of the labor force in the SCAG region relative to the rest of California and the country.

Exhibit 2.6: Summary of Impacts by County

Percent of GDP Lost Due to Wage Inequity, 2021

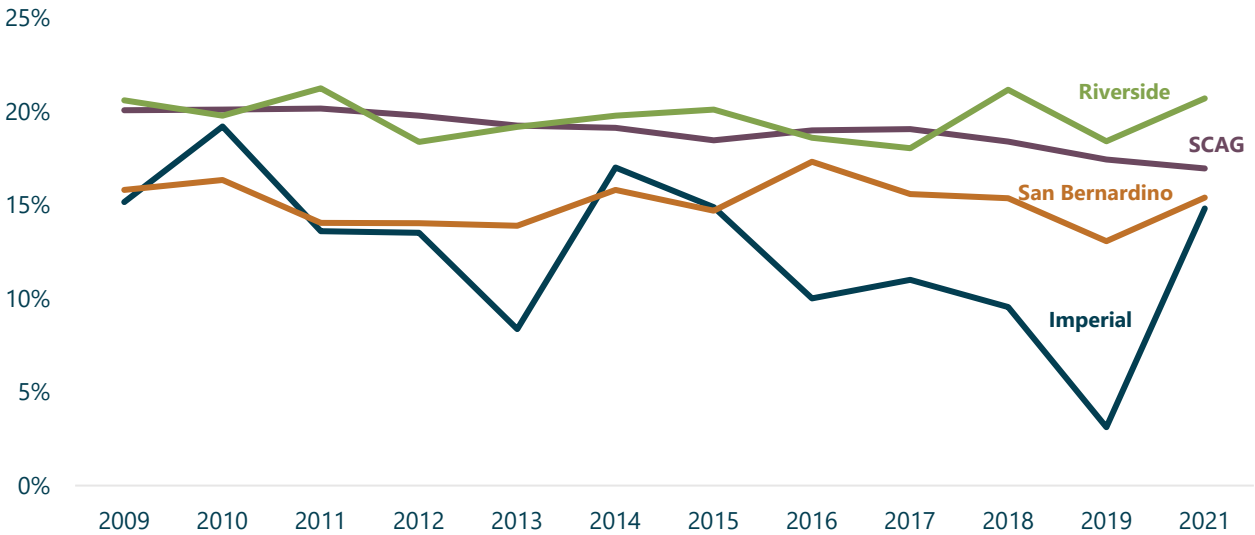


Source: Author calculations based on data from Ruggles et al (2023) and U.S. Census Bureau (2023)

Exhibit 2.7 explores the gains over time from eliminating race and gender wage gaps. We observed that the potential gains are significant from 2009 to the present (ranging from 17 to 20 percent of regional GDP), but these gains decreased between 2017 and 2021 in the SCAG region. This pattern is driven by the fast-growing regional economy (since GDP is the denominator in the calculation) and the gradually narrowing wage gaps between white men and women/workers of color, as demonstrated in Exhibit 2.2. However, the inland counties of Imperial, Riverside and San Bernardino saw increases in potential loss in GDP due to labor market inequity.

Exhibit 2.7: Lost GDP Over Time

Share of GDP

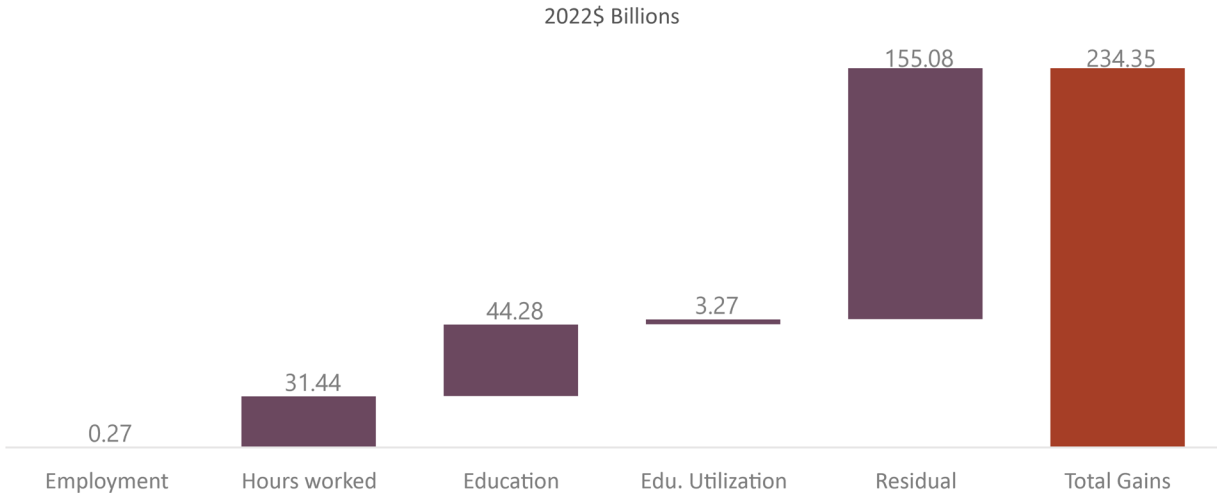


Source: Author calculations based on data from Ruggles et al (2023) and U.S. Census Bureau (2023)

DRIVERS OF WAGE INEQUITY

Several factors drive race and gender wage gaps. This analysis focuses on well-documented drivers of wage differences: employment rates, hours worked, education and educational utilization drive these wage gaps. After netting out the effects of these drivers on wage differences, the remaining differences are residuals, the unexplained differences. The residual differences are driven by factors we have not accounted for in our model, including discrimination. Exhibit 2.8 reports the estimated effects of the four drivers we explore plus the residual.

Exhibit 2.8: Drivers of Wage Inequity in SCAG Region



Source: Author calculations based on data from Ruggles et al (2023) and U.S. Census Bureau (2023)

This analysis assesses how different factors contribute to wage gaps by race and gender. For example, total labor earnings are lower for Hispanic women workers, partially due to working fewer hours per week on average or because they have a smaller proportion of workers with a bachelor's degree compared to white men. As shown in Exhibit 2.3, higher education attainment is associated with higher wages.

Following Buckman et al. (2021), we consider five sources of labor market inequity: employment rate, weekly work hours, educational attainment, skill utilization, and residual wage gaps explained by factors other than education attainment and skill utilization. As described below, this analysis requires us to further divide the sample into smaller subgroups, such as non-Hispanic white male workers with bachelor's degrees. Because Native American workers account for a relatively smaller share of the total labor force (0.1 percent in 2021) and do not have a full distribution across various levels of education attainment, we assess the factors contributing to inequity by dividing the sample into ten groups: five racial/ethnic groups (non-Hispanic white, Black, Hispanic, Asian, and all others) and two genders (men and women workers).

Analyzing inequity drivers begins with the observed baseline labor earnings contribution to GDP, which is equal to the sum of total annual labor earnings across all groups. We then calculate the increases in annual labor earnings resulting from equalizing each of the four drivers to the observed value of white male workers.

We start with the employment rate. Relative to most race-gender groups, white men have higher rates of employment. In the counterfactual world, total annual labor earnings would be higher for non-white

workers if their employment rates were higher. We, therefore, replace the employment rates of the non-white worker groups with the white men's employment rate if it is higher and calculate the total annual labor earnings resulting from this adjustment.

Similarly, relative to most race-gender groups, white men, on average, work more hours per week, have a lower proportion of workers without a high school degree and have a lower rate of skill underutilization among college graduates. Following Buckman et al., we define workers whose skills are underutilized if they have a bachelor's degree or higher and work in an industry where less than 50 percent of workers hold a college degree. In the counterfactual world, total labor earnings would be higher for non-white worker groups if they fare better in one or more of these indicators. Therefore, we sequentially replace the weekly work hours, education attainment distribution and skill utilization rate for each non-white worker group with the group average levels of white men if white men fare better.

Finally, we address wage gaps explained by factors other than educational attainment and skill utilization. In other words, white men, on average, earn higher wages than non-white and women workers with the same levels of education attainment and skill utilization. We set the average hourly wage of each group to match the average wage of white men in the same categories of education attainment and skill utilization.

The adjustments reveal incremental improvements in labor earnings as disparities in employment rates, weekly work hours, educational attainment and skill utilization are eliminated step by step. The last step equalizes wages across race and gender, quantifying additional gains that could come from eliminating residual earnings gaps not explained by the specific factors assessed in this analysis. These factors' relative contributions to GDP can be measured by comparing the incremental gains resulting from each step.

DISCUSSION

We begin the analysis by exploring a simple counterfactual that replaces the wages for each race and gender group with the average wages for white male workers. While this exercise creates a counterfactual scenario where race- and gender-based wage gaps are eliminated, it is necessarily incomplete. The multitude of labor market inequities beyond the gender and race wage gap, as well as the diverse array of factors contributing to such disparities, are too complex to explore in a single exercise. This analysis also does not fully consider the potential adjustments in labor supply and demand in response to wage changes. Nonetheless, it presents a straightforward approach to quantify the potential gains from addressing wage inequity by race and gender.

This analysis shows how eliminating race- and gender-based wage inequities would boost economic productivity in the region. Moving all groups to at least the wage levels of non-Hispanic white men would result in labor earnings of over \$234 billion, or approximately 17 percent of the SCAG-region GDP in 2021. This gain is substantial compared to the rest of California (8.4 percent of GDP) and the rest of the country (8.5 percent of GDP). Our analysis also finds that differences in education, employment opportunities, hours worked, educational attainment and education utilization drove a third of the race and gender wage inequities.

The significant gain from addressing wage inequity is partially attributable to Southern California's racially and ethnically diverse labor force. A growing body of research finds that racial diversity in the workforce is associated with enhanced market performance (Kline et al., 2022). To harness the diverse labor force within the region, it is essential to address the misallocation of human resources as reflected by persistent racial, ethnic and gender disparities. Regional planning plays a vital role in addressing inequity in the labor market by implementing strategies for inclusive and equitable economic growth.

Rectifying labor market inequity requires coordinated efforts from different levels of government. Regional planning agencies across the United States propose policies for equitable and inclusive economic development in large metropolitan areas such as the SCAG region. As a metropolitan planning organization, SCAG plays a key role in promoting equity and inclusion in the labor market, primarily through funding projects advancing equity or securing funding for such projects. In addition, SCAG supports equity-related work by convening stakeholders, supporting discussion and collecting and sharing data. Many of these efforts are outlined in SCAG's Racial Equity Early Action Plan (SCAG, 2021).

SCAG's Connect SoCal 2024 details specific regional planning policies and investments that can contribute to fairer labor market outcomes. Strategies centering on mobility and communities will enhance regional connectivity and help improve access to education and employment opportunities. Regional planning also involves developing strategies to address socioeconomic factors that influence disparities in the labor market, such as housing instability, access to healthcare, poverty and more. SCAG is also developing a regional and subregional job quality index to provide a benchmark for a common understanding of the region's job markets and inform policy discussions and help measure progress toward a more robust, inclusive and equitable economy.

This analysis points to several policy directions for the region. Specifically, disparity in educational attainment is among the most important drivers of wage inequities. By addressing barriers in education attainment, the SCAG region's GDP would increase by more than \$52 billion. Differences in work hours across races and genders serve as another factor contributing to inequity. Such disparities could be attributable to factors such as structural barriers to employment opportunities, variation in work hours by industry and occupation, geographic accessibility of jobs and societal expectations that could impact work hour choices, particularly for women.

Notably, factors explored in this analysis account for only one-third of the gaps in labor earnings, leaving a substantial two-thirds unexplained. The residual earnings gaps underscore the need for coordinated efforts to address additional contributors to labor market inequity, such as historical and ongoing discriminatory practices, occupational segregation and cultural norms perpetuating such disparities. As part of this comprehensive initiative, regional planning is vital in guiding the development of housing, jobs, transportation, and other essential infrastructure. These strategies support the region's growth, enhance connectivity and support programs that facilitate economic recovery, resilience and the creation of diverse, supportive work environments.

County Economies & Outlooks

Chapters 3 through 7 of the Regional Briefing Book include economic snapshots of the counties in the SCAG region. Working with regional experts, SCAG provides an analysis of each county's economic performance and our regional experts' outlooks for each county. The regional experts consulted and collaborated with SCAG staff in developing an economic overview and outlook for each of the counties in our region.

IMPERIAL COUNTY

Michael Bracken

Managing Partner & Chief Economist, Development Management Group, Inc.

LOS ANGELES COUNTY

Shannon Sedgwick

Director, Institute for Applied Economics, Los Angeles County Economic Development Corporation

ORANGE COUNTY

Wallace Walrod, Ph.D.

Chief Economic Advisor, Orange County Business Council

RIVERSIDE & SAN BERNARDINO COUNTIES

Manfred Keil, Ph.D., Robert Kleinhenz, Ph.D., and Fernando Lozano, Ph.D.

Inland Empire Economic Council

VENTURA COUNTY

SCAG REGION

Mark Schniepp, Ph.D.

Director, California Economic Forecast

3. Imperial County

Imperial County is located in the Southeastern corner of California and borders San Diego County (west), Riverside County (north), Arizona (east), and Mexico (south). The county is served by two international border crossings (one consumer/pedestrian the other commercial). Imperial County's economy is based on agriculture production, transportation (both of agriculture products and imports from Mexico), border security, state prisons, and local serving businesses, such as food, food service, hospital, education, and local government. The area has become a vital source of renewable energy production over the past 15 years.

Imperial County's economy is stable by historical standards. While the unemployment rate, of 19.8 percent, is five times the national rate, it is slightly below the county's ten-year average of 20.5 percent. Population stands at 179,500, a slight increase over 2022. Population declines seen during the pandemic have subsided and population has stabilized. The labor force has 71,900 participants, up 1,700 from one year ago—the largest since 2016. Median household income in 2022 was \$59,000 (2023 dollars). This was an increase of \$1,700 in real terms from 2021 despite a year-over-year increase in the national urban Consumer Price Index of 8.2 percent, suggesting that incomes gains are generally exceeding inflation. Median home prices sit at \$310,000, lower than record levels seen in November 2022 at \$366,000 but still close to a historic high.

Agriculture production reached \$2.61 billion in 2022, an increase of 14.5 percent from 2021, marking the largest agriculture production on record. All categories saw increases in production value.

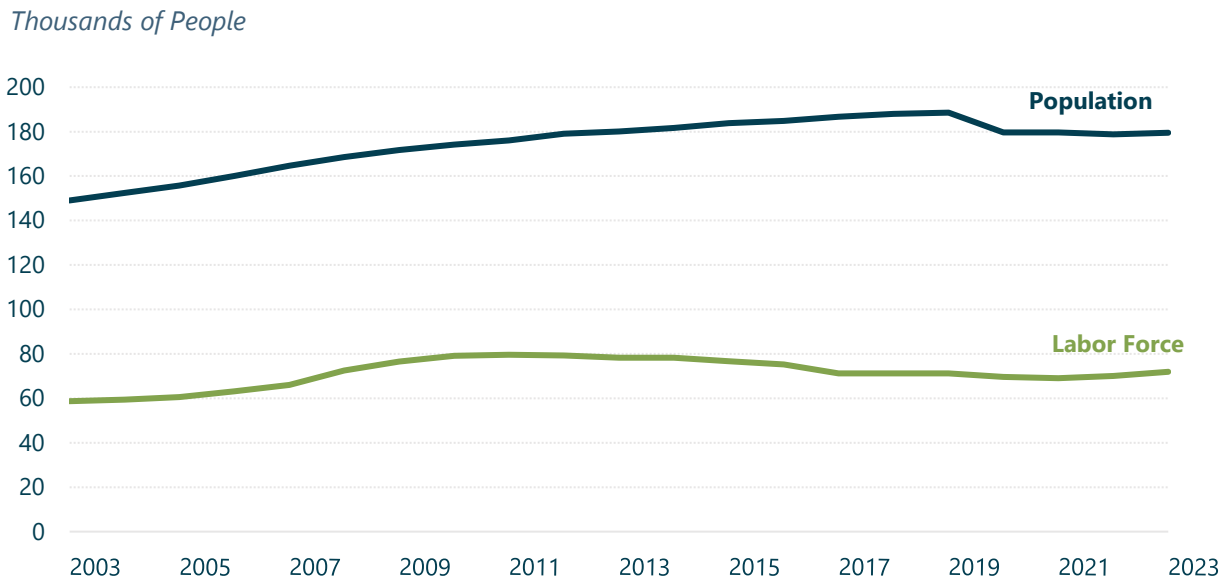
The region continues to see investment in commercial scale solar production and battery storage. Over 3,400 MW of electricity-generation has been approved producing 8,305 GWh in 2022. An additional 1,380 MW of solar and battery projects are currently being entitled in addition to a number of geothermal projects. The region is closer to seeing billions of dollars of economic investment as a result of geothermal development and rare-mineral (lithium) extraction.

Inflation and rising interest rates are impacting the average family and small businesses. Housing costs have increased due to supply pressures and higher interest rates. Long-term water supply issues remain. While early 2023 saw significant rainfall which provided a short-term respite from the drought, pressure remains to reduce water deliveries from the Colorado River.

DEMOGRAPHICS AND EDUCATION

Imperial County's population has stabilized at about 179,500. Up until the pandemic, the population was increasing at a steady rate. The pandemic saw a population decline of about 10,000 in a single year (2020). Movement into the region is steady but less than the SCAG region. About 1.2 percent of the population living in Imperial County in 2022 moved from another state the year previous. Within the SCAG region, the figure is 1.9 percent.

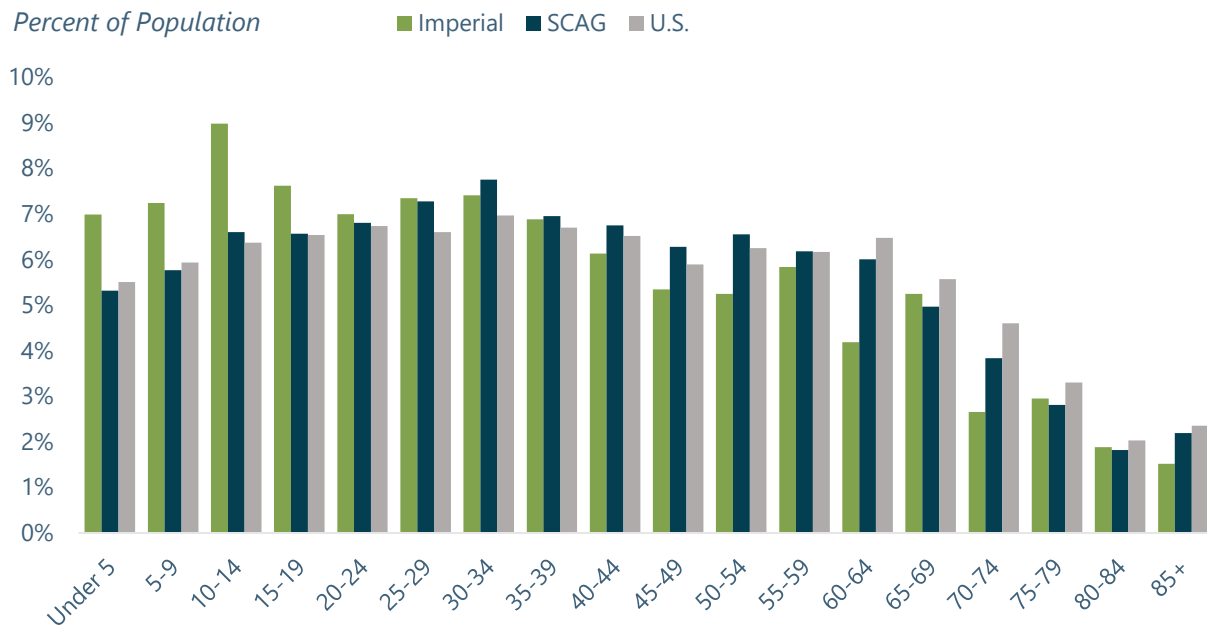
Exhibit 3.1: Imperial County Population and Labor Force



Source: CA DOF E-2 and E-5 Estimates

Imperial County has historically boasted a younger population. Currently, the median age in the region is 32, almost seven years younger than the U.S. median age of 39. Within the region, 28.1 percent of residents are under the age of 18 whereas nationally 21.7 percent of the population is under 18.

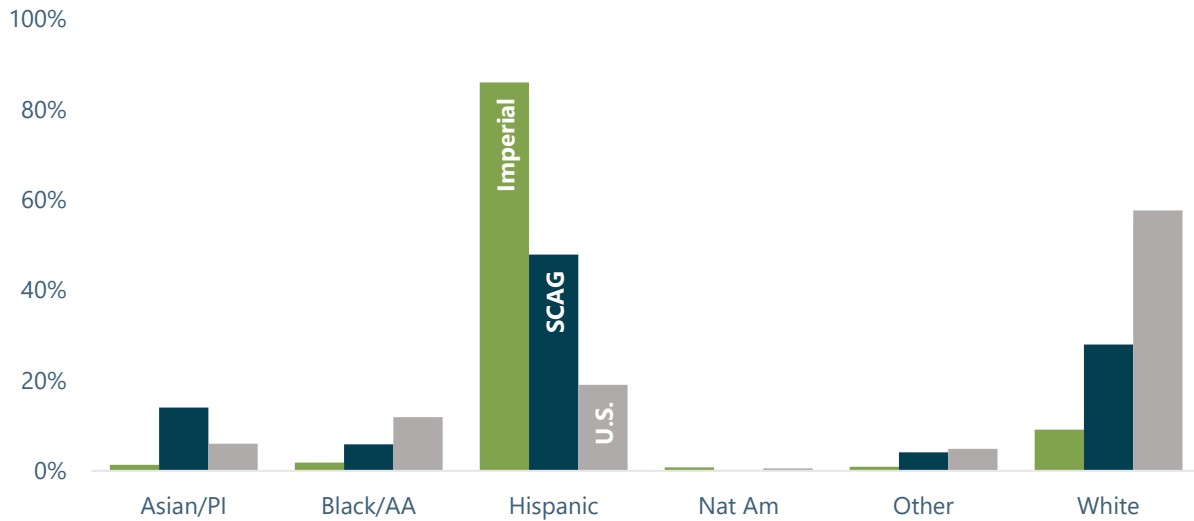
Exhibit 3.2: Imperial County Age Distribution (2022)



Source: U.S. Census Bureau, American Community Survey 1-year Sample (2022).

Over 86 percent of residents in the region identify as Hispanic. Residents identifying as non-Hispanic white comprise 9.1 percent of the population. The percentage of residents identifying as Asian/Pacific Islander, Black/African American, or Native American are all under 3 percent each.

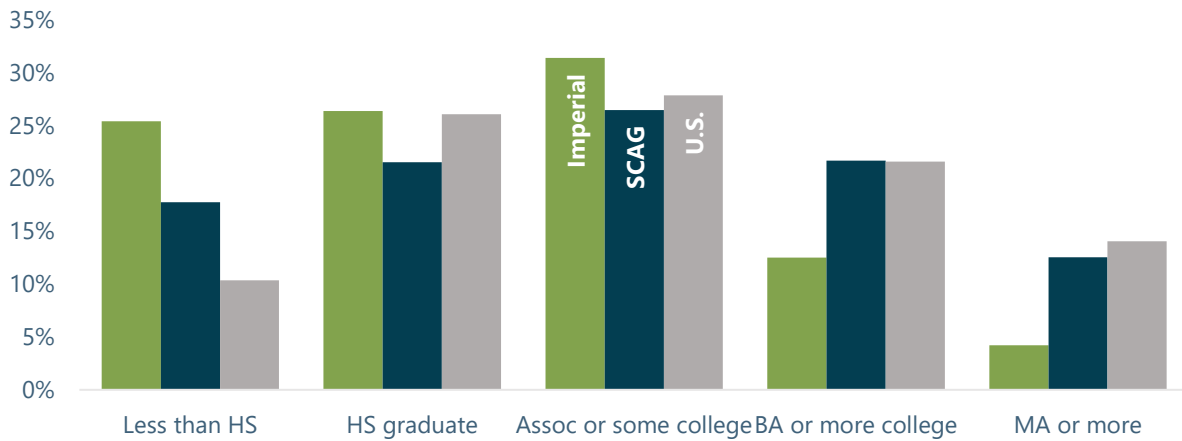
Exhibit 3.3: Share of Population by Race and Ethnicity in Imperial County (2022)



Source: U.S. Census Bureau, American Community Survey 1-year Sample (2022).

Educational attainment in the county lags behind the SCAG region as a whole and the United States. Over 25 percent of Imperial County residents ages 25 or older have less than a high school education. Those earning a high school diploma or equivalent is on par versus the United States as a whole. This holds for residents with some college or an associate degree. Completion of a higher education is where the region lags. While almost 22 percent of adults 25+ in the SCAG region has a bachelor’s, only 12.5 percent of Imperial County residents do. Graduate degrees lag even further.

Exhibit 3.4: Imperial County Educational Attainment for Population Aged 25 and above (2022)



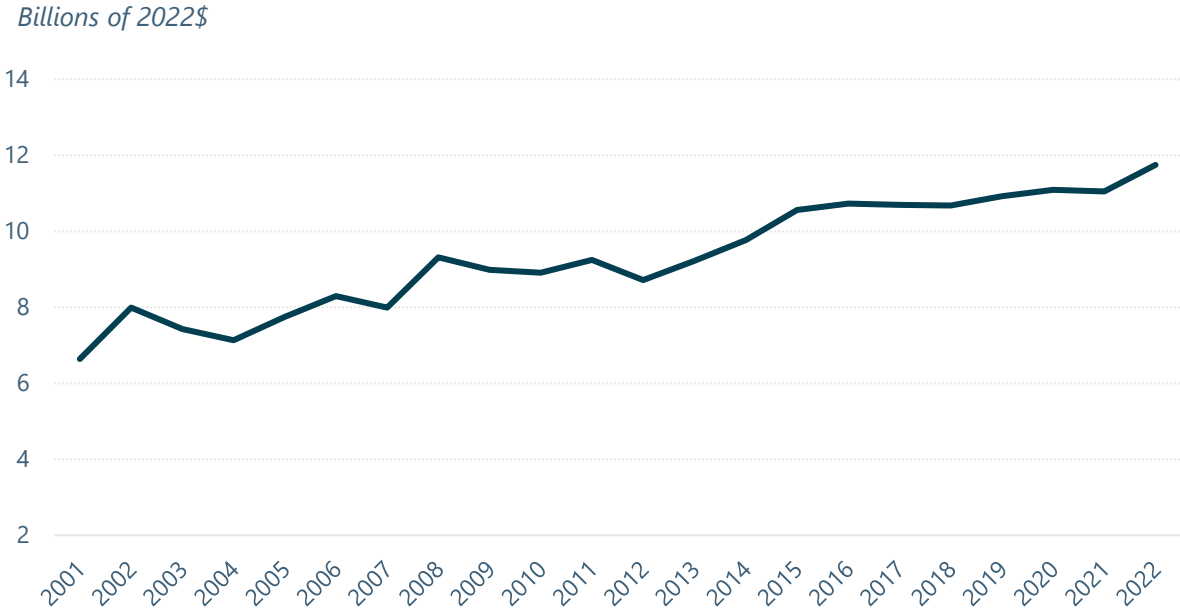
Source: U.S. Census Bureau, American Community Survey 1-Year Sample (2022).

Despite lower levels, trends in educational attainment in Imperial County are encouraging. In particular, the share of adults age 25+ with less than a high school education has decreased from 37.9 percent in 2007 to 25.4 in 2022 and the share with at least a bachelor’s degree has risen from 10.6 percent to 16.8 percent. Expansion at Imperial Valley College (the community college serving the region) and San Diego State University Imperial Valley Campus have played a role. In the 2022-23 budget, the State of California provided over \$80 million for San Diego State to begin work on an additional campus in Brawley, which will serve the northern portion of Imperial Valley and provide education for students seeking a career in the sciences. Continued investment in facilities will increase access and capacity for those seeking to further their education.

INDUSTRIES

Gross Domestic Product (GDP) is defined as monetary value of all finished goods and services made within a specific period within a set geography. Imperial County’s GDP is largely a function of agriculture, construction, mining (namely gold), and professional services. While year-over-year GDP measures growth, GDP expressed per capita and compared to other regions gives a better indicator of the strength of an economy. Imperial County’s GDP is approximately \$8.8 billion, or about \$48,900 per capita (Exhibit 3.5). Imperial County’s GDP ranks 29th in the State of California, based on 2021 figures (out of 58 counties). DMG, Inc. estimates that for 2022, that there was an increase in GDP of about \$360 million based on the increase in agriculture production between 2021 and 2022.

Exhibit 3.5: Imperial County Gross Domestic Product

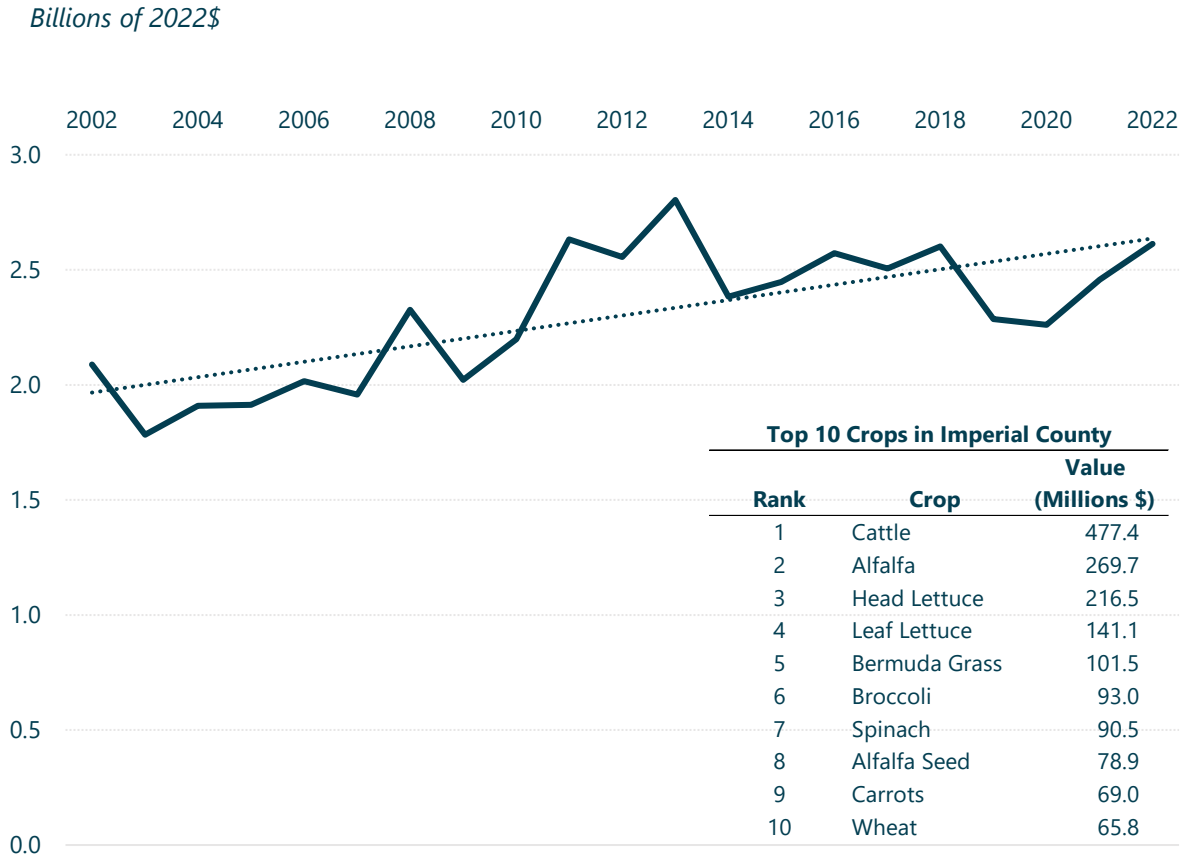


Source: Based on data from FRED and REMI (2023)

Agriculture continues to be the most important private industry to the Imperial Valley. In 2022, the region produced over \$2.61 billion of agriculture products. This was led by vegetable/melon production at \$1.12 billion, field crops at \$640.1 million, and livestock (predominately cattle) at \$616.7 million. Farmers report significant price increases in “crop inputs” which include cost of funding (tied to increases in interest rates), seed, fertilizer, and pesticides. Agricultural labor costs are increasing due to an increase in the

minimum wage from \$15.50 per hour, increasing to \$16.00 per hour in January 2024, as surrounding areas (namely Arizona and Mexico) have lower production costs. Exhibit 3.6 shows total production by year since 2002 and the list below are the top 10 commodity crops in 2022.

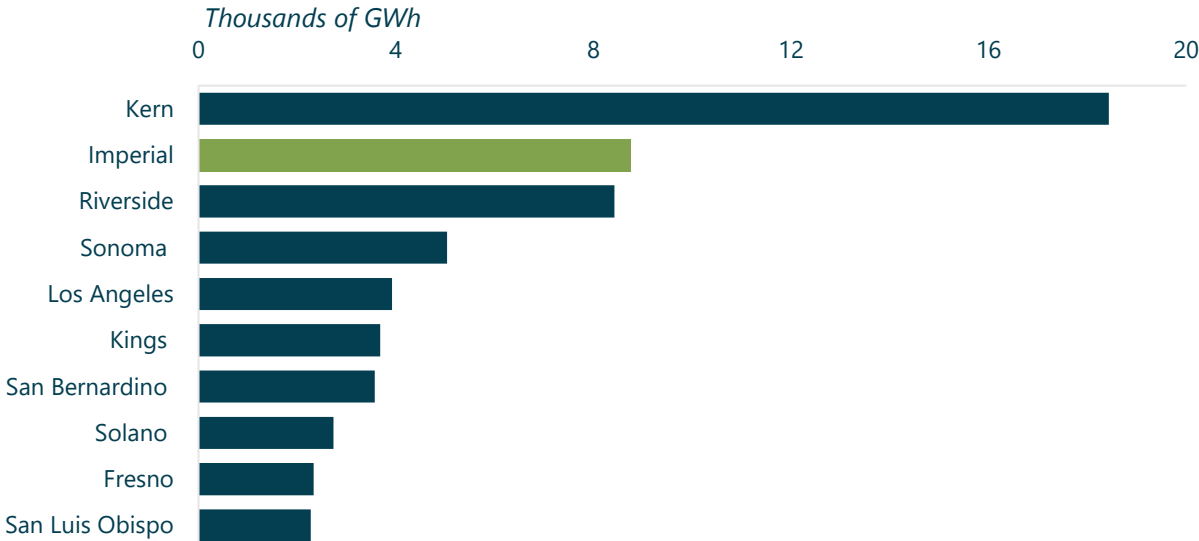
Exhibit 3.6: Imperial County Total Agricultural Production and Top Commodity Crops in 2022 by Value



Source: County of Imperial Agricultural Commissioner

Imperial County plays a vital role in helping California meet the renewable energy goals championed by the past three governors. Much of this energy s come from solar, geothermal, and wind, which tend to be abundant in more rural parts of the state, such as Imperial County. Based on the most current figures available (2022), Imperial County ranked second in California for renewable energy production, generating some 8,763 GWh in 2022, only trailing Kern County which produces 18,434 GWh (Exhibit 3.7). Overall, Imperial County produces 11.9 percent of all renewable energy in California despite having only 0.46 percent of the state’s population.

Exhibit 3.7: Renewable Energy Generation by GWh (Top Counties in California)



Source: California Energy Commission (2022)

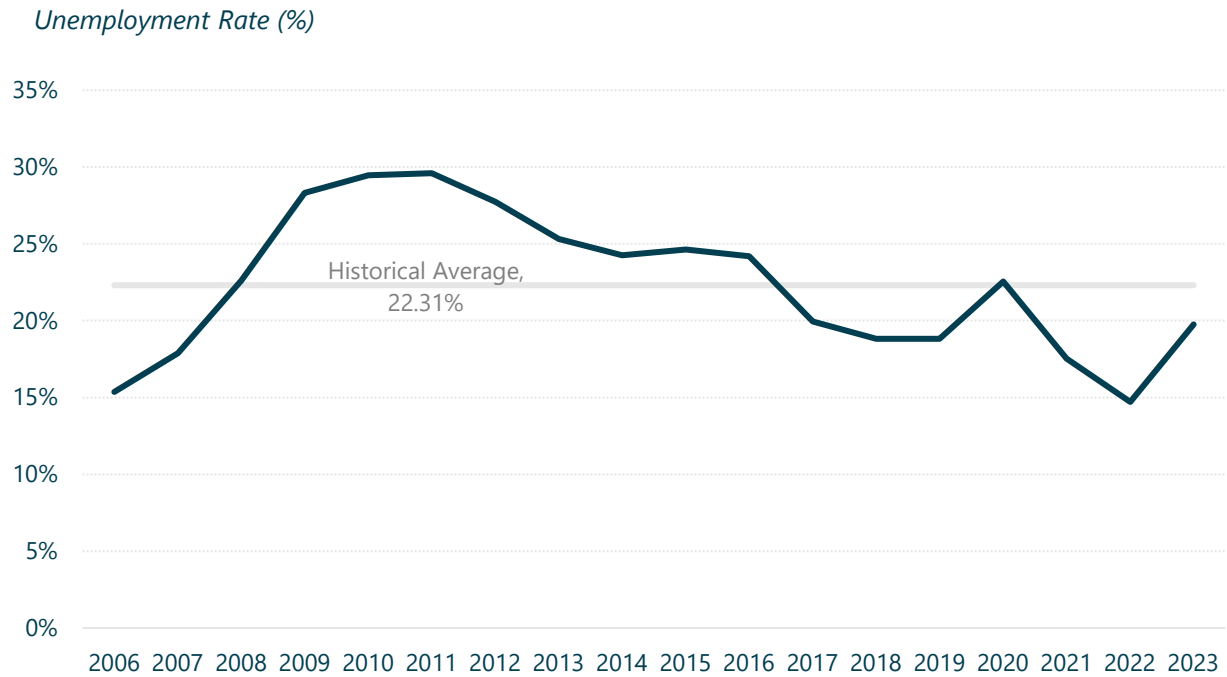
Geothermal production is included in renewable energy production. In 2022, the county produced 3,472 GWh of geothermal power—trailing only Sonoma County’s production of 4,978 GWh and representing over 31 percent of California’s total geothermal production (see conclusion section for mode detail).

WORKFORCE AND OCCUPATIONS

The county’s labor force is currently 71,900. The current labor force is in decline from the highest figure seen in the county’s history, at 80,000 persons (2010-11), and the labor force has increased by 2,900 persons in the last two years (Exhibit 3.9). Imperial Country’s August 2023 unemployment rate of 19.8 percent is dramatically higher than the U.S. unemployment rate of 3.8 percent for the same period. Over the last 15 years, the county’s unemployment rate has often been over 20 percent, with a high of 29.6 percent in 2011 and a low of 14.7 percent in 2022 (Exhibit 3.8). As with most agriculture economies, unemployment rates can vary widely based on the season, crop contracts, weather, and other factors.

Imperial County’s labor force participation rate of 54.3 percent is well above a recent low of 50.9 percent in 2019, though is far below the overall SCAG region labor force participation rate of 64.5 percent. Reasons for the far lower labor force participation rate include limited employment opportunities and lower pay scales, but also larger families and more children coupled with scarce and expensive childcare.

Exhibit 3.8: Unemployment Rate in Imperial County

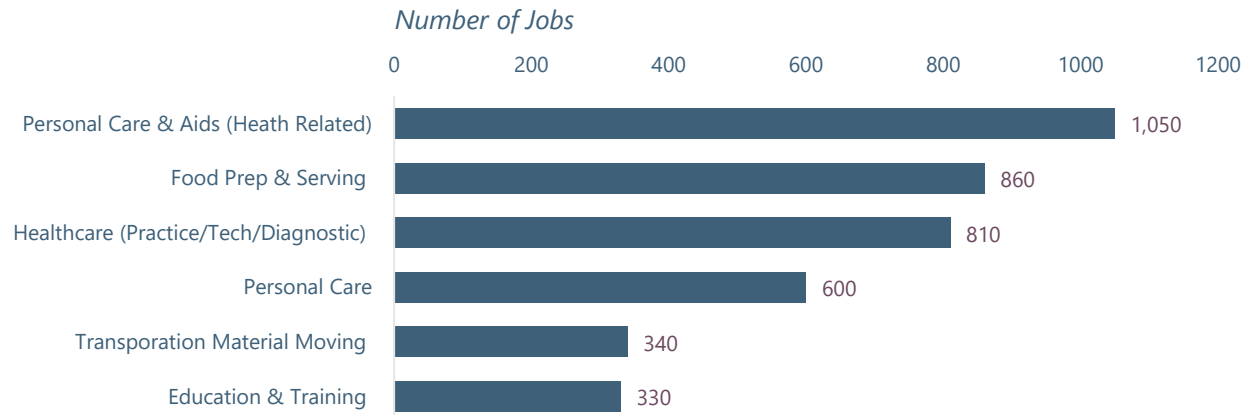


Source: California Employment Development Department (EDD)

Nearly 78 percent of the workforce is engaged in just five industries. By far the largest sector (employing 19,500 persons) is Public Administration (NAICS 92), which includes a variety of jobs such as those connected to local, state, and federal government, including teachers, first responders, and administrators. Healthcare and Social Services (NAICS 62) and total farming (NAICS 11) each employ roughly 10,000 people. Retail trade (NAICS 44) accounts for about 8,100 jobs and Accommodation and Food Services (hotels, motels, and restaurants—NAICS 72) account for 4,200 jobs.

The State of California Employment Development Department typically looks at historic data and demographic shifts to predict categories for job growth. Exhibit 3.9 provides anticipated employment growth by occupation for the current ten-year period (2018-2028). Overall, low-paying jobs (notably home health, food preparation/serving and personal care) are expected to be available. DMG, Inc. believes that the currently entitled geothermal projects could potentially change the growth dynamic to larger gains in construction, manufacturing, and similar industries.

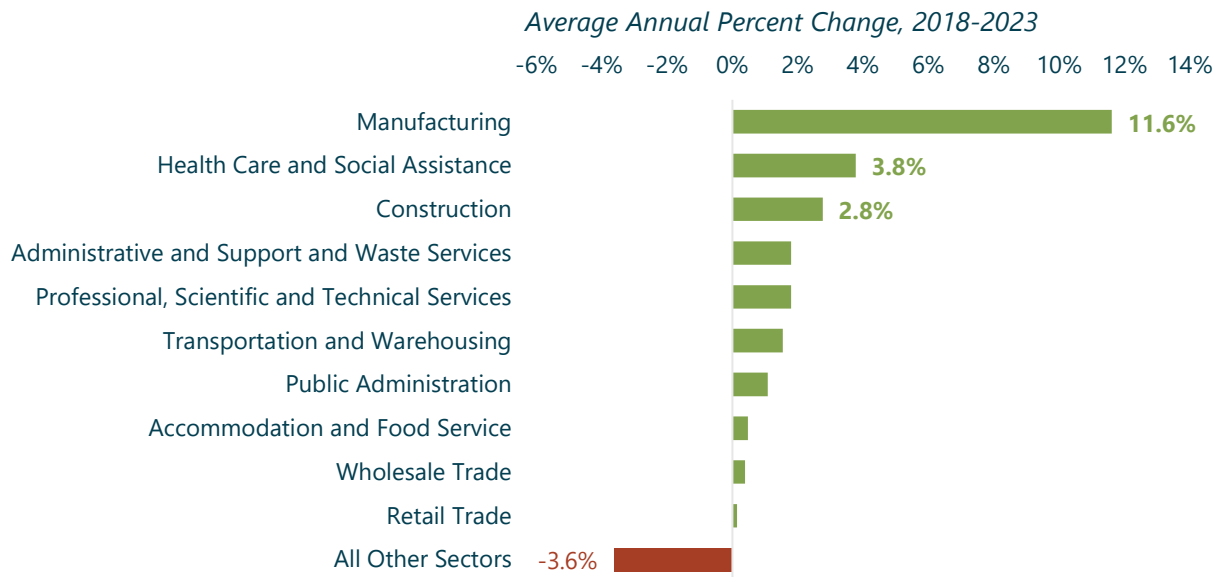
Exhibit 3.9: Projected Employment Growth by Occupation in Imperial County (2018-2028)



Source: California Employment Development Department (EDD)

Exhibit 3.10 provides historic gains (losses) by industry covering 2018-2023. Healthcare & Social Assistance, Manufacturing, and Public Administration have seen the largest gains, while farm employment is down by over 2,800 jobs during the same time period. DMG, Inc. predicted in past economic forecasts a reduction in farm employment as agriculture continues to transition to automated processes.

Exhibit 3.10: Average Job Growth in Imperial County, 2018-2023



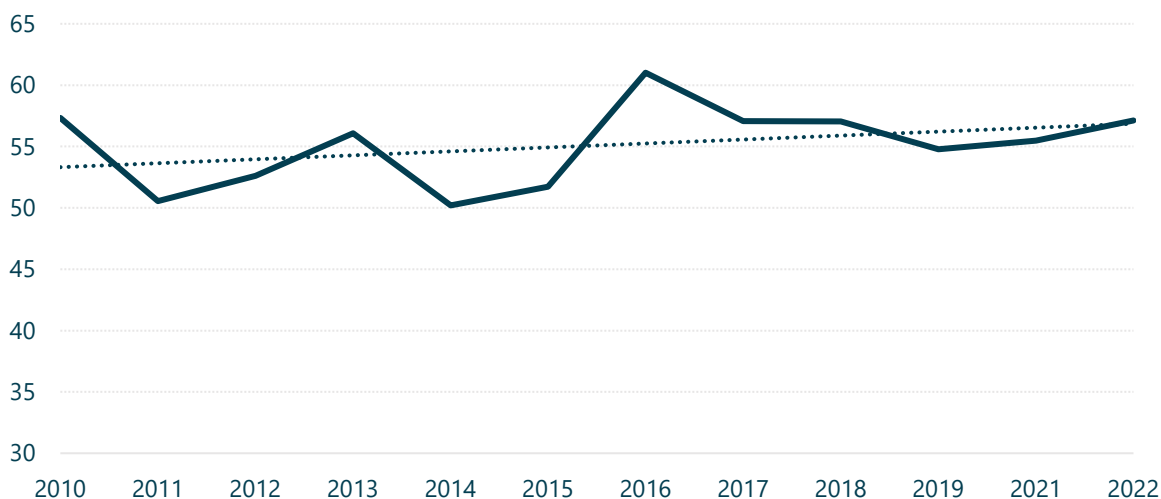
Source: California Employment Development Department (EDD)

INCOME, POVERTY, AND EQUITY

The most recent (2022) median household income in Imperial County is about \$59,000—far below the SCAG region as a whole (\$90,000), California (\$94,000), and the United States (\$77,000). The county’s inflation-adjusted median household income has increased over the last 10 years from about \$54,000—a compounded annual growth rate of 3.6 percent. While this suggests that income growth has exceeded inflation, the state, nation, and other five SCAG region counties saw real annualized income gains of between 3.8 and 9.9 percent over this period.

Exhibit 3.11: Imperial County Median Real Household Income and Trendline

Thousands of 2022 Dollars

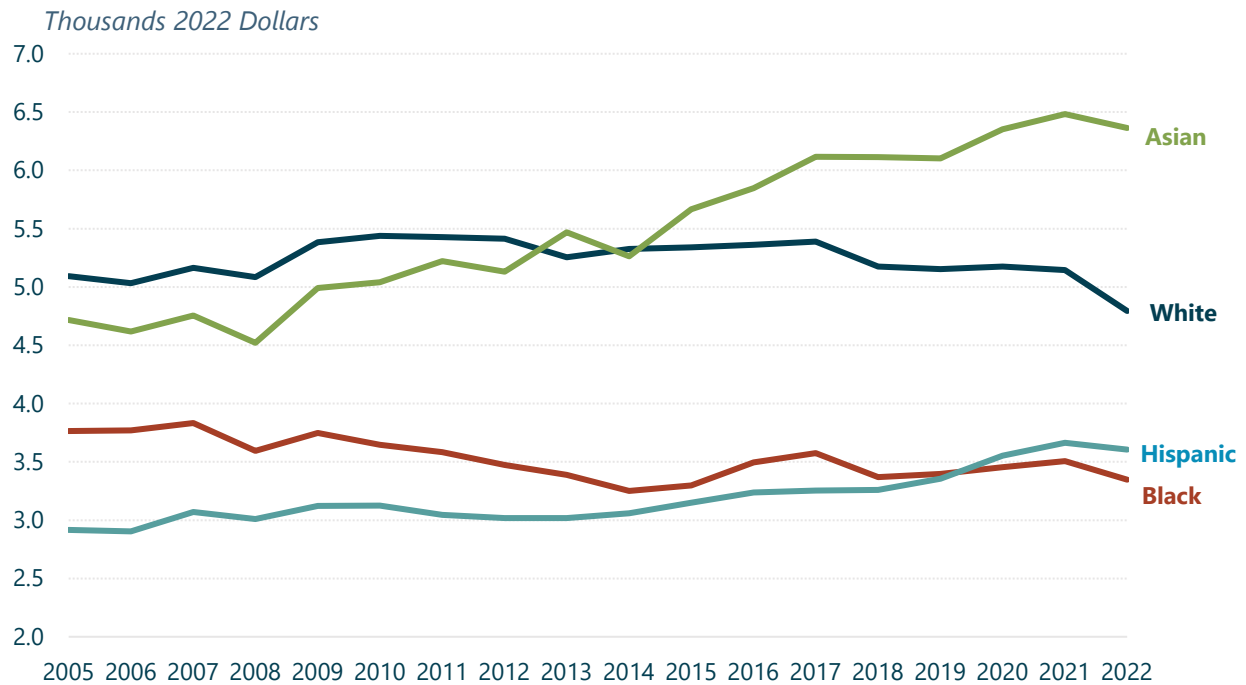


Source: American Community Survey 1-Year Estimates

High poverty rates have long affected Imperial County residents. Historically, poverty has run at about 25 percent of the total population and 33 percent for those under the age of 18. The overall poverty rate is currently 22.6 percent, below what it was in 2019 (25.1 percent) but higher than a year ago. It is likely the relatively low 2021 poverty rate of 16.4 percent was the result of financial aid provided to families as a result of the pandemic. As funds have been expended, families no longer have these resources. By comparison, the poverty rate in the SCAG region of 12.6 percent roughly matches the United States as a whole.

Real monthly wages by race in Imperial County show disparity between Asian, white, Hispanic, and Black residents. While this is true across Southern California, Imperial County is unique in that the vast majority of residents (86 percent) identify as Hispanic. Hispanic workers make about 75 cents on the dollar versus white workers. Average wages for the county’s small Asian population (just over 2,000 people) have increased substantially in the last decade and now exceed all other groups by a wide margin. Note that these monthly wage differences do not account for differences in education, training, and industry-type participation and should not be used to conclude individual disparity issues (see Chapter 2 for further discussion).

Exhibit 3.12: Average Real Wage by Race/Ethnicity in Imperial County



Notes and sources: Includes wage and salary workers only. Hispanic include all races. Based on data from U.S. Bureau of the Census, Quarterly Workforce Indicators (1990-2022).

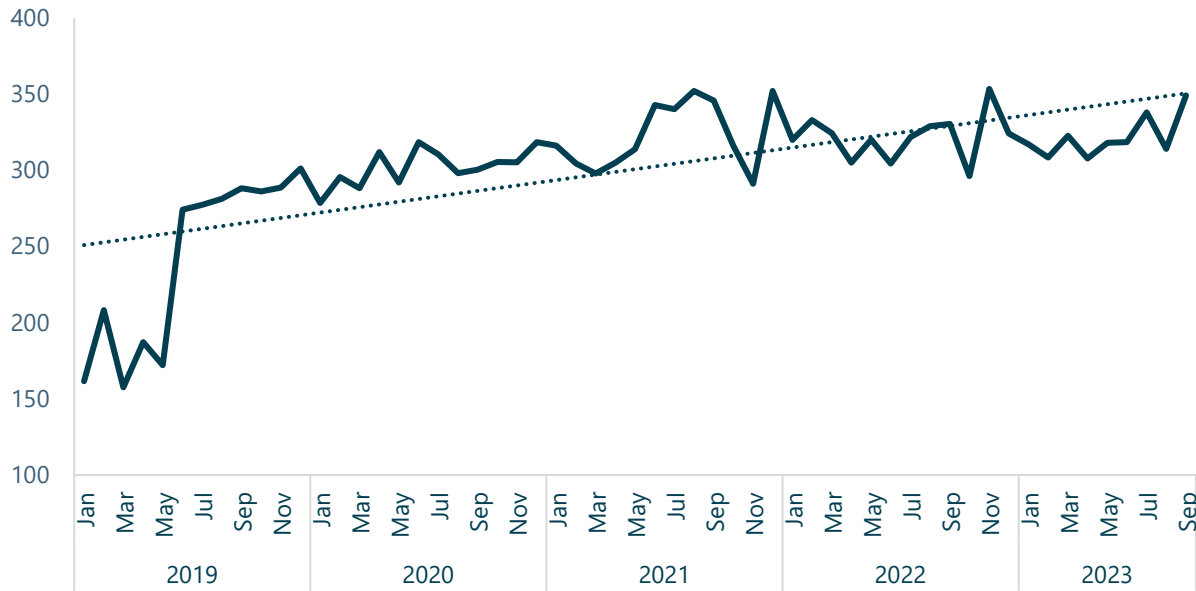
Gender wage differences prevail in Imperial County, as they do in most regions, though the gender wage gap is narrowing. Between 2005 and 2014, women generally earned 66 percent to 70 percent of the wages earned by their male counterparts, though by 2022 the disparity has closed to about 76 percent (Exhibit 3.12). DMG, Inc. notes that it is easier to consider policy on gender disparity based on this data, as in general women hold a greater level of educational attainment than men across all race/ethnicity categories in the county and therefore should be qualified for higher paying occupations that require additional years of education. This is generally common in agriculture and rural economies as men tend to join the workforce at an earlier age, thereby forgoing higher education. Nonetheless, racial differences persist—while 39.6 percent of white women in Imperial County have a bachelor’s degree or above, only 13.9 percent of the (far larger) Hispanic female population does. In the long-run, Imperial County’s agricultural employment is not expected to increase as long as there is tremendous upside in energy and related industries, which could dramatically change the skills and experience required for Imperial County workers and affect race and gender wage gaps.

HOUSING MARKET

In 2009, the height of the Great Recession, the median home sales price in Imperial County fell to \$125,000. Home prices generally stayed depressed until early 2019. Since that time, there has been a steady increase in home prices. Exhibit 3.13 below shows that the current median home price (single family) is \$310,000. More remarkable has been the consistent increase in prices, versus the large swings that have been seen in other communities across Southern California.

Exhibit 3.13: Median Sale Price for Single Family House in Imperial County (with Trendline)

Thousands of 2022 Dollars

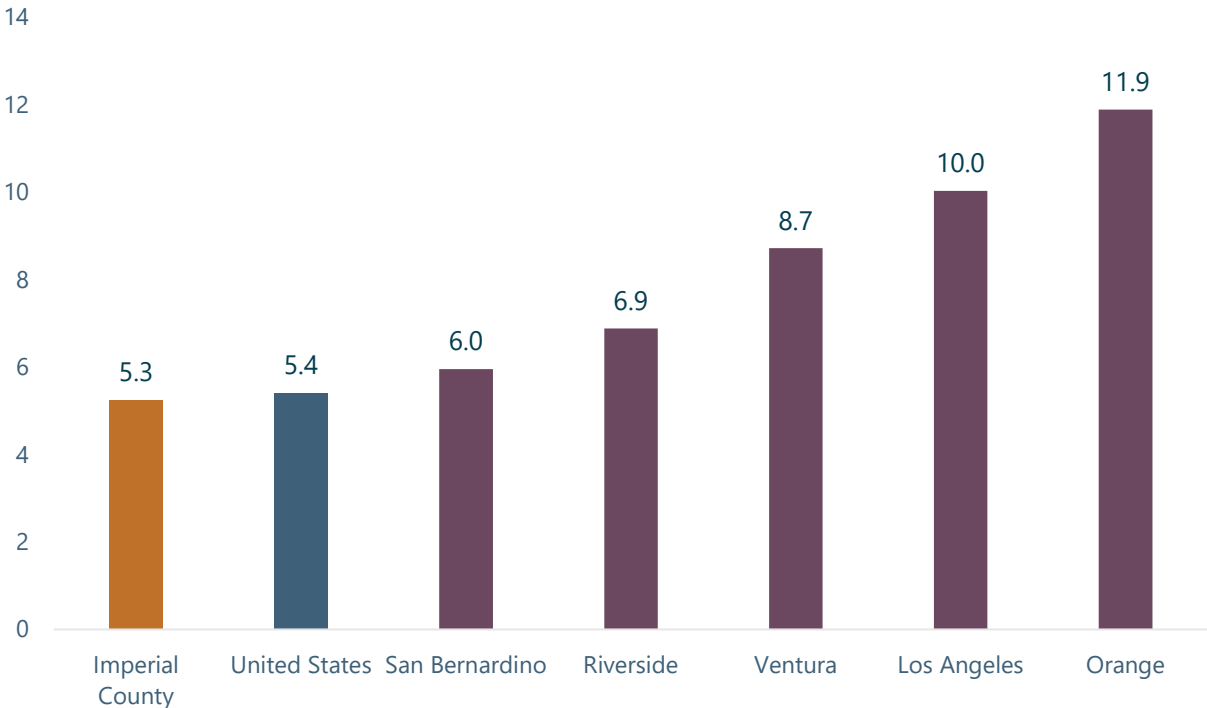


Source: Redfin

Exhibit 3.14, below, provides a housing affordability comparison based on the Median Home Price divided by the Median Household Income by SCAG county and the United States as a whole. Historically, Imperial County has been the most affordable of the regions listed. For 2023, Imperial County is the most affordable housing market in the SCAG region and is more affordable than the United States as a whole, with the median home price 5.25 times larger than the median household income. By comparison, Orange County is the highest, whereby the median home price is 11.89 times larger than the median household income.

Exhibit 3.14: Housing Affordability by Region (2023)

Median Home Price/Median Household Income

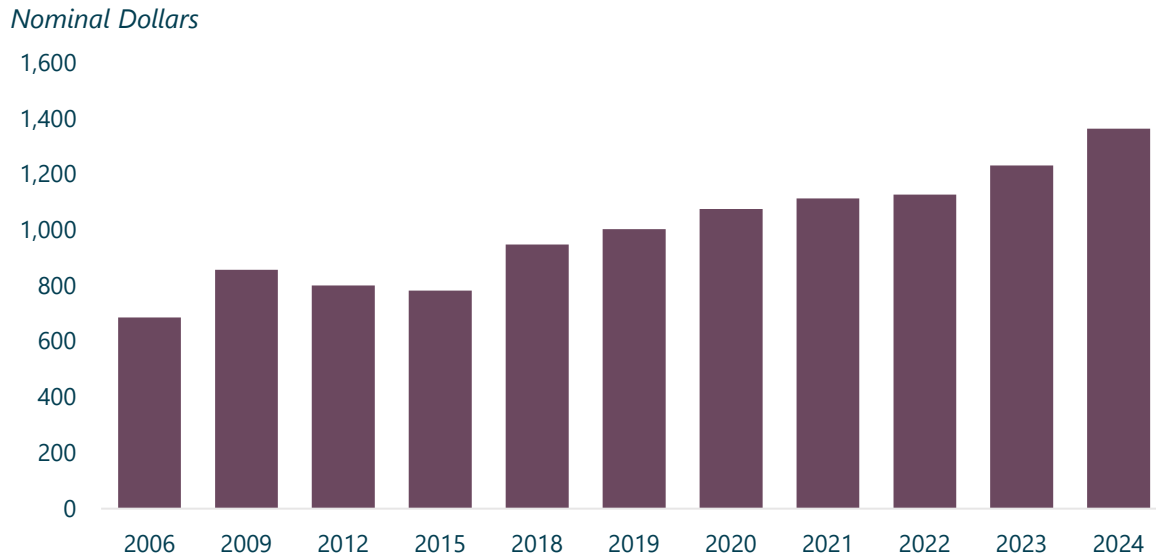


Sources: California Assoc. of Realtors, Redfin, ACS, St. Louis Reserve (FRED), DMG, Inc.

Median rents in Imperial County have gone up in recent years, tracking with the rest of California. In 2006, the median rent for a 2-bedroom unit cost 14.6 percent of the median household income. Today, the same unit would cost 23.0 percent of the median household income.

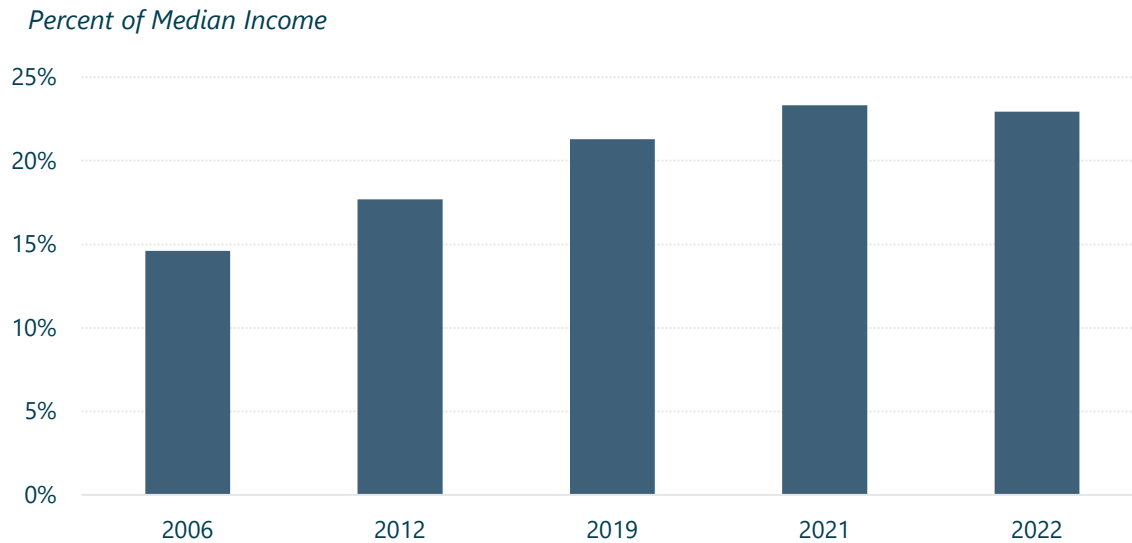
Imperial County often sees rent increases tied to a combination of the overall housing market and minimum wage. When the housing market collapsed in 2009, the rental market in Imperial County saw additional demand from displaced former and potential homeowners. More recently, increases in California’s minimum wage has boosted incomes and therefore ability to pay increased rents. Today, a 2-bedroom/2-bathroom apartment runs about \$1,300 – \$1,400 per month. A 4-bedroom unit (typically a single-family home) rents for between \$2,000 and \$2,400 per month. Property managers are reporting that vacancies are almost non-existent—less than 1 percent on an annualized basis. An informal survey conducted by DMG Economics of multi-family property managers that manage over 1,500 units (about 7 percent of the Imperial County market) currently lists a total of five vacancies—four of which are being remodeled and technically not available. All property managers surveyed are reporting waiting lists for multi-family housing.

Exhibit 3.15: Median Rents in Imperial County



Sources: U.S. Department of Housing and Urban Development 50th Percentile Fair Market Rents

Exhibit 3.16: Rental Affordability in Imperial County



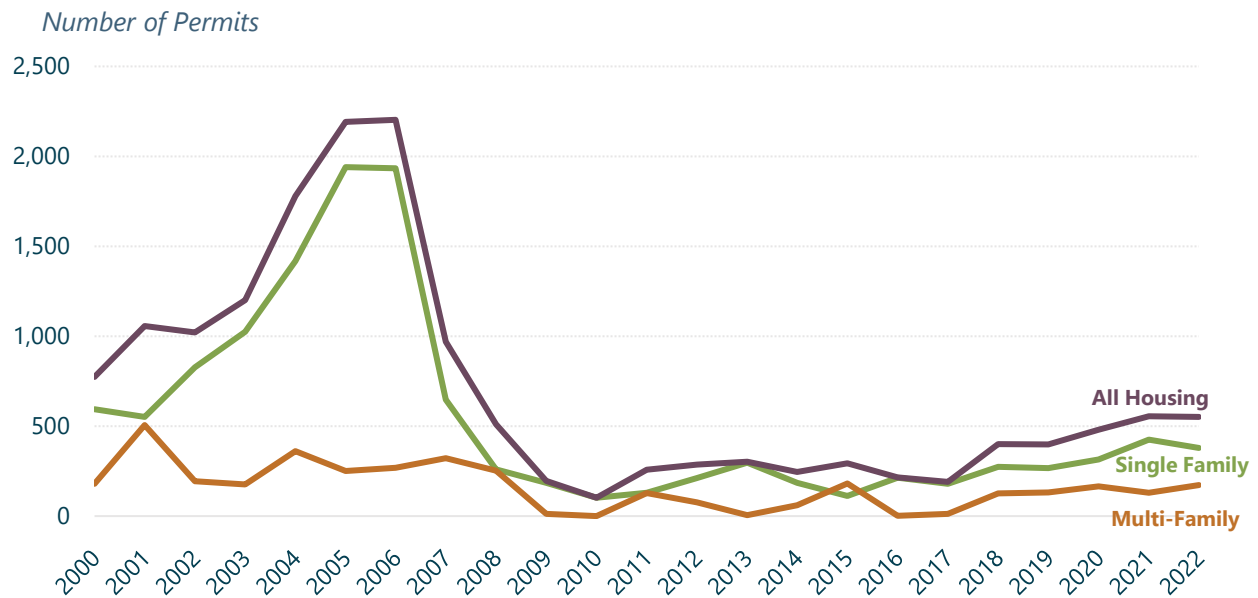
Source: Calculation of American Community Survey 1-Year Estimates

After the Great Recession, Imperial County was slow to see new residential construction. There were several years when fewer than 20 single family home permits were issued. Countywide in 2022, 551 total residential building permits were issued, 379 for single family homes and 172 multi-family units (Exhibit 3.17). On a per capita basis, Imperial County saw more new construction per capita than Los Angeles, Orange, Ventura, and San Bernardino counties. Only Riverside County saw a faster growth rate for home construction per capita in 2022.

As 30-year mortgage rates have more than doubled in the last 12 months, it remains to be seen what future market absorption of the single-family units will be. Currently all multi-family permits appear to be for the rental market, including both senior housing and market-rate.

One other trend in Imperial County is the conversion of older exterior-entrance motels to micro-apartments. One local developer has acquired approximately 500 units of previously used motel rooms. The developer has successfully changed the land use designation and remodeled the rooms into micro-apartments of approximately 300 – 400 square feet. The units are considered studio or efficiency units and include a basic kitchen area, sleeping quarters and a bathroom. The units generally rent for between \$600 and \$800 per month. The ownership group states that interest in these units comes from a variety of persons, including those working in agriculture, the state prison system, and the U.S. Department of Homeland Security, as well as construction workers traveling in the region to work on solar, battery, and geothermal projects.

Exhibit 3.17: Residential Permits Issued for Imperial County



Sources: Construction Industry Research Board

FUTURE ECONOMIC OPPORTUNITY AND FORECAST

The overall economy of Imperial County is stable. The impacts of Covid-19 seem to be over, though poverty levels are increasing as a result of inflation and the expiration of various financial stimulus programs.

GEOTHERMAL AND LITHIUM PRODUCTION

The Imperial County region is on the cusp of developing the largest economic engine in its history. Lithium and other rare-earth metal extraction from geothermal brine is under development. Improved extraction technology combined with increasing demand for electric vehicle batteries results in a viable opportunity. It is estimated that Imperial County holds 15 million metric tons of lithium, enough for over 650 million electric cars. At the current market value of \$24,000 per metric ton, the value of this asset is

\$360 million. However, the market price of lithium fluctuates greatly and has been as much as \$80,000 and as low as \$20,000 per metric ton in the last 12 months.

Imperial County continues work on a Specific Plan and Programmatic Environmental Impact Report (PEIR) for approximately 12,000 acres of land in “Lithium Valley” that could contain ancillary and downstream uses, including refining, manufacturing, assembly, and logistics/distribution. The Specific Plan and PEIR are expected to be completed in the third or fourth quarter of 2024.

Currently, three major companies are actively working to entitle and permit geothermal/lithium extraction facilities in Imperial County. These include Berkshire Hathaway Energy, Control Thermal Resources, and Energy Source. As of October 2023, one project from Energy Source is fully entitled and available to construct. One project from Control Thermal Resources is on schedule to be considered for entitlement by the County Board of Supervisors within the next 4-6 months. Nine additional projects (three from Berkshire Hathaway Energy and six from Control Thermal Resources) are currently under active application with state and county agencies. The economic investment from these known projects is in excess of \$10 billion.

SOLAR ENERGY PRODUCTION AND BATTERY STORAGE

There is an additional 630 MW of solar and 2,300 MW of battery storage under construction. Additionally, 1,000 MW of solar production and 1,950 MW of battery storage projects are currently undergoing entitlement. The battery storage component, which is attracting significant economic investment, is vital to California’s grid stability. As California moves toward its Renewable Portfolio Standard (RPS) objectives, gaps remain in power availability during the peak hours of 4 and 9 p.m., especially in the late summer and early fall months. Battery storage will help stabilize the grid by providing on-demand power after sunset when solar production is not available.

AGRICULTURE

For 2023, crop production will likely be within 5 percent of 2022 levels, as the rains earlier in the year provided a brief respite from the ongoing drought. That said, there continue to be medium- and long-term concerns over water. As part of the broader discussions with the Colorado River Board of California and the seven states in the Colorado River basin, the Imperial Irrigation District (IID), the provider of water to the county’s agriculture interests, has proposed additional conservation contributions.

IID anticipates requesting 250,000 acre-feet of additional, voluntary conservation from water users in each of the next three years to meet these commitments. Currently it is thought that these reductions over 2024 – 2026 would be achieved through an expanded on-farm program, a deficit irrigation program, and if necessary, a more severe fallowing program to backstop the volume of reduction needed⁹.

⁹ Imperial Irrigation District,

<https://www.iid.com/Home/Components/News/News/1099/793#:~:text=The%20Lower%20Basin%20Plan%20proposes,end%20of%20calendar%20year%202024.>

4. Los Angeles County

The Los Angeles County economy has overcome most challenges faced during the COVID-19 pandemic. Total payroll jobs moved beyond pre-pandemic levels in late 2022. Following the recovery, population decline, housing supply and affordability, and poverty have risen to the surface as the county's primary challenges. Over the past year, the county's economy has been facing new challenges including labor disruptions, slowing global economic growth, geopolitical conflict, and a struggling office market feeling the continued effects of hybrid and remote work.

The so-called "Hot Labor Summer" hit Los Angeles hard in 2023. Labor disruptions occurred across several key industries throughout 2023, each with their own distinct impacts. Work stoppages related to contract negotiations between dockworkers represented by International Longshore and Warehouse Union (ILWU) and terminal operators represented by the Pacific Maritime Association at the San Pedro Bay port complex lasted close to a year and impacted discretionary cargo levels. The dual strikes between the Writers Guild of America and Screen Actors Guild-American Federation of Television and Radio Artists and the Alliance of Motion Picture and Television Producers over residuals and protections from artificial intelligence have resulted in decreased levels of production not seen since the COVID-19 shutdown (the writers' strike ended Oct. 30, 2023, and the actors' strike ended November 9, 2023). The impact on production also affects workers and businesses in the industry's supply chain, including caterers and equipment rental services. The ripple effect of reduced spending by workers in the industry and its supply chain represent additional revenue losses in our region.

The diversity of Los Angeles County's economic base is the foundation of the LAEDC forecasts that show continued, albeit slow, growth on the horizon in total payroll employment and Gross Domestic Product (GDP). National economic developments will continue to significantly influence the county's economic performance; the direct effects of inflation and the Federal Reserve's ongoing efforts to combat it still pose a risk, but a soft landing seems to be a real possibility. Predictions of a recession occurring by the end of 2023 never manifested—and there is a very real possibility the region avoids a recession in favor of modest sustained growth in the coming years. As the Federal Reserve continues with their tightening policy in an attempt to achieve their inflation goal, we do expect the economy and employment growth to cool; we forecast relatively flat employment growth in Los Angeles County, of less than 1 percent, from 2024 through 2028. Additional risks emerged internationally, including an economic slowdown and rising geopolitical conflict. Due to the degree to which Los Angeles County is globally connected, international factors could have implications on the county's economy and future growth projections.

Los Angeles County is expected to experience positive economic growth between 2022 and 2023 with real GDP growth of 2.0 percent. GDP growth is expected to slow to 1.2 percent over the year in 2024. Total nonfarm payroll employment in the county is forecasted to grow by 98,000 jobs (1.8 percent) from 2022 to 2023 and 33,800 jobs (0.6 percent) between 2023 and 2024. Inflation, measured through the Consumer Price Index (CPI), in Los Angeles County is expected to increase by 3.7 percent year-over-year from 2022 to 2023 and expected to slow to 2.4 percent over the year in 2024 in response to the federal government's continuing monetary and fiscal measures.

Los Angeles County is the major economic engine of the six-county SCAG region. In 2023, the 4.76 million workers employed in Los Angeles County accounted for 54 percent of total employment in the SCAG region. The top five industries by employment in 2023 are Health Care and Social Assistance, Public Administration, Accommodation and Food Services, Retail Trade, and Professional, Scientific, and

Technical Services. These industries collectively accounted for over half of the county's total nonfarm payroll employment.

Los Angeles County's labor force displayed modest growth in 2023, reaching approximately 5 million residents. The labor force participation rate is 65.1 percent, surpassing rates in other counties in the SCAG region, the state, and the country. However, the county typically reports slightly higher unemployment rates than the regional average. Despite a decrease in unemployment rates to pre-pandemic levels in 2022, unemployment rates increased slightly in 2023.

Like many places, Los Angeles County combines income growth and enduring disparities in income distribution. In 2022, the county's median household income reached approximately \$85,000, ranking fourth in the SCAG region. This figure reflects an 8.9 percent real growth from 2006 to 2022, representing the second highest growth rate in the region. However, substantial wage disparities persist across various racial/ethnic groups and genders. Moreover, despite a slight reduction in the individual poverty rate, the county still had the second-highest poverty rate in the SCAG region at 13.9 percent.

The housing market in Los Angeles County is characterized by fluctuating prices and faces considerable affordability challenges. The real median home price declined noticeably in early 2023, although the market experienced an upward trend later in the year. Housing affordability remains a concern with only 17 percent of households able to afford a median-priced home. This concern is exacerbated by disparities in housing affordability across racial and ethnic groups. High office market vacancy rates are a challenge; however, there are signs of potential improvement with new lease agreements and office space under construction. Adaptive reuse, particularly the conversion of underutilized commercial spaces into housing, shows promise for addressing housing needs and repurposing spaces in the county.

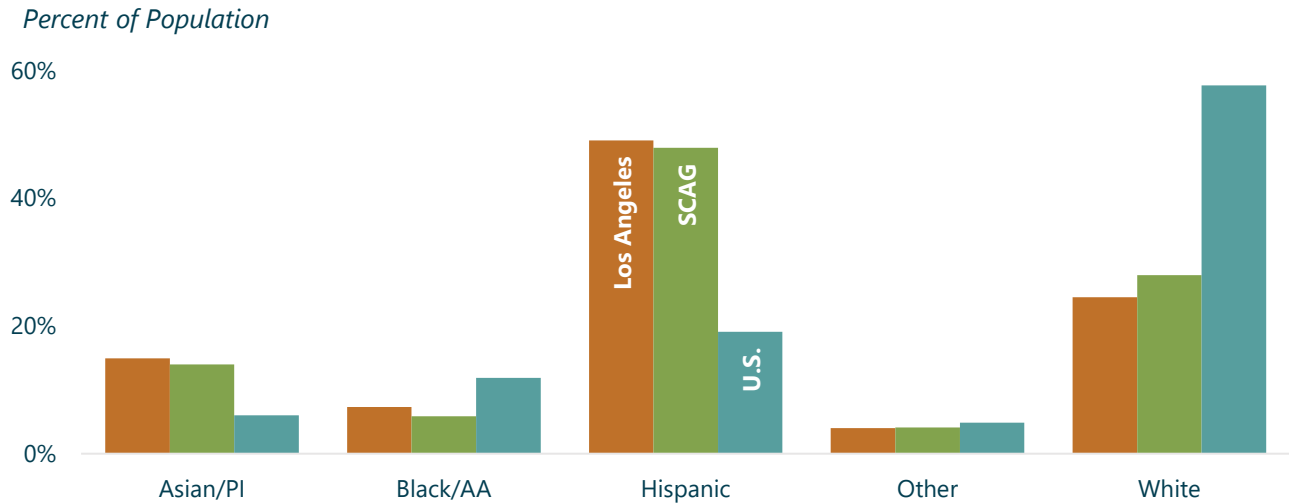
Moving forward, LAEDC projects nonfarm employment in Los Angeles County to increase by 131,900 jobs from 2022 to 2024, with Health Services; Leisure and Hospitality; Education Services; and Transportation, Trade, & Utilities leading the job growth. Keys to future growth and prosperity in Los Angeles County include addressing disparities, bolstering housing affordability, and enhancing economic resilience.

DEMOGRAPHICS AND SOCIOECONOMICS

As of January 2023, the total population of Los Angeles County was 9,761,000, representing a 0.7 percent decrease from the previous year and marking the fourth consecutive year of population decline. While the county continues to be the most populous within the SCAG region, state, and nation, its share of the regional population gradually decreased from 55.5 percent in 2006 to 52.4 percent in 2022, and its share of the state population has similarly decreased from 27.3 percent to 24.9 percent. While the population growth in the region and state has generally slowed due to both pandemic impacts and more longstanding trends, Los Angeles County's decrease is somewhat more pronounced. The county's population decrease can be attributed to a range of factors including a decline in foreign immigration, a decline in birth rate, and an increase in living costs compared to other areas—the last resulting in domestic out-migration.

Additionally, there have been significant variations in population trends among different racial and ethnic groups. Over the period from 2006 to 2022, both the Black/African American and white populations experienced declines of over 10 percent, whereas the Asian and Hispanic/Latino populations grew by approximately 7.0 percent and 2.6 percent, respectively.

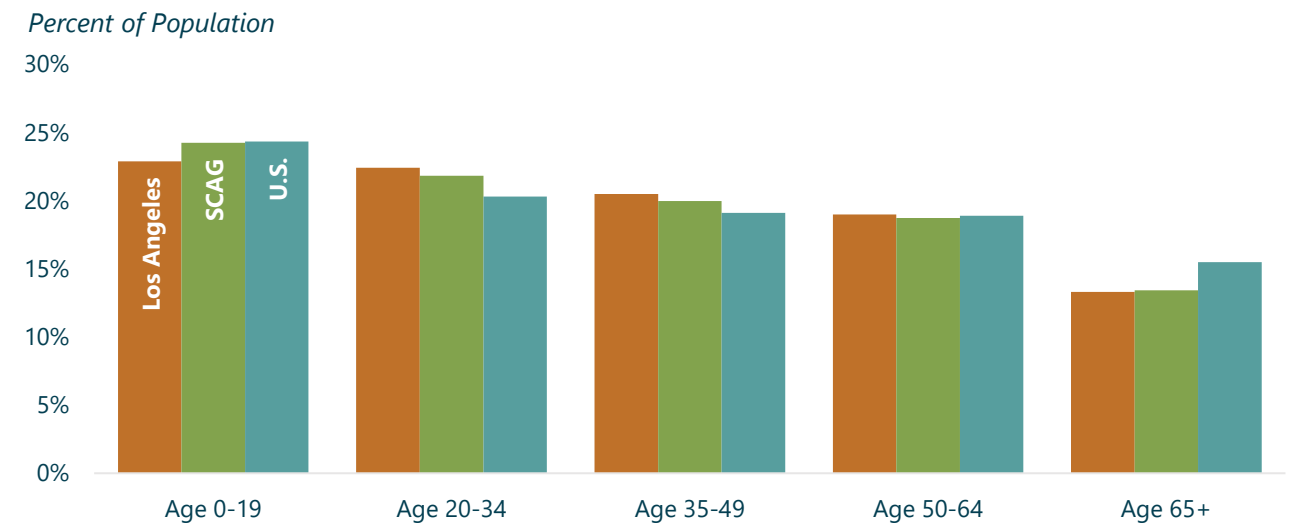
Exhibit 4.1: Race and Ethnicity of Population in Los Angeles, SCAG, and U.S. (2022)



Source: American Community Survey 1-Year Estimates

The composition of the population by race and ethnicity in Los Angeles County and the SCAG region are similar, with significantly higher percentages of Hispanic residents (49.0 percent and 47.9 percent, respectively) compared to the national average of 19.1 percent. Conversely, both Los Angeles County and the SCAG region display notably lower proportions of white residents at 24.5 percent and 28.0 percent, respectively, in contrast to the national average of 57.7 percent. Los Angeles County also has a slightly higher concentration of Asian residents compared to the SCAG region and exceeds the national average by more than double.

Exhibit 4.2: Population Age Distribution in Los Angeles, SCAG, and U.S. (2022)



Source: American Community Survey 1-Year Estimates

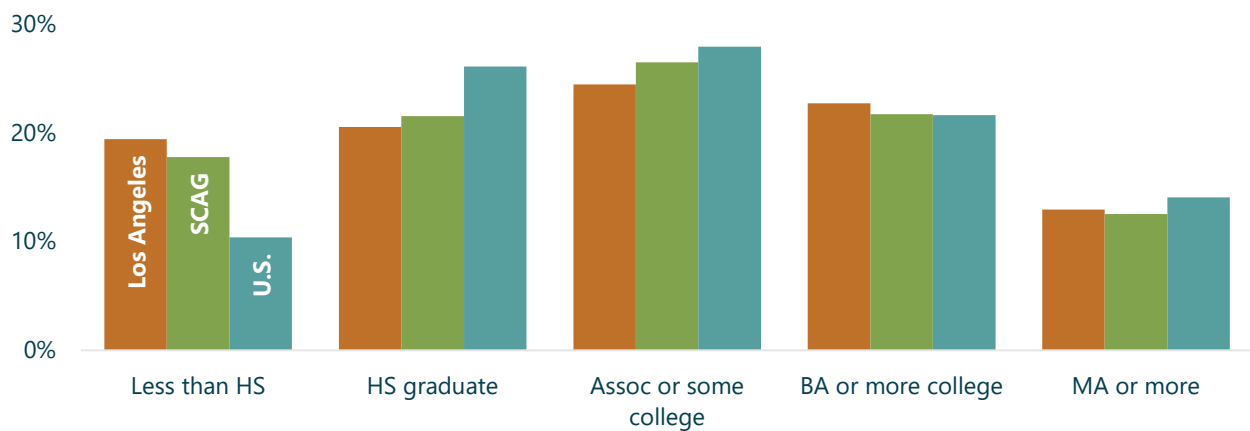
The age distribution of the population (Exhibit 4.2) offers insights into future labor force dynamics and evolving needs in housing, education, healthcare, and other social services. In contrast to the nation, both Los Angeles County and the SCAG region exhibit a similar growth trend in the share of mature adults (age

35-64). In 2022, Los Angeles County had the highest proportion of mature adults within the region, at 39.3 percent. A greater presence of mature adults in the population can potentially stimulate economic growth, as this demographic group typically possesses more advanced skills, experience, and productivity. All of these can contribute to a robust workforce, increased consumer spending, and enhanced economic stability.

As shown in Exhibit 4.3, Los Angeles County has a higher proportion of adults with less than a high school education (19.4 percent) than both the SCAG region (17.8 percent) and the entire United States (10.4 percent). Los Angeles County’s share of high school graduates (20.5 percent) and those with some college educations (24.4 percent) were slightly lower than the corresponding figures for the SCAG region and notably below the national average. The percentage of individuals in the county with a bachelor’s degree or higher was slightly greater than the levels observed in the region and the United States. In terms of advanced degrees (master’s or more), both Los Angeles (12.9 percent) and the SCAG region (12.5 percent) were slightly below the national average (14.0 percent).

Exhibit 4.3: Educational Attainment in Los Angeles, SCAG, and U.S.

Percent of Population Age 25+

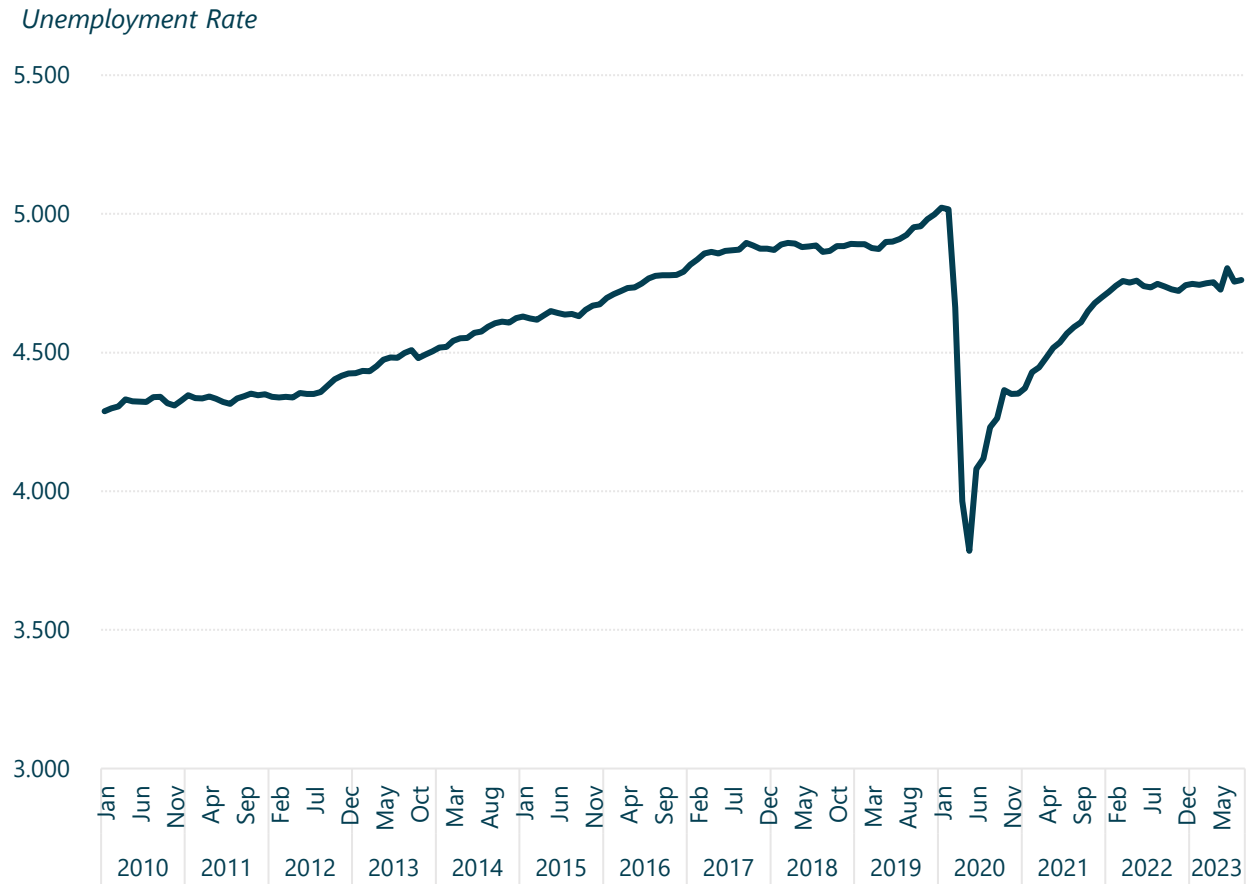


Source: American Community Survey 1-Year Estimates

WORKFORCE AND UNEMPLOYMENT

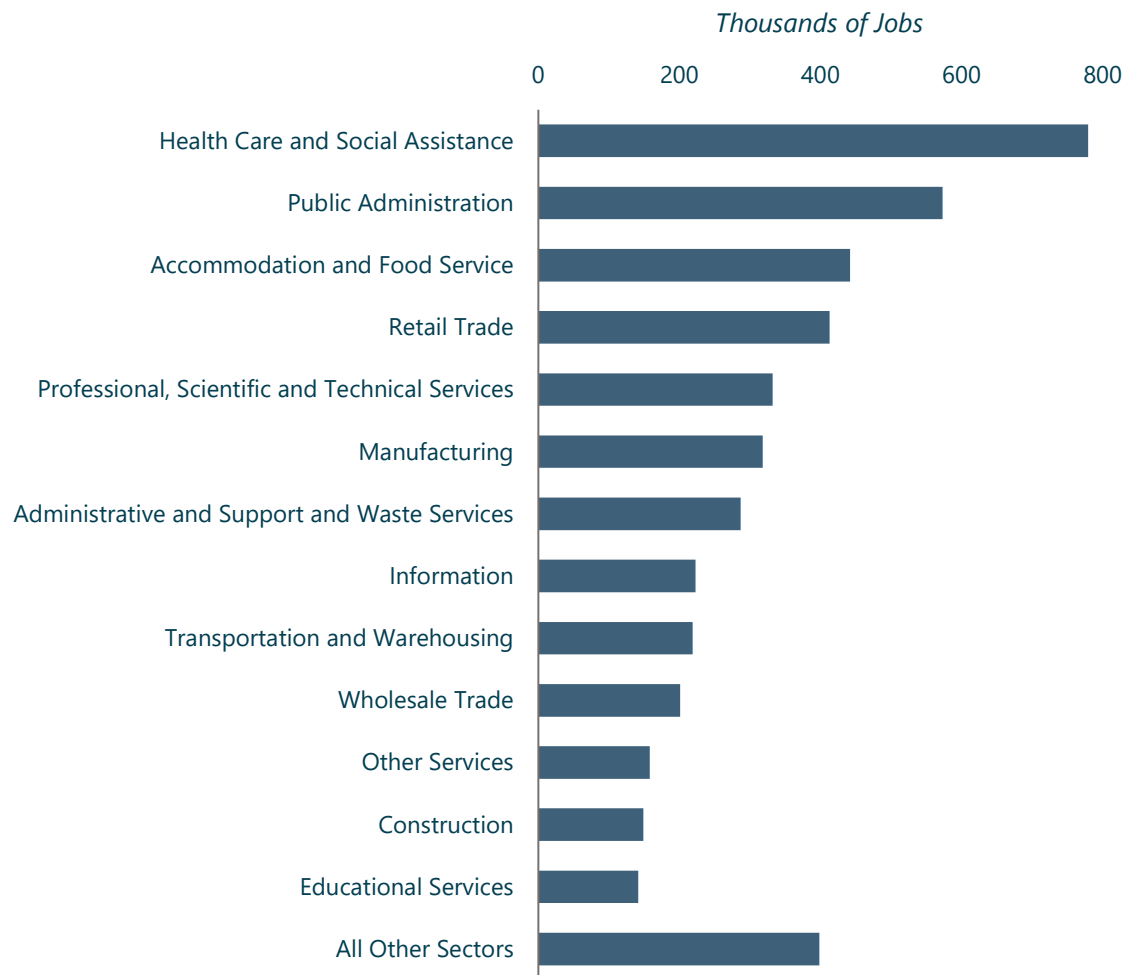
In 2023, the labor force in Los Angeles County grew modestly, hovering at approximately 5 million residents since the beginning of the year. By August 2023, the county’s labor force had rebounded to approximately 95 percent of its pre-COVID level from early 2020. The county’s labor force participation rate increased slightly in 2022 to 65.1percent—higher than the SCAG region, the state, and the country.

Exhibit 4.4: Los Angeles County Monthly Unemployment Rate, Seasonally Adjusted



Source: California Employment Development Department (2023)

Los Angeles County’s unemployment rate typically exceeds the region as a whole, and in 2023, it continued to hold the second-highest rate in the region. By the end of 2022, the county’s unemployment rate had decreased to 4.6 percent, approaching the level recorded in 2019 prior to the global pandemic. However, as 2023 began, there were slight increases in the unemployment rate, primarily because job growth lagged slightly behind the increase of the labor force. By August 2023, the seasonally adjusted unemployment rate reached 5.5 percent, approximately one percentage point higher than the rate observed a year earlier. The unemployment rate is expected to increase to over 6.5 percent in 2024.

Exhibit 4.5: Employment Levels in Los Angeles County by Industry Sector, 2023

Source: California Employment Development Department (2023)

INDUSTRIES AND OCCUPATIONS

Total employment in Los Angeles County reached more than 4.76 million by August 2023. The county's top five industries in 2023, which constitute more than half the total are Health Care and Social Assistance (775,000 jobs, accounting for 16.8 percent of the total), Public Administration (572,000 jobs or 12.4 percent), Accommodation and Food Services (439,000 jobs or 9.5 percent), Retail Trade (412,000 jobs or 8.9 percent), and Professional, Scientific and Technical Services (331,000 jobs or 7.1 percent). Collectively, these five industries constitute more than half of the total employment in the county (Exhibit 4.5).

Exhibit 4.6: Forecasted Job Growth Relative to 2022 Employment by Sector

Sector	2024	2025	2026	2027	2028
Const, Nat Resources & Mining	-0.2%	1.8%	0.7%	0.9%	0.8%
Manufacturing	-1.5%	-2.5%	-2.9%	-2.1%	-1.5%
Transportation, Trade & Utilities	2.8%	1.5%	1.1%	1.0%	0.4%
Information	-1.7%	0.9%	2.2%	-0.4%	-1.0%
Financial Activities	0.1%	0.0%	0.3%	0.4%	0.4%
Professional Business Svcs	1.8%	0.8%	0.7%	0.3%	0.7%
Educational Svcs	3.5%	1.6%	0.5%	0.5%	0.6%
Health Svcs	5.3%	2.6%	1.3%	1.2%	1.2%
Leisure & Hospitality	5.3%	1.7%	1.5%	1.5%	0.6%
Other Services (not gov't)	2.5%	1.0%	0.5%	0.5%	0.6%
Government	0.9%	0.3%	0.4%	0.4%	0.4%

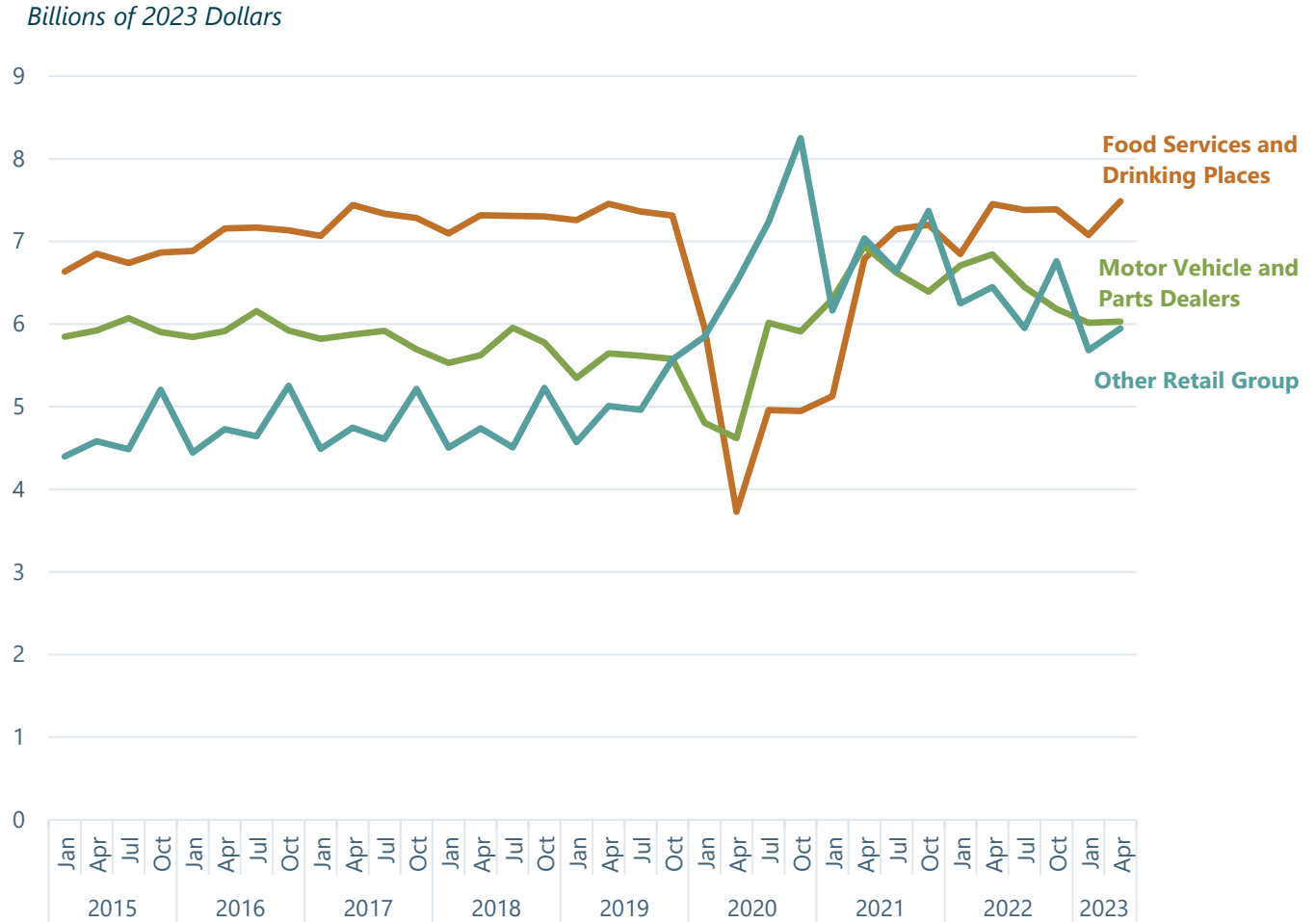
Source: LAEDC (2023).

In terms of annual employment growth, the Arts, Entertainment, and Recreation industry experienced the highest percentage increase at 9 percent. Other sectors with notable growth rates exceeding 3 percent include Education Services (6.0 percent), Accommodation and Food Services (4.8 percent), Health Care and Social Assistance (4.6 percent), and Professional, Scientific and Technical Services (3.1 percent).

Looking forward, LAEDC projects nonfarm employment in Los Angeles County to increase by 220,000 jobs from 2022 to 2028. When compared to 2022 employment levels, Health Services is expected to see the highest increase of 13.6 percent in jobs by 2028, followed by a 11.9 percent growth in Leisure & Hospitality. Education Services, Transportation, Trade, and Utilities are also expected to grow. In contrast, manufacturing jobs are projected to decline by 11.7 percent due to ongoing technological advancements, capital and labor substitution, and productivity enhancements.

In the second quarter of 2023, total taxable sales in Los Angeles County reached \$36.2 billion, marking a 6.3 percent increase from the preceding quarter. However, this figure is about 6.4 percent lower than the same quarter in the previous year, largely driven by the decreased revenues from gasoline sales as average gasoline prices fell compared to the record highs in mid-2022. Over one-third of the county’s total taxable sales were generated in the top two categories of Food Services & Drinking Places (\$7.5 billion) and Motor Vehicle and Parts Dealers (\$6 billion).

Exhibit 4.7: Taxable Sales for Top Sales Retail Outlets



Sources: California Department of Tax and Fee Administration (2023).

The top five detailed occupations that exhibited the highest absolute job growth between 2017 and 2022 include: Home Health and Personal Care Aides; Producers and Directors; Fast Food Cooks; Heavy and Tractor-Trailer Truck Drivers; and First-Line Supervisors, Food Preparation & Serving Workers. Among these, four offer median hourly earnings ranging from \$26 to \$65. However, Home Health and Personal Care Aides, which contributed to the addition of nearly 79,000 jobs between 2017 and 2022, have a median hourly wage of less than \$17. This hourly rate falls short of the county’s calculated living wage, which is nearly \$22 per hour. Fast Food Cooks and Stockers and Order Fillers have median hourly earnings hovering around \$17 as well, combined they accounted for more than 19,000 jobs added over the five-year period.

Exhibit 4.8: Los Angeles County Occupational Growth (2017-2022) with Median Earnings

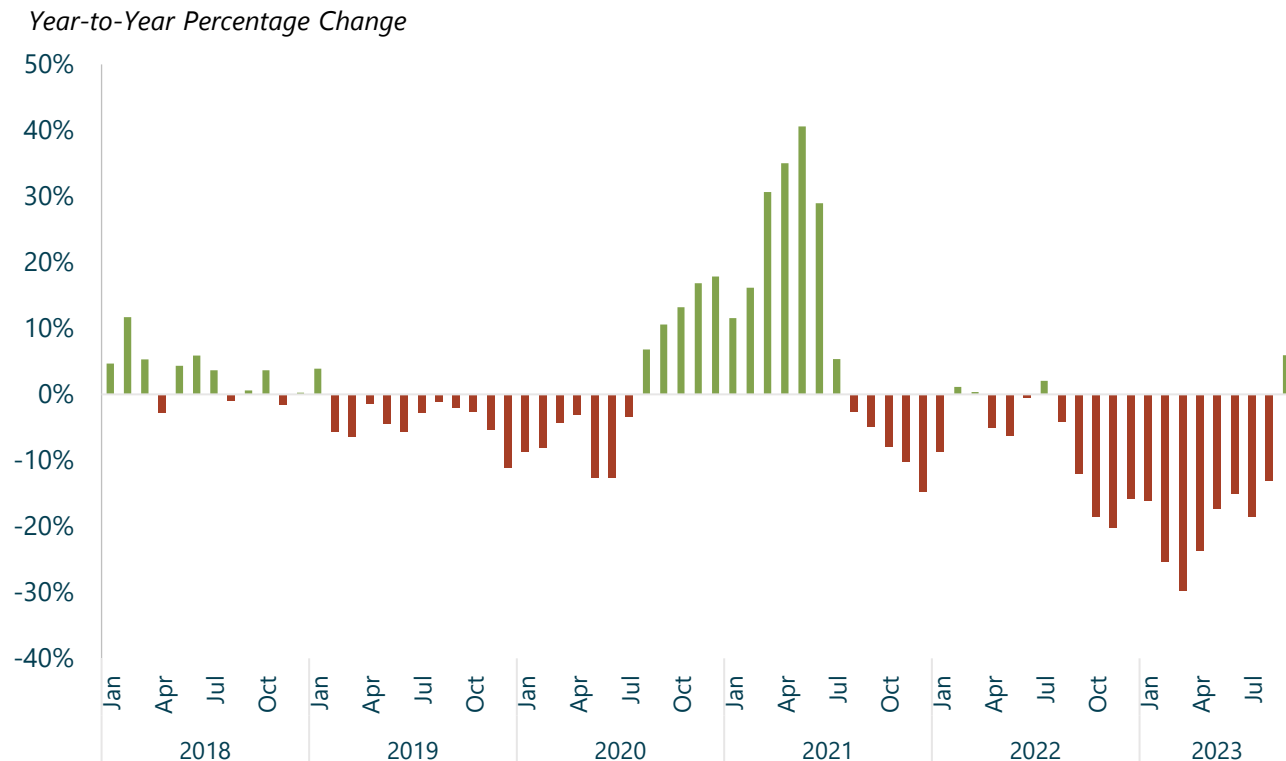
Occupation	2017 Jobs	2022 Jobs	Change in Jobs	% Change in Jobs	2022 Median Hourly Earnings
Home Health and Personal Care Aides	196,340	275,230	78,890	40.2%	\$16.13
Producers and Directors	21,150	32,790	11,640	55.0%	\$54.38
Cooks, Fast Food	28,140	39,570	11,430	40.6%	\$17.20
Heavy and Tractor-Trailer Truck Drivers	34,800	46,100	11,300	32.5%	\$26.32
First-Line Supervisors, Food Preparation & Servig Workers	24,710	35,230	10,520	42.6%	\$20.88
Special Effects Artists and Animators	6,180	14,950	8,770	141.9%	\$64.82
Medical Secretaries and Administrative Assistants	19,310	27,340	8,030	41.6%	\$22.97
Child, Family, and School Social Workers	11,290	19,180	7,890	69.9%	\$32.60
Light Truck Drivers	28,230	35,920	7,690	27.2%	\$20.92
Stockers and Order Fillers	61,500	69,140	7,640	12.4%	\$17.95

Source: CA EDD, LMID, OEWS

PORT ACTIVITIES

As the largest container port complex in the United States, the ports of Los Angeles and Long Beach (POLA/POLB), serve as important economic drivers for Los Angeles County and the SCAG Region. They also play a crucial role in facilitating international and domestic trade, support thousands of job opportunities, and advance sustainable and innovative technologies and practices.

Total container traffic data, encompassing both inbound and outbound volumes, reveal a consistent decline at POLA/POLB beginning in August 2022. Throughout FY 22/23, spanning from July 1, 2022, to June 30, 2023, there was an average monthly reduction of more than 170,000 inbound and outbound containers. This decline reached its peak in March 2023, with a notable 30 percent year-to-year decrease in container traffic. In total, there were 2,174,000 fewer containers moved through the ports during FY 22/23 compared to FY 21/22—a decline of 17 percent. Contributing factors included price increases due to inflation, decreased consumer demand amidst economic uncertainties, changes in trade routes, and high built-up inventory levels that retailers needed to clear. Moreover, negotiations for a new labor contract between ILWU workers and the port terminals extended for over a year until a tentative agreement was ultimately reached on June 14, 2023. Work stoppages and temporary port closures resulting from labor disputes also adversely affected trade flows at the ports with many shippers choosing to reroute discretionary cargo to other seaports to safeguard against these disruptions.

Exhibit 4.9: Change in Port Volumes at the Ports of Los Angeles and Long Beach

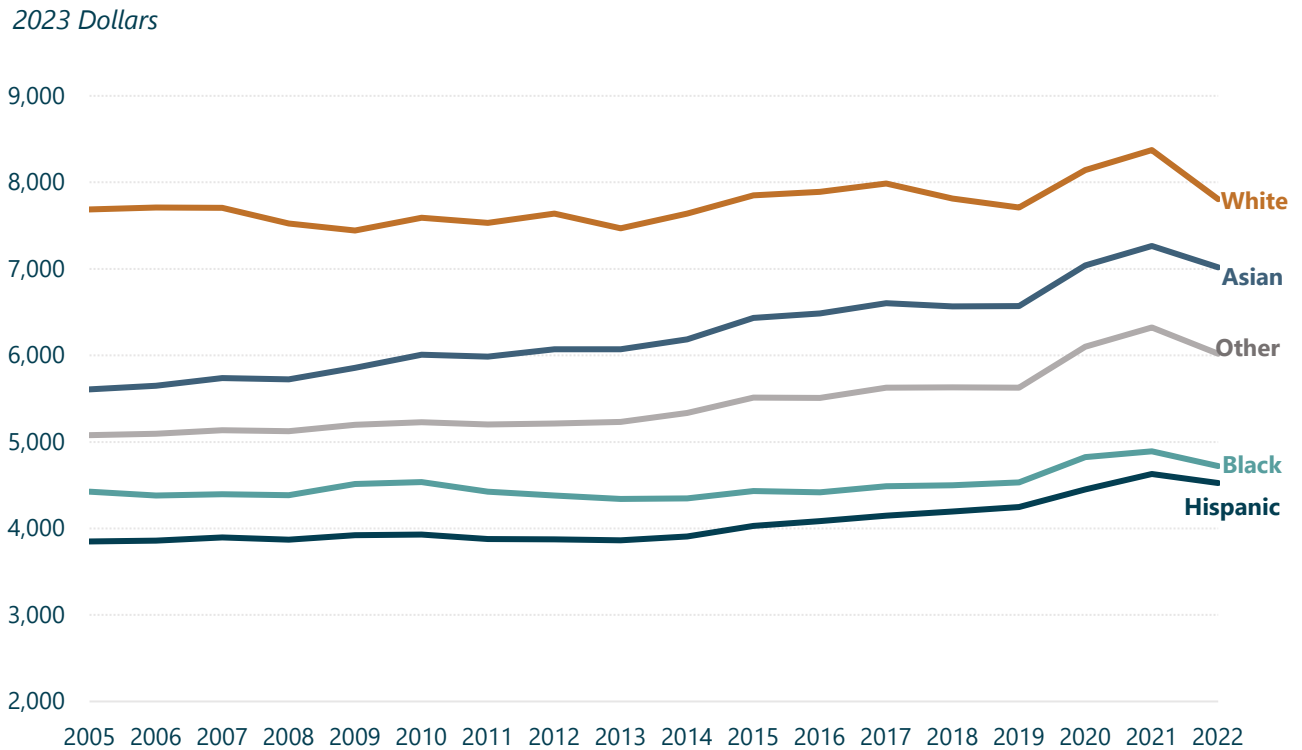
Source: Port of Los Angeles (2023), Port of Long Beach (2023)

INCOME, POVERTY AND EQUITY

In 2022, the real median household income for Los Angeles County was \$84,911 around \$5,000 below the SCAG regional median. Los Angeles County saw an 8.9 percent increase in real median household income growth from 2006 to 2022, ranking second across the region's six counties to Riverside and significantly surpassing the regional growth rate of 6.1 percent.

However, real wage growth varied across racial/ethnic groups in Los Angeles County. Between 2005 and 2022, Asian workers experienced the most significant growth in real monthly wages at 25.2 percent, followed by Hispanic workers with a 17.5 percent increase. Black workers saw a moderate wage increase of 6.7 percent, while white workers had the slowest growth at 1.6 percent. Over the same period, the white, non-Hispanic share of the county's population also declined from 29.4 percent to 24.5 percent. Despite the relatively slow growth in monthly wages, white workers in Los Angeles County consistently maintained the highest average wages, reaching \$7,807 per month in 2022, followed by Asians with an average of \$7,020. In contrast, Hispanic and Black workers, although experiencing some wage growth over the past 18 years, still earned considerably lower average wages, about 60 percent of what white workers earned in 2022. These figures emphasize the persistent wage disparities among racial/ethnic groups, highlighting the need for ongoing efforts to address this significant issue.

Exhibit 4.10: Monthly Wages by Race and Ethnicity in Los Angeles County



Source: U.S. Bureau of the Census, Quarterly Workforce Indicators (1990-2022).

Wage data over the same period also highlights income disparities by gender. Throughout this period, male workers consistently outearned their female counterparts. In 2022, the average monthly wage for male workers was \$7,050, compared to the \$5,084 earned by female workers. While the male to female income gap narrowed from around 1.5 times in 2005 to approximately 1.4 times in 2022, the persistent wage differential highlights the importance of further efforts aimed at reducing gender-based income disparities in the county.

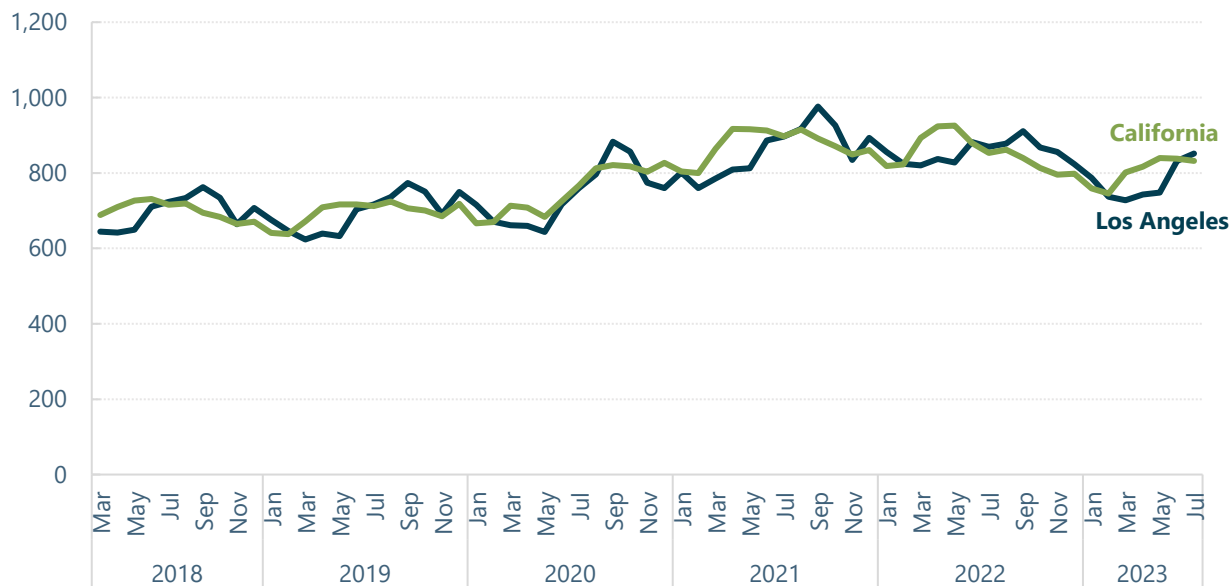
The individual poverty rate in the county decreased slightly from 14.2 percent in 2021 to 13.9 percent in 2022, though this is still the second highest in the SCAG region. Lower income households will continue to be disproportionately impacted by high levels of inflation and any other economic instability.

HOUSING MARKET

Housing costs constitute the largest portion of a household’s expenditures. In Los Angeles County, real median home prices decreased more than 20 percent from over \$910,000 in September 2022 to below \$730,000 in March 2023. This trajectory reversed at the beginning of the second quarter this year, with the median home price reaching \$851,500 by July 2023. The median home price in Los Angeles is slightly above the state median of \$832,300 and ranks as the third highest within the SCAG region.

Exhibit 4.11: Real Home Sale Prices in Los Angeles County and California

Thousands of 2023\$



Source: California Association of Realtors (2023)

Exhibit 4.12: Housing Affordability by Race and County, 2022

Percent of Household Who Can Afford Median-Priced Home

Region	All	White	Asian	Hispanic	Black
Los Angeles	17	25	22	10	9
Orange	14	16	15	8	12
Riverside	28	31	36	24	31
San Bernardino	36	40	48	32	29
Ventura	20	24	31	11	NA
CA single-family home	21	26	31	12	12
CA Condo/Townhome	30	35	41	20	18
United States	43	46	58	36	28

Source: California Association of Realtors (2023)

The conventional housing affordability index, as reported by the California Association of Realtors, reveals that only 17 percent of households in Los Angeles County could afford a median-priced home in 2022. Only Orange County ranks lower in the region¹⁰. Decomposing the index by race and ethnicity shows that Hispanic/Latino and Black households face substantially lower housing affordability when compared to

¹⁰ California Association of Realtors. 2023. 2022 Housing affordability by ethnicity. Retrieved from: <https://www.car.org/aboutus/mediacenter/newsreleases/2023-News-Releases/2022haibyethnicity>.

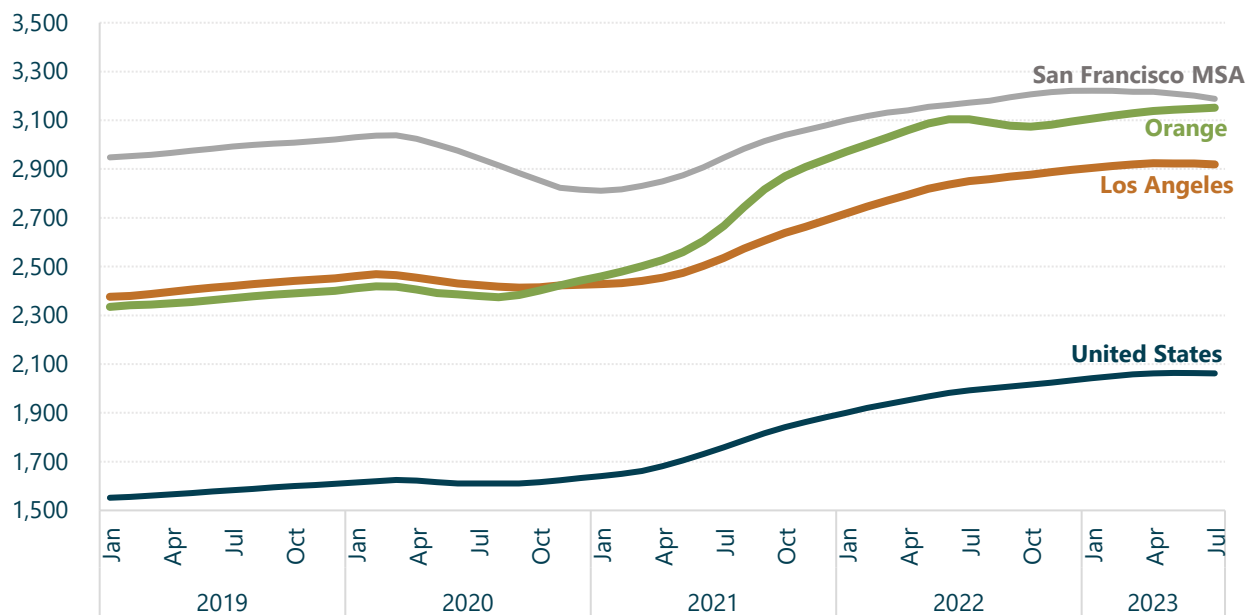
white and Asian households. Only 9 percent of Black households and 10 percent of Hispanic/Latino households can afford to purchase a median-priced home—only 22 percent of Asian and 25 percent of white households could.

Rents also have a significant impact on residents of Los Angeles County, especially considering that more than 53 percent of the county’s more than 3.6 million housing units were rentals in 2022.¹¹ In the City of Los Angeles, this rate is even higher at approximately 63 percent.¹² High rents result in more than 55 percent of renter households being rent burdened, spending 30 percent or more of their household income on rent. In addition, close to one third of the renter households pay 50 percent or more of their income on rent.

Rents in Los Angeles County have generally increased since 2015 despite a brief downturn during the early stages of the COVID-19 pandemic driven by economic uncertainty. Rents rose rapidly beginning in mid-2021 as rental demand surged in the county and rose 3.5 percent in the year ending July 2022. Nevertheless, as of the beginning of 2023, the rate of increase has tapered off. Median rent remained relatively steady between January and June 2023, with minor fluctuations. This slowdown in rent price growth may be attributed in part to a growing housing supply.

Exhibit 4.13: Zillow Rent Index for Los Angeles County

2023 Dollars



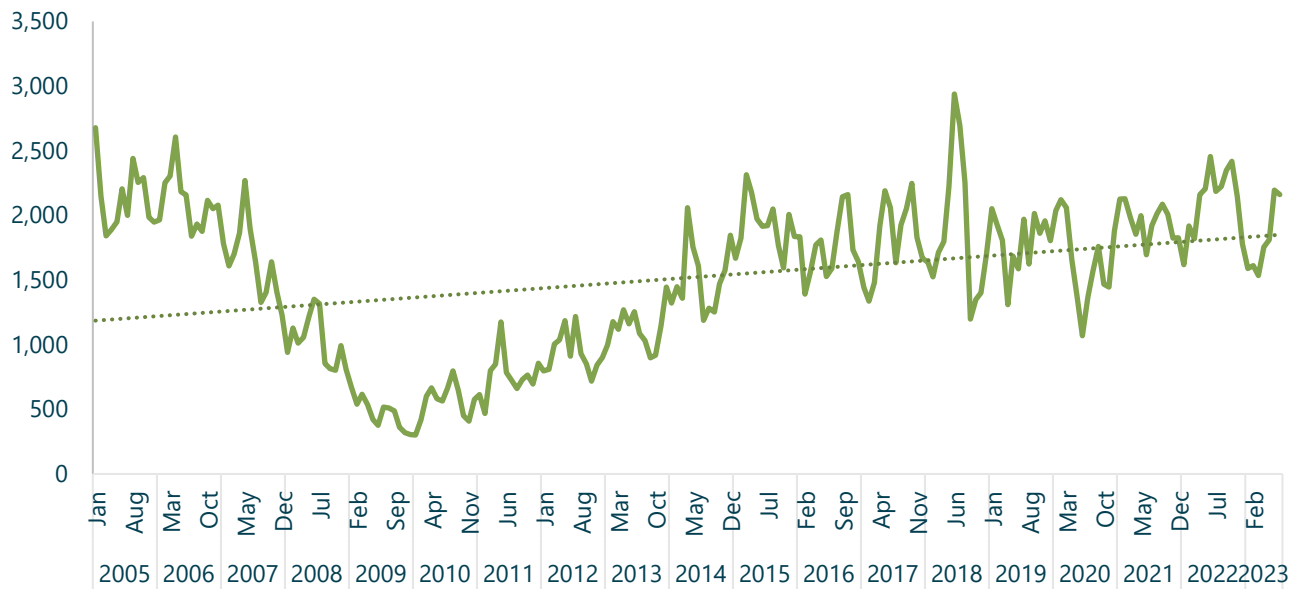
11 Census Bureau. 2023. QuickFacts Los Angeles County. Retrieved from: <https://www.census.gov/quickfacts/fact/table/losangelescountycalifornia/PST045222>

12 Census Bureau. 2023. QuickFacts Los Angeles County. Retrieved from: <https://www.census.gov/quickfacts/fact/table/losangelescitycalifornia/PST045222>

One of the key strategies for improving affordability is to bolster the housing supply by constructing new units. According to the Census Building Permit Survey, the three-month moving average of the number of building permits issued for new residential units increased significantly, rising by 36 percent from 1,590 units in January to 2,162 units in July 2023 (Exhibit 4.14). The growth rate for single-family units is 46 percent. For multi-family units, the growth rate is 30 percent. These rates are far in excess of levels during the 1990s and 2000s; however, there are many indicators of past undersupply, including, e.g., the county’s high level of household overcrowding. While Los Angeles County’s household overcrowding rate of 10.84 percent is the highest in the SCAG region, the county stands out for the decrease from 11.89 percent a decade ago.

Exhibit 4.14: New Units from Residential Permits in Los Angeles

Number of Permits Issued per Month for All Housing Units Housing (Three-month Moving Average)



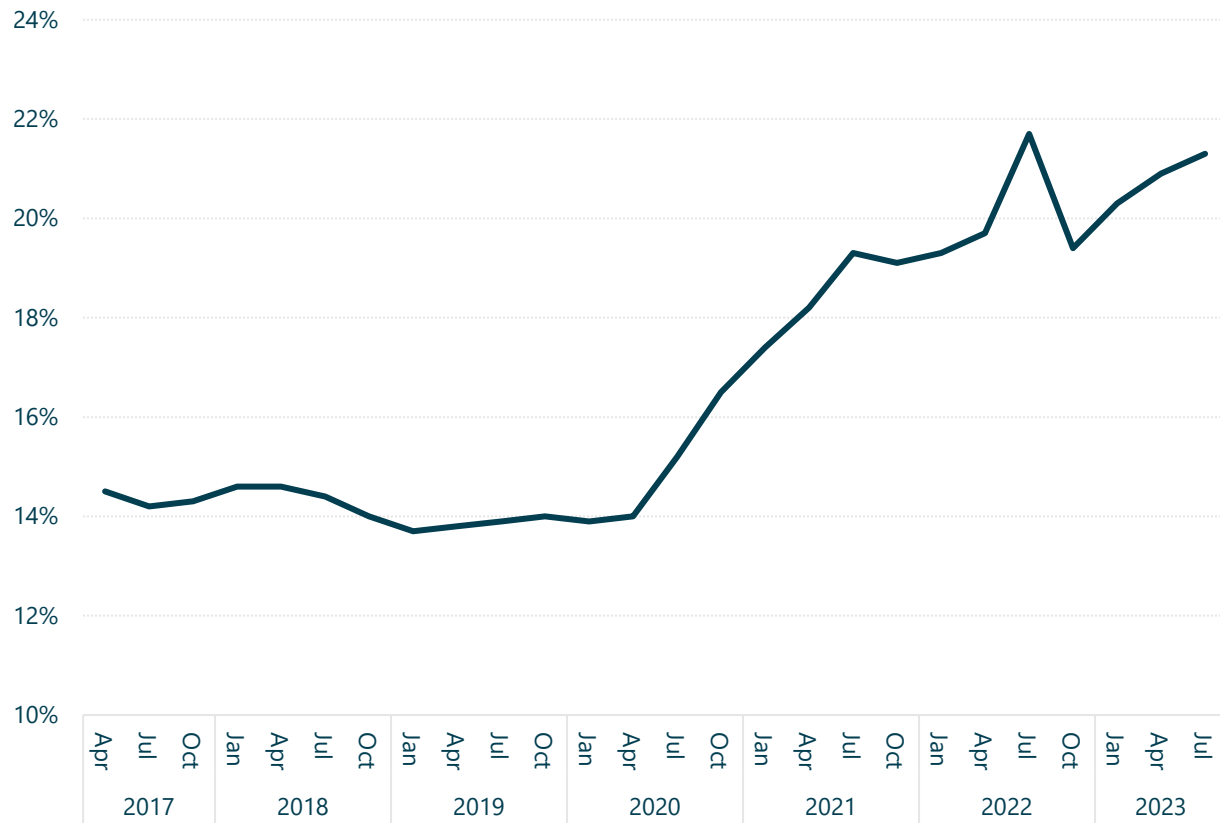
Source: CIRB and US Census Building Permit Survey

OFFICE MARKET

The office sector in Los Angeles County is facing significant challenges in the post-pandemic era. Sharp increases in office vacancies reached 21.7 percent in 2022, which was about 1.5 times the pre-pandemic vacancy rate. The high vacancy rate for office space has persisted due to continued remote and hybrid work schedules. Many businesses are re-evaluating office space requirements and downsizing office footprints. Economic uncertainties, including high inflation and rising interest rates add to the challenge. The distribution of office vacancies is uneven across the submarkets, with the highest vacancy rate observed in East Downtown at 48.9 percent and the lowest in mid-county areas at 7.8 percent.¹³

13 CBRE. 2023. Greater Los Angeles Office Figures Q3 2023. Retrieved from: <https://www.cbre.com/insights/figures/greater-los-angeles-office-figures-q3-2023>.

Exhibit 4.15: Office Market Vacancy Rates in Los Angeles County



Source: LAEDC.

Despite a weak office market, there are a few positive signs that may indicate a potential improvement in market conditions in the coming few years. New lease agreements made up nearly 70 percent of the overall leasing activity in the third quarter of 2023. In addition, there are 27 properties with 2.7 million square feet of office space under construction, representing about 0.9 percent of total office inventory.¹⁴ The market for adaptive reuse, such as converting underutilized office spaces into residential housing, shows some promise. For example, a recent RAND study suggests that if all identified underutilized properties (including offices hotels/motels, and other commercial properties) were converted into housing units, they could account for approximately 9 to 14 percent of the total housing needed in Los Angeles County over the next eight years.¹⁵

14 Avison Young. 2023. Los Angeles Office Market Report Q3 2023. Retrieved from: <https://www.avisonyoung.us/web/los-angeles/office-market-report>.

15 Ward, J. How Can Commercial Buildings Become Needed Housing? Retrieved from: https://www.rand.org/pubs/research_reports/RRA1333-1.html.

5. Orange County

ORANGE COUNTY ECONOMIC PERFORMANCE

Following the COVID years of 2020–2022, 2023 has brought its own unique set of challenges including rising interest rates, rising labor and housing costs, rising geopolitical conflict, and inflation that has remained above the Federal Reserve target. Despite these challenges, the labor market has remained resilient, and Orange County retains several significant strengths. These include its diverse industry cluster mix, a well-educated workforce, and a growing pipeline of new development projects that promise to generate new jobs. These strengths contrast with a persistent challenge in Orange County—a lack of workforce housing supply. As a result, housing affordability has hit a new low and household debt continues to rise.

In the face of rising interest rates and a higher cost of goods and services, however, consumer spending has remained strong, supported by a resilient labor market. While significant international turmoil presents additional potential headwinds, Orange County’s diverse industry clusters and well-educated workforce keep it insulated from disruptions better than most of its peers and neighbors.

ECONOMIC OUTLOOK

Cal State Fullerton’s (CSUF) economic forecast provides the most recent comprehensive outlook for the Orange County economy. Released with the Orange County Business Council in October, CSUF’s forecast projects slower growth and a mild recession in 2024 due to higher interest rates, lingering inflation, banks tightening their lending standards, and the ensuing credit squeeze. CSUF cites office vacancy rates as one early sign—Orange County’s 16.4 percent office vacancy rate in October exceeded the highs set after the Great Financial Crisis of 2007–2008. Their forecast expects Orange County’s unemployment rate to grow to 4.5 percent by 2024 before falling slightly to 4.2 percent in 2025.

CSUF’s Orange County Business Expectations Index (OCBX) is a business health index that relies primarily on a survey of top Orange County executives, with a score of over 50 indicating an expectation of positive future growth. In the survey, 44.4 percent of local executives cited inflation as their most pressing concern, pointing to short-term labor market weakness and moderated growth. Other concerns included cybersecurity and government deficits. Nonetheless, the fourth quarter OCBX rose to 73.1—up from 68.4 the previous quarter and well above the estimates of 63.9 from one year ago.

MAJOR NEW INVESTMENTS

Major new developments in the pipeline will help to drive economic growth and activity in the coming years. DisneylandForward and ocV!BE, two of the county’s largest developments, promise to drive tourism and consumer spending in and around the county’s core entertainment, leisure, and hospitality hotspots. DisneylandForward is a massive multi-year resort expansion and ocV!BE is a \$4 billion 96-acre mixed-use development near the Honda Center in Anaheim.

These proposed multi-billion-dollar investments will update Disneyland and its surrounding properties and further drive tourism and consumer spending in the area. ocV!BE includes a concert hall,

amphitheater, office building, two hotels, over 35 restaurants, 20 acres of parks and trails, and approximately 1,500 residences. With the first phase expected to be completed in 2026, a key objective of ocV!BE is to attract young professionals and families who enjoy living in or near city centers with ready access to retail, restaurants, and other amenities.

Additional mixed-use and residential projects are being developed throughout the rest of the county. One Metro West in Costa Mesa is a mixed-use development with over 1,000 residences, 25,000 square feet of office space, 6,000 square feet of specialty retail, a park, and an event plaza to centrally located Costa Mesa. This project, supported in part by Measure K passed in November 2022, is already approved and in pre-construction planning. Related Bristol, a 41-acre mixed use development in Santa Ana’s South Coast Metro neighborhood, is in an earlier phase but is even larger in scope, envisioning 3,750 residential units between 2026 and 2036.

Rancho Mission Viejo, a mega development in south Orange County, is one of the largest ongoing residential projects in the SCAG region. Several of the project’s neighborhoods are already built and occupied and the entire project is expected to contain 14,000 homes with up to 6,000 reserved for seniors.

TOURISM

Exhibit 5.1: Orange County Amusement Park Attendance

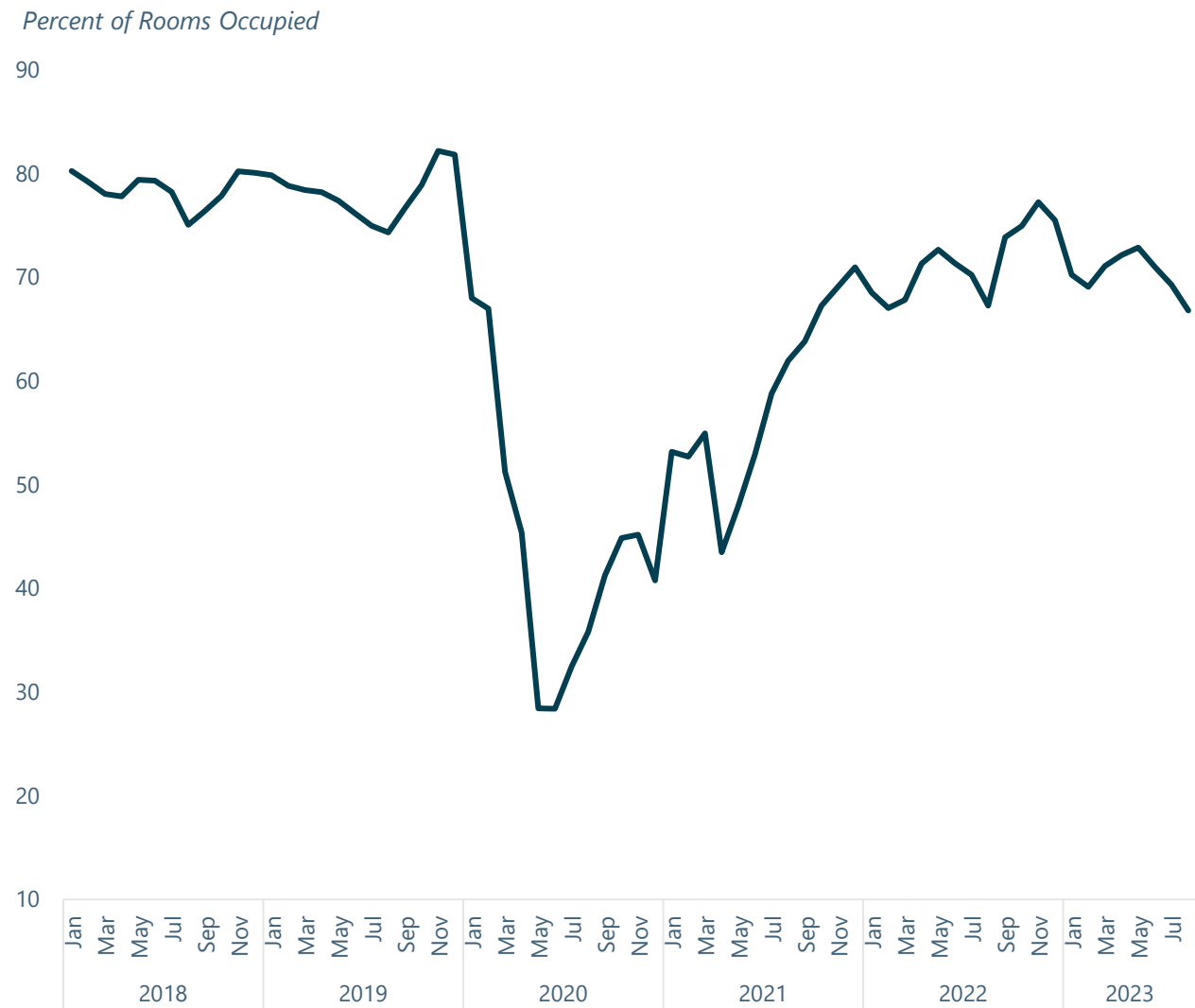
Year	Disneyland	California Adventure	Knott's Berry Farm
<i>----- Thousands of Annual Visitors -----</i>			
2019	18.68	9.99	4.24
2020	3.67	1.92	0.81
2021	8.57	4.98	3.68
2022	16.88	9.00	3.90
<i>----- Percent Change -----</i>			
2020	-80.3	-80.8	-80.9
2021	133.3	159.4	353.9
2022	96.9	80.8	5.9

Sources: TEA/AECOM 2022 Theme Index and Museum Index, Queue Times

In 2022, visitor attendance at Southern California theme parks, including Disneyland, California Adventure, and Knott’s Berry Farm in Orange County, rebounded dramatically after pandemic closures and restrictions in 2020 and 2021 (Exhibit 5.1). In 2023, growth is expected to continue at regional amusement part, estimated to increase an additional 9 percent.

Hotel occupancy rates, crucial for the economic livelihoods of the communities surrounding theme parks and sports venues, have also rebounded to nearly pre-pandemic levels in Orange County (Exhibit 5.2).

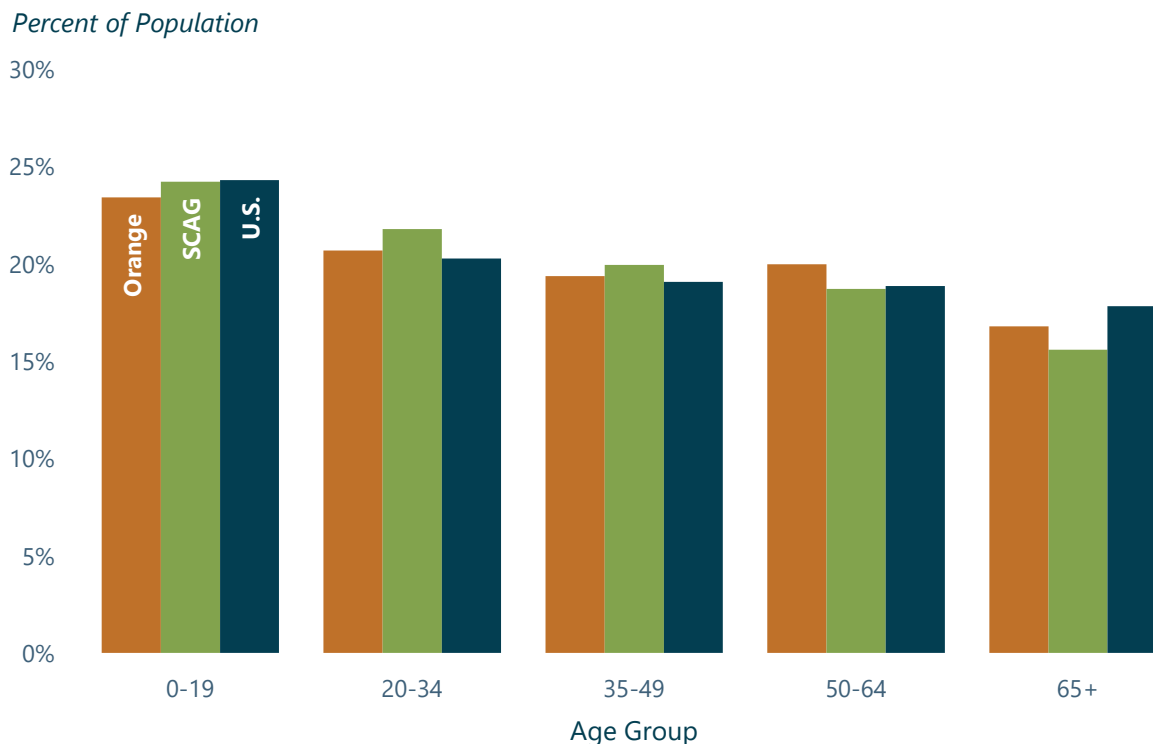
Exhibit 5.2: Orange County Lodging Occupancy Rate



Source: Visit California

DEMOGRAPHICS

Exhibit 5.3: Age Distribution in Orange County, SCAG Region, and U.S.



Source: American Community Survey 1-Year Estimates

Orange County's population declined by 14,782 (0.5 percent) between 2022 and 2023, the third consecutive year of population decline. This is slightly greater than the 0.4 percent total population decline statewide over the same period. The main factor remains the county's high cost of living, driven primarily by high housing costs, which pushes many residents—especially young families—to move to more affordable neighboring counties or out of the state. In 2021, the number of such domestic out-migrants exceeded domestic in-migrants by 26,403—this difference rose to 30,524 by 2022 as this was exacerbated somewhat following the pandemic. Meanwhile, immigration into Orange County remains positive and actually increased by more than 8,000 residents between 2021 and 2022.

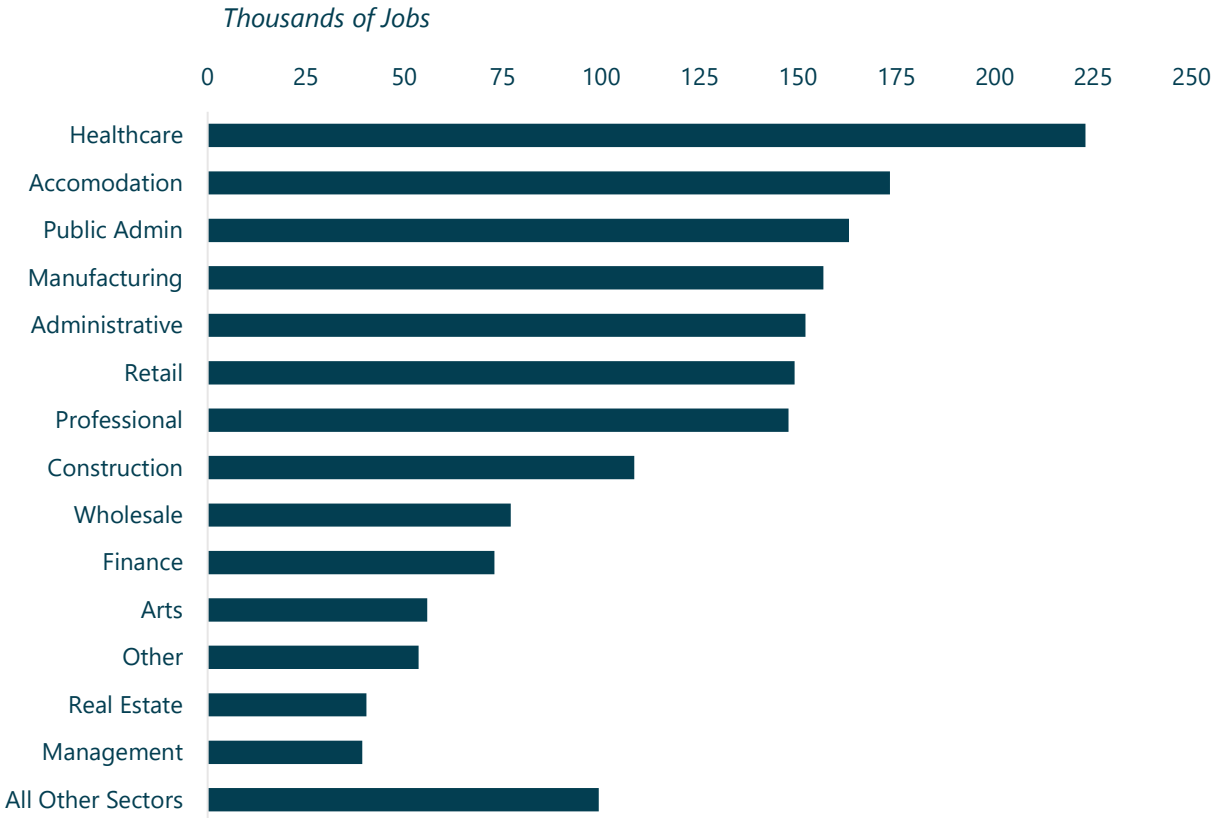
Like the rest of California, Orange County continues to grow older and more diverse. As seen in the chart above, the county had fewer young residents and more older residents than the SCAG region in 2022; its median age increased from 39.2 in 2021 to 39.5 in 2022. Between the 2010 and 2020 Census decennial, the largest changes in race/ethnicity were a decline in the white, non-Hispanic population (44.1 percent to 37.6 percent) and an increase in the Asian population (17.7 to 21.9 percent).

INDUSTRIES AND EMPLOYMENT

Orange County’s unemployment rate has increased over the past year from 2.8 percent in September 2022 to 3.7 percent as of September 2023, caused by an overall rise in labor force participation—the number of employed residents has actually increased slightly. Despite this rise in the county’s unemployment rate, it remains the lowest in the SCAG region and well below the state average of 4.9 percent.

Orange County’s largest industries include Health Care, Accommodation and Food Service, Public Administration, and Manufacturing. Over the past year, Health Care saw the largest increase in employment, followed by Accommodation and Food Service, and Professional, Scientific, and Technical Services. Orange County’s manufacturing industry clusters, including Medical Devices and Biomedical, continue to drive economic activity and innovation in the region.

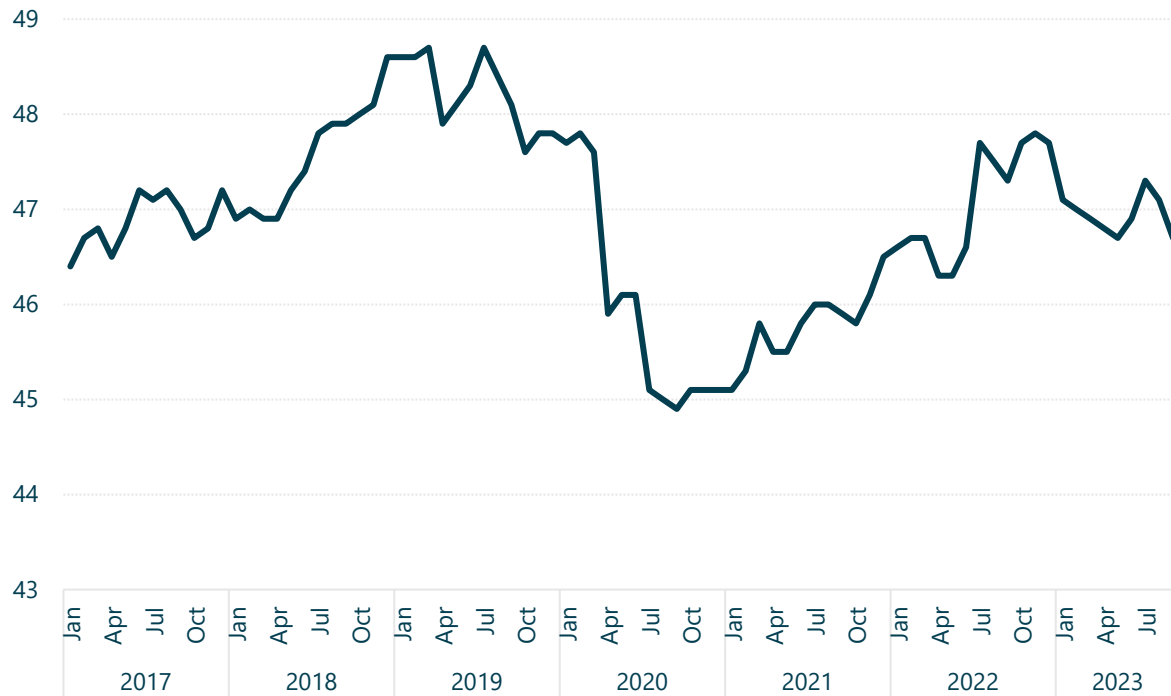
Exhibit 5.4: Employment by Industrial Sector in Orange County, 2023



Source: California Employment Development Department (2023)

Exhibit 5.5: Advanced Manufacturing Employment in Orange County

Thousands of Jobs



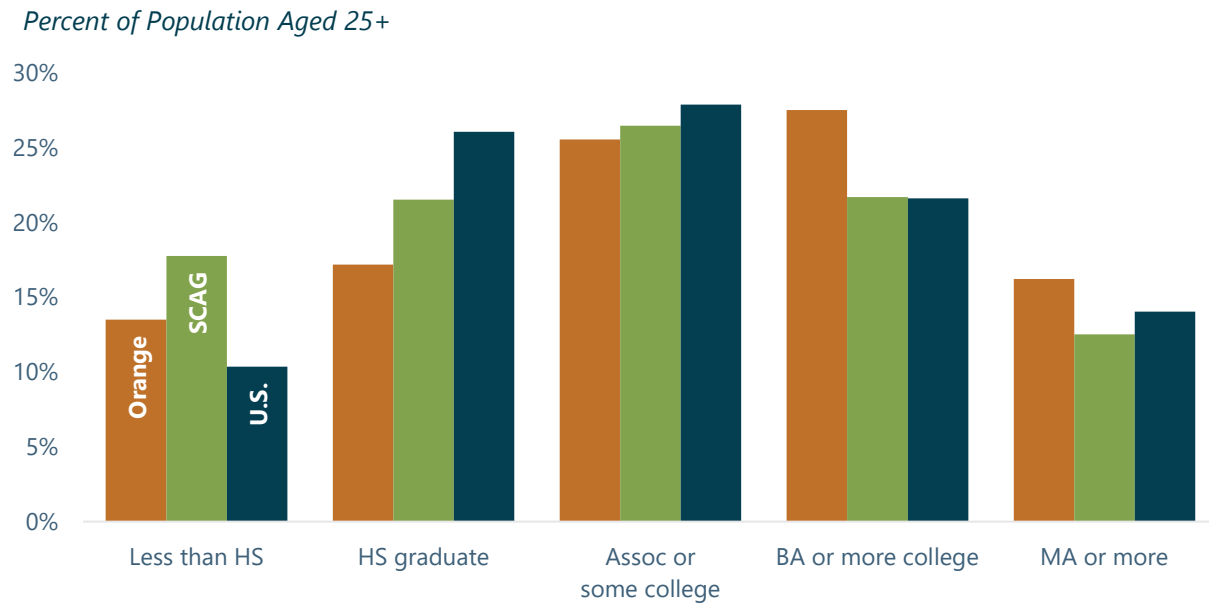
Source: California Employment Development Department (2023)

Furthermore, in the last 18 months, the Orange County advanced manufacturing sector has rebounded with the restoration of jobs after a decline in 2019-2020. The recent surge in both technology services and technology manufacturing employment is impressive, reflecting Orange County’s ability to attract workers with skillsets needed for these jobs.

WORKFORCE AND OCCUPATIONS

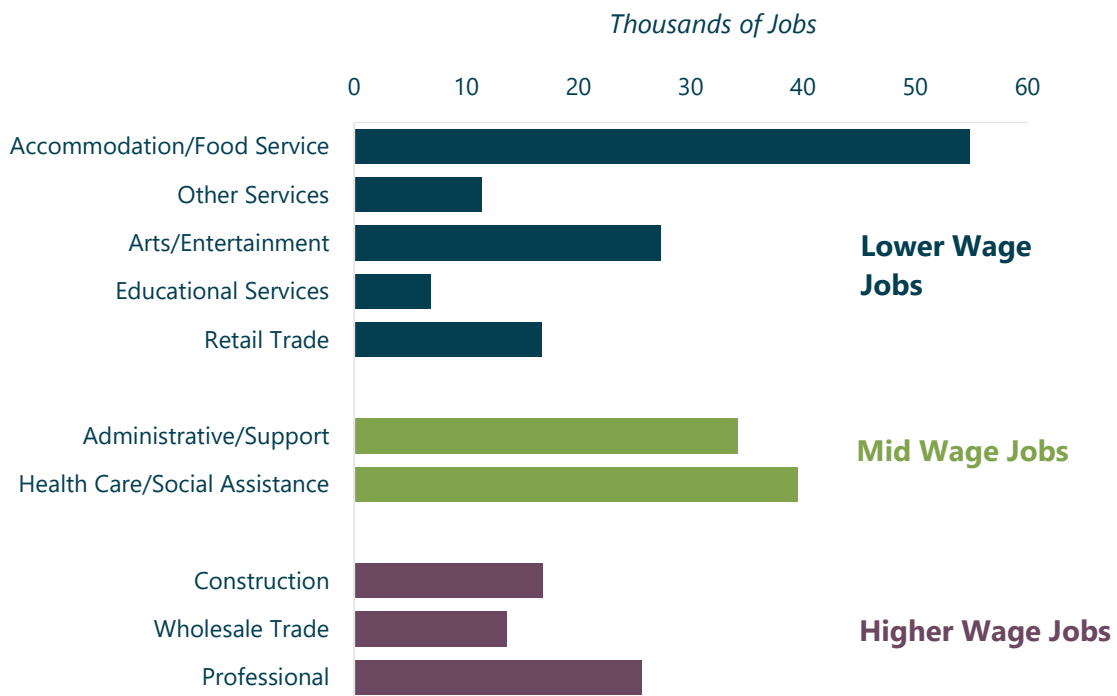
One of Orange County’s major competitive advantages is its highly educated population. Approximately 27.5 percent of county residents aged 25 years and older have a bachelor’s degree or higher, compared to 21.7 percent in the overall SCAG region and 21.6 percent in the nation as a whole. 16.2 percent of residents 25 years and older have their master’s degree or above, compared to just 12.5 percent in the SCAG region and 14.0 percent in the nation. Despite this, Orange County education professionals and stakeholders need to continue efforts to increase educational equity across all races and income levels.

Exhibit 5.6: Educational Attainment in Orange County, SCAG Region, and U.S., 2022



Notes and Source: "Assoc or some college" includes associate degrees and additional schooling but not a bachelor's degree. "BA or more college" includes a bachelor's and additional schooling but not a master's degree, and "MA or more" includes master's degrees, additional schooling, including other advanced degrees. Based on data from U.S. Census Bureau, American Community Survey 1-Year Sample (2022).

Exhibit 5.7: Projected Employment Growth in 2020-2030 in Orange County's Largest Sectors



Source: California Employment Development Department (2023)

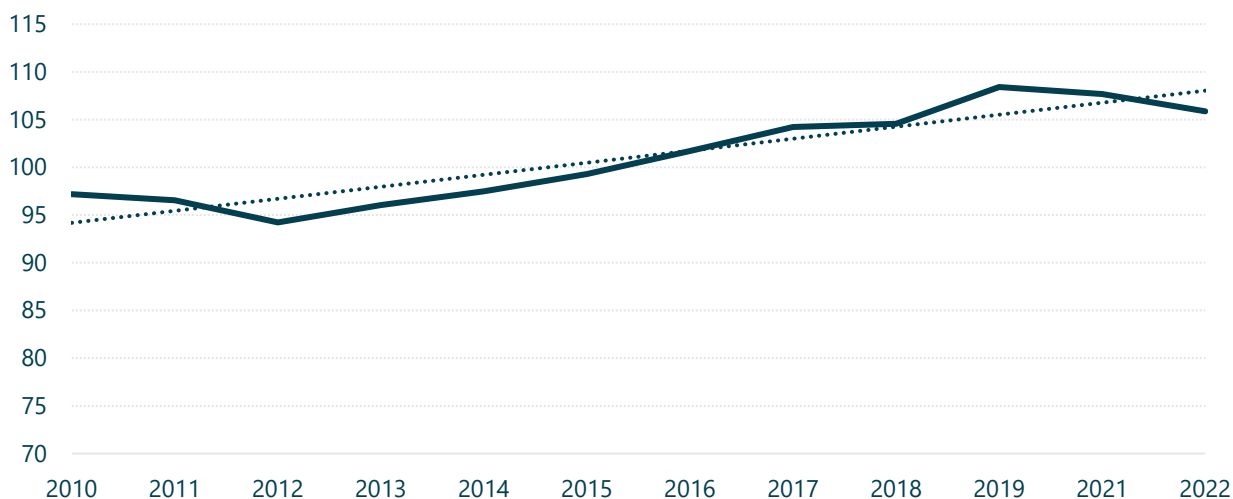
INCOME, POVERTY, AND EQUITY

While median real household incomes have increased slightly from 2006 to 2022, the past year has seen a reversal of this trend: real household incomes actually declined, by \$1,891, or 1.7 percent. Despite this decline, Orange County still commands the highest median household income in the SCAG region at \$109,300.

A similar trend happened at the regional level. SCAG real household incomes increased between 2006 and 2022 before falling by 0.8 percent (\$697) over the past year.

Exhibit 5.8: Real Median Household Income in Orange County

Thousands of 2022 Dollars



Source: U.S. Census Bureau, American Community Survey 1-year Sample (2022).

Despite the decrease in real household incomes, Orange County's poverty rate remained unchanged over the past year at 9.9 percent, which was the region's second lowest poverty rate in the region behind only Ventura County. Overall SCAG regional poverty declined from 12.8 percent in 2021 to 12.6 percent in 2022.

A bright spot in promoting equitable economic growth has been through the California Jobs First Initiative, formerly known as the Community Economic Resilience Fund (CERF). CERF is a statewide effort across 13 regions to promote sustainable and equitable economic development. The state has since created a catalyst fund to ensure that CERF projects make it through the planning stages and are fully implemented. Each region must both ensure that these projects are eligible for additional federal, state, and private funding and prioritize catalyst funding for specific target industries.

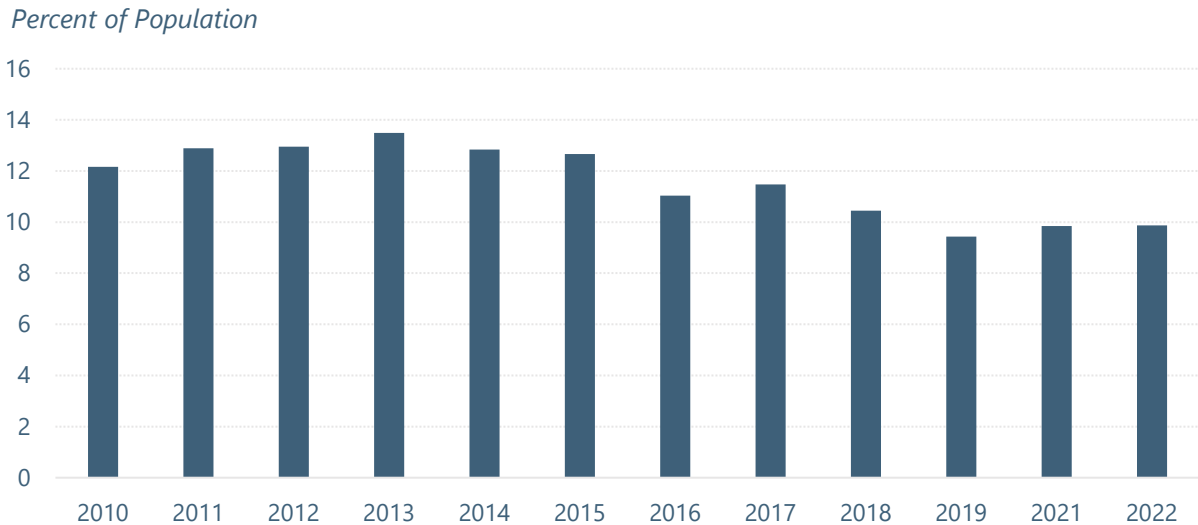
One major aspect of CERF's equity and sustainability objectives is support for innovative new plans and strategies to diversify local economies and develop sustainable industries that create good paying jobs that are accessible to all residents and especially in traditionally disinvested communities. An additional focus is to encourage more and better entrepreneurial opportunities in these same communities.

To accomplish this, Orange County's High Road Transition Collaborative (the CERF decision-making body) selected five industry sectors to prioritize: Healthcare and Social Assistance, Manufacturing, Educational Services, Construction, and Accommodation and Food Services. While jobs in food service, for example,

might be unexpected, rising minimum wages and the strength of the labor market following the pandemic mean that these jobs can be an increasingly attractive path for entry-level employment that leads to financially sustainable career pathways as well as opportunities for entrepreneurial ventures.

A unique, collaborative example of economic uplift in Orange County is StoreOne, located on the site of the very first Northgate González Market in Anaheim. StoreOne is currently in the process of transforming into a multi-use community center and is set to open in 2025. Currently being developed as a public-private partnership operated by the City of Anaheim and fiscally sponsored by the Anaheim Community Foundation, Store One will provide services in entrepreneurship, workforce development, and community health and wellness—with a focus on supporting Anaheim’s hospitality and food service industries. The 12,000-square-foot facility helps food service business owners incubate new products and businesses, provides training and certifications for those entering the food service profession, and provides a variety of community-based programming.

Exhibit 5.9: Orange County Population in Poverty



Source: U.S. Census Bureau, American Community Survey 1-Year Sample (2022).

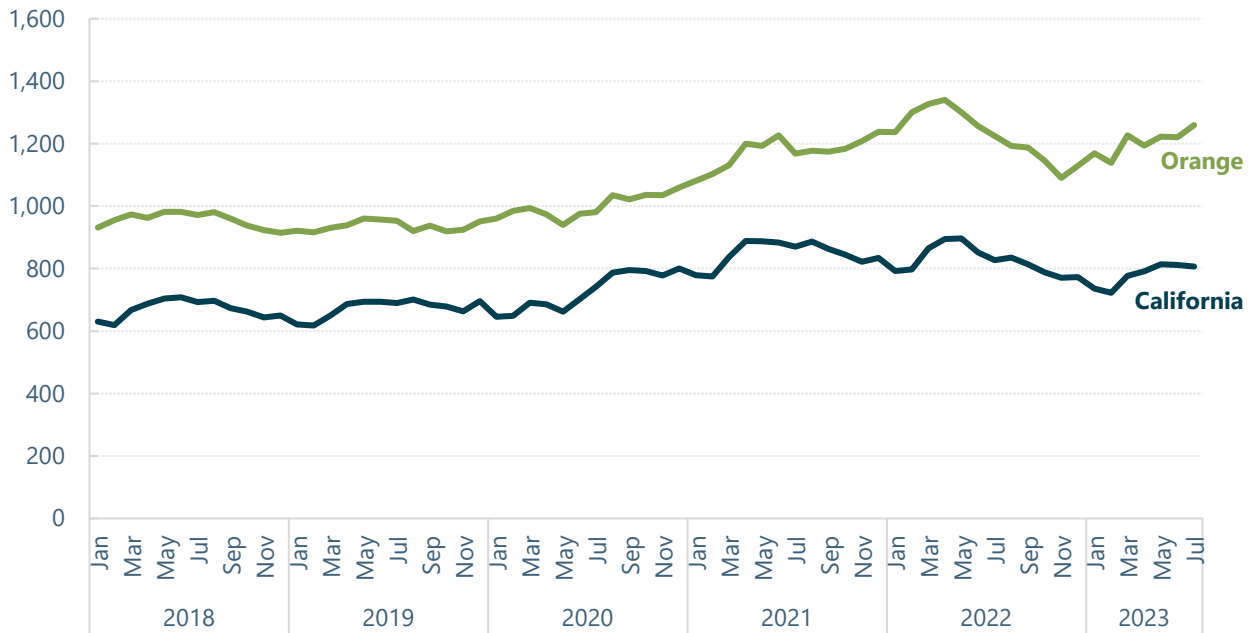
HOUSING MARKET

Rising mortgage rates make a lack of housing affordability a growing concern, especially in already expensive Orange County. Over the past year, real median home prices for single-family homes in Orange County have increased by 3 percent, whereas prices have decreased by 2 percent in Los Angeles County and 2.5 percent in California as a whole. Lack of workforce housing supply is a regional issue but is particularly pressing for Orange County due to the combination of price appreciation and strong employment growth.

Real median home prices reached \$1,300,000 in July 2023, a monthly increase of \$40,500. (The median home price peaked at \$1,383,600 in April 2022.) Overall, prices remain \$283,300 above pre-pandemic levels, highlighting the significant home price growth in recent years.

Exhibit 5.10: Real Median Home Prices for Single Family Homes in Orange County

Thousands of 2022 Dollars



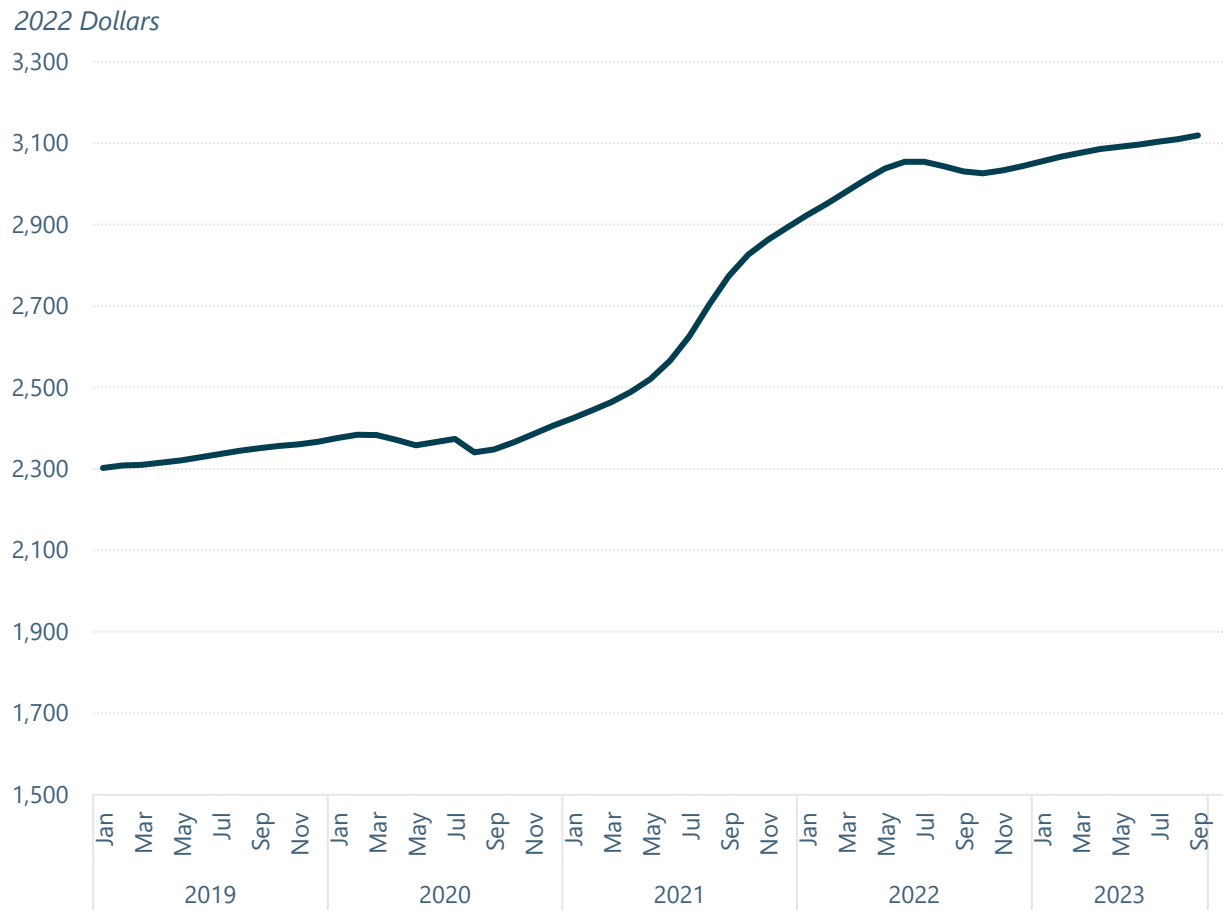
Source: California Association of Realtors

While rents in Orange County did dip slightly in the second half of 2022, they have since surpassed previous highs and currently stand at a record high. As of July 2023, Zillow’s Observed Rent Index for Orange County totaled \$3,151 per month, an increase of 1.5 percent since July 2022. Orange County was just behind the San Francisco rent index of \$3,188, above Los Angeles County (\$2,919), and well above the national average (\$2,062).

Despite significant demand to both live and work in Orange County, housing supply has failed to keep pace. A total of 5,938 building permits were granted in 2022 in Orange County, down from 7,867 in 2021 and below the 2020 total of 6,027. Of the 5,938 building permits issued in 2022, 49.4 percent were for single-family units while 50.6 percent were for multi-family units.

Nonetheless, there is some promise for increased housing supply—if not necessarily major price relief. The major development projects listed above total several thousand units—additionally, accessory dwelling unit (ADU) permitting increased from 291 in 2018 to 1,661 in 2022 according to state data—ADUs continue to see increased supported from state and local policies. More than half of Orange County’s local jurisdictions now have state-certified housing elements—countywide, these planning documents identify potential sites that would support a total of nearly 184,000 new housing units.

Exhibit 5.11: Zillow Observed Rents Index for Orange County



Source: Zillow (2023)

6. Riverside & San Bernardino Counties

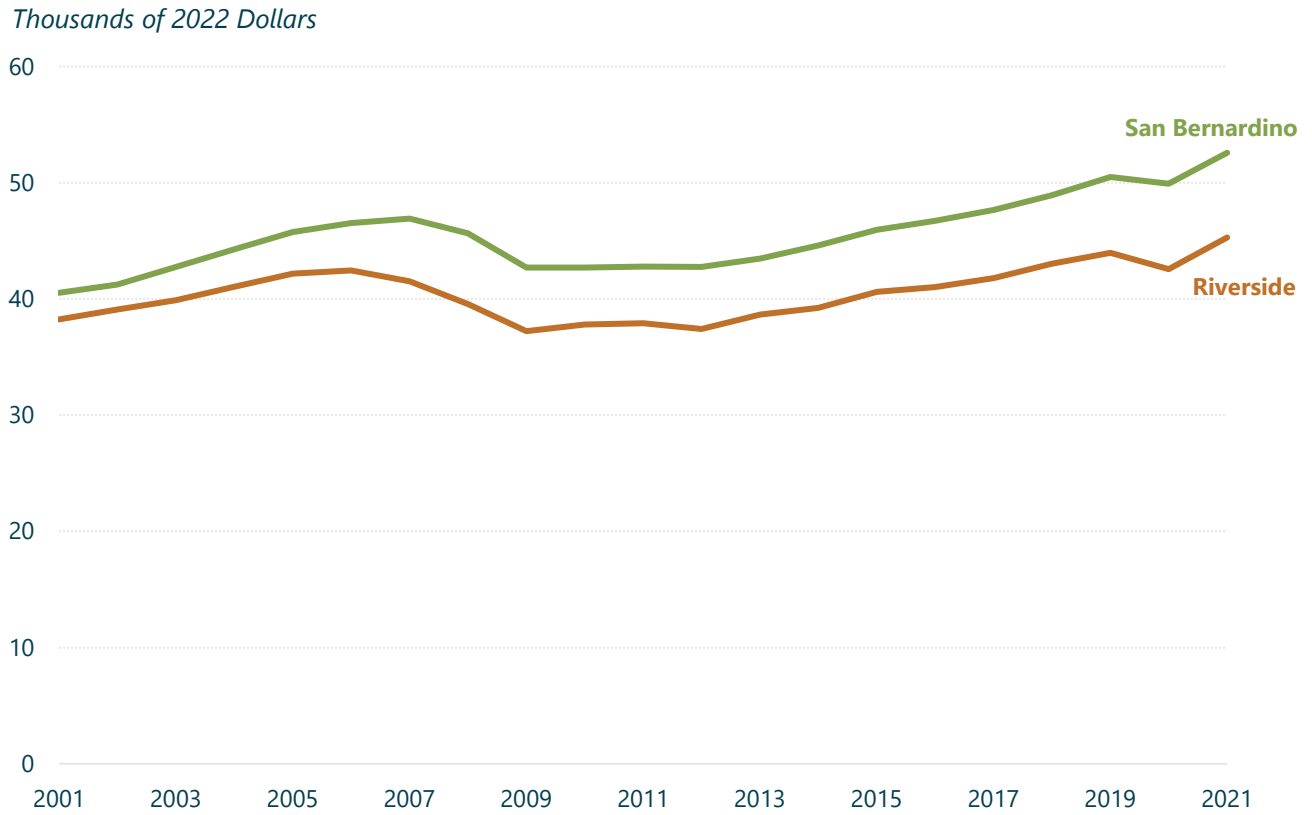
The economies of Riverside County and San Bernardino County have undergone significant changes over the past year as they transitioned to the post-pandemic period. The Inland Empire Metropolitan Statistical Area (MSA), consisting of the two counties, led the way in labor market recovery, returning to February 2020 job levels by mid-2021, ahead of other parts of Southern California. Unemployment rates were at historically low levels a year ago due to the strength of the region's Logistics sector (Transportation, Warehousing, and Wholesale Trade). However, monthly Logistics employment levels peaked in late 2022 and have since declined as consumption patterns shifted from those observed during the pandemic and the subsequent economic recovery.

Recent decreasing trends in the Inland Empire's labor force participation are of greater concern. Prior to the pandemic, the region enjoyed decades of population gains and corresponding increases in the size of the labor force. Having peaked in December 2022 at 2.2 million, the labor force has since decreased by 1.6 percent, shrinking by nearly 20,000 in Riverside County and by 17,000 in San Bernardino County. The Department of Finance projects only modest increases in net migration over the next two years, suggesting small increases in the labor force.

Both cyclical and structural factors will determine where the two counties are heading in 2024. A national recession, forecasted by some analysts, would reduce imports and adversely affect the logistics sector. In addition, post-pandemic consumption patterns are shifting in favor of services at the expense of growth in goods. The alternative cyclical scenarios are a soft landing or a mild recession. However, job growth in the Inland Empire may well be sustained in the coming year by continued gains in Health, Government, Leisure and Hospitality, and Professional Services. We expect the region's unemployment rate to increase modestly.

The long-term outlook for the Inland Empire is less obvious. The Inland Empire has a relatively large number of residents but has among the lowest levels of per capita GDP (Exhibit 6.1), the standard measure for a region's wealth, among U.S. metropolitan areas. The region has a "chicken-and-egg" problem: to attract higher value-added industries, it must invest significantly in human capital. However, it needs to retain these newly minted graduates with both jobs and attractive communities to entice them to stay in the region. Without it, the structural shifts towards higher qualification requirements will likely lead to job vacancies that cannot be filled due to the lack of qualified workers, resulting in further automation.

Exhibit 6.1: Real per Capita GDP in the Riverside and San Bernardino Counties

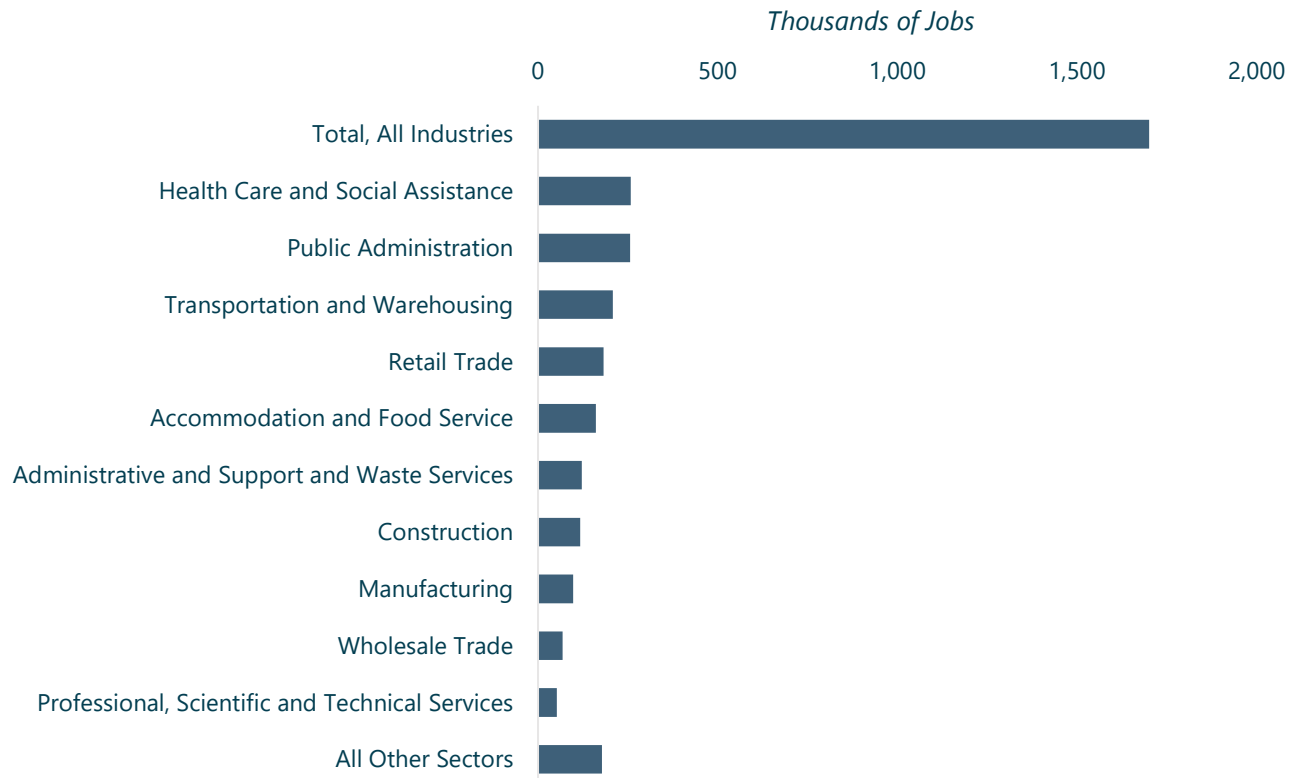


Sources: U.S. Bureau of Economic Analysis (2023), CA DOF E-2 estimates

INDUSTRIES

There were over 1.7 million payroll jobs in 2023 in the Inland Empire. The Transportation and Warehousing sector (NAICS 48) has the highest employment share (16.4 percent), followed closely by Health Care and Social Services (15.1 percent), Public Administration (15.0 percent), and Retail Trade (10.7 percent). These four sectors employ 57 percent of all workers in the region. shows the share of the industry employment for the Inland Empire and compares it to the SCAG region.

Exhibit 6.2: Industry Employment, Inland Empire, 2023

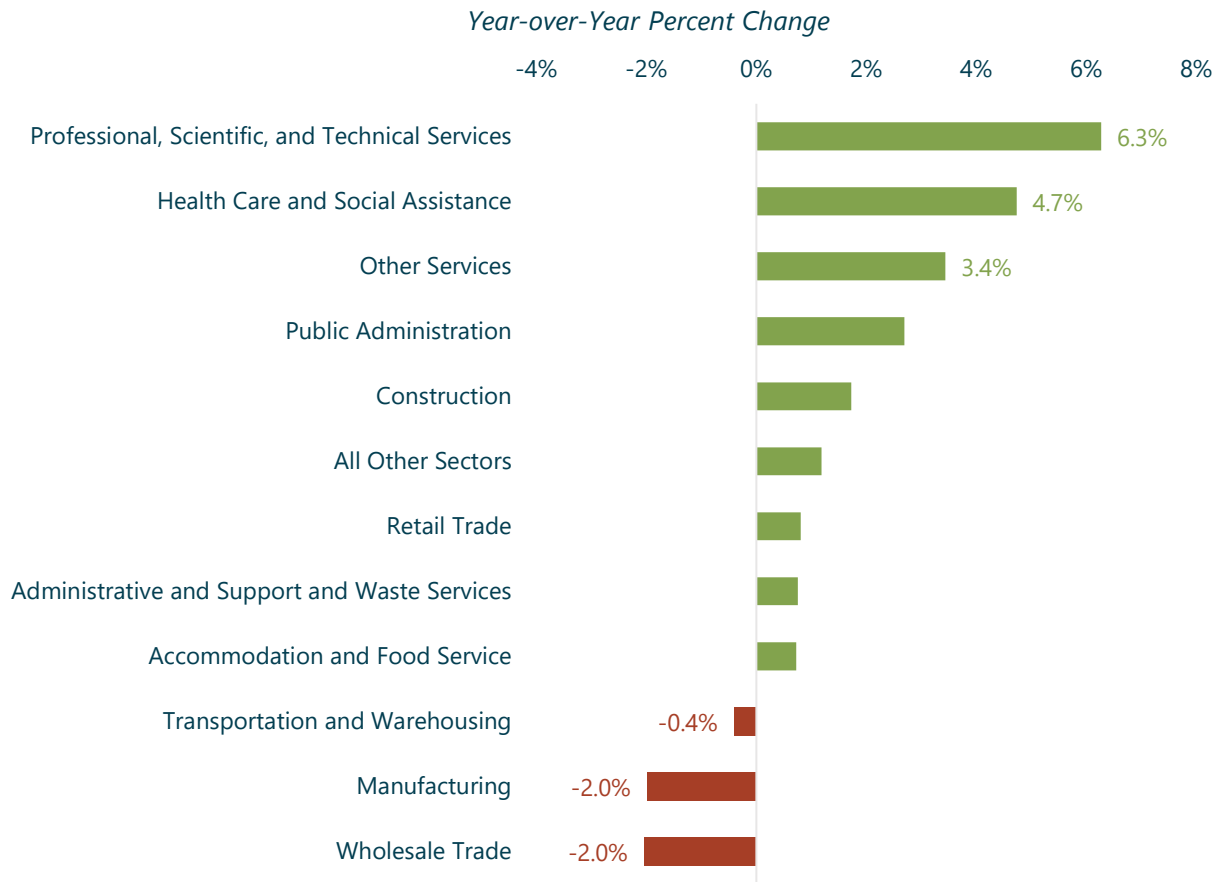


Notes and Sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

Over the past year, payroll job growth has slowed considerably (+1.6 percent year-over-year), mainly because job growth in Logistics has stalled. However, other sectors have experienced accelerated growth, led by Health Care (+4.7 percent, 12,000 jobs) and Public Administration/Government (+2.5 percent, 6,200 jobs). Professional Scientific and Technical Services sector experienced the largest percentage gain (+5.4 percent) and the third largest absolute increase, adding 2,700 positions. All but three industries contributed to overall job gains over the past year (see Exhibit 1-2).

We expect the logistics sector to continue to weaken in 2024 as household spending patterns revert back to pre-pandemic levels, that is, towards an increased share of consumption of services relative to goods. In the long run, the region’s reliance on Logistics as its anchor industry is cause for concern. Growth in Logistics output and economic activity is expected to last over the foreseeable future, but automation and efforts to shorten supply chains or even re-shore production activities may constrain future employment gains. At the same time, the population in the region is expected to grow more slowly in the coming years, which will tend to limit the growth of employment in the local population-serving industries. Finally, job opportunities in sectors that require higher skill levels will not result in local employment increases if education levels cannot be raised—employers, both private and public, will invest in increased automation if they cannot find workers for posted vacancies. The recently hyped developments in Artificial Intelligence (AI) may not affect employment within the Inland Empire significantly. However, AI developments may still impact the Inland Empire workers, as higher qualified workers commuting to coastal counties may feel a more substantial impact from AI-related workforce reductions. Finally, lack of adequate transportation and amenities will result in fewer in-migration into the region than otherwise possible.

Exhibit 6.3: Change in Employment by Sector in the Inland Empire



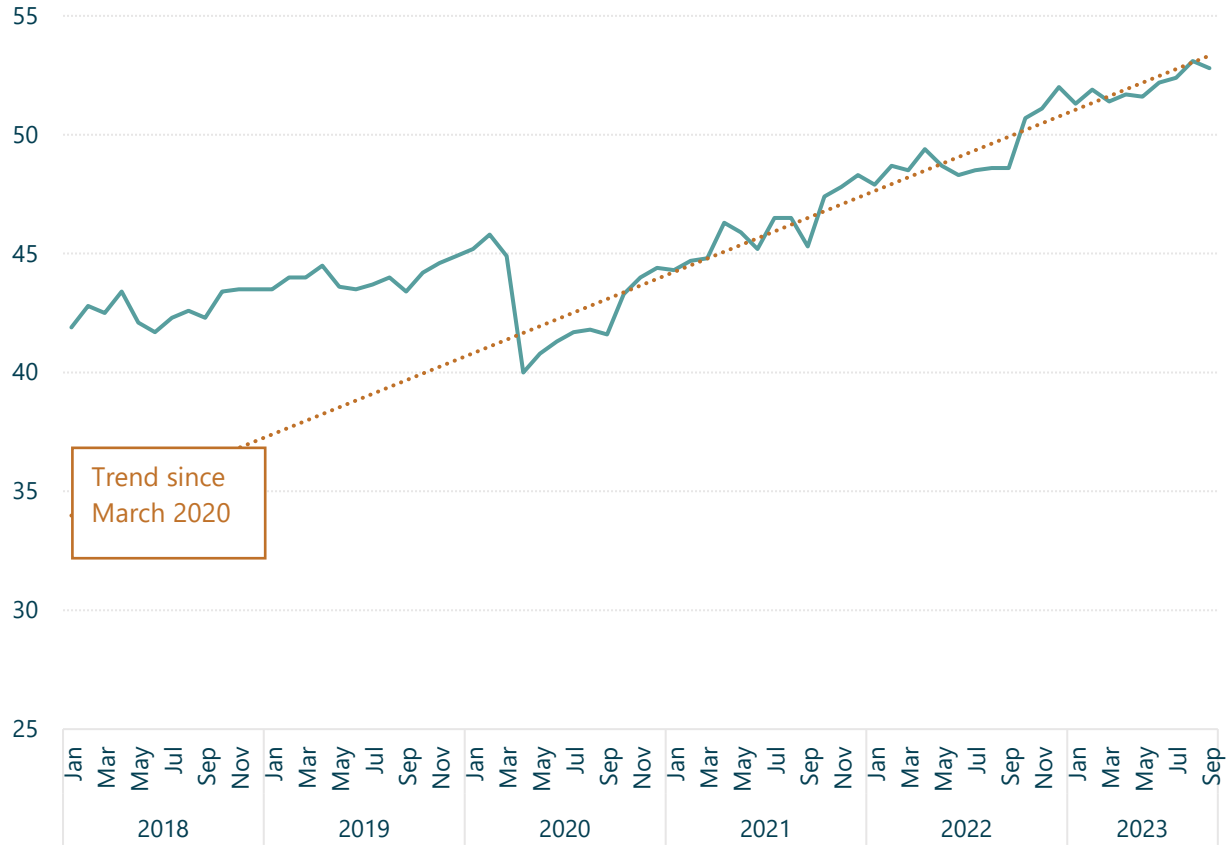
Notes and Sources: Values for 2023 are annualized based on data from Jan.-Sept. 2023. Data from California Employment Development Department (2023).

Despite the contraction of the logistics sector, “tech” jobs—proxied as the jobs in the Professional, Scientific, and Technology sector— have shown robust growth in the Inland Empire since the pandemic.¹⁶ Between April 2020 and September 2023, employment in this sector grew by 32 percent, or nearly 13 thousand jobs.

¹⁶ Jobs in high technology are largely contained in the professional, scientific & technical services, which includes computer and computer components design, computer system analytics, scientific research and development, technical consulting, computer network architects, database architecture, and information security. See: https://www.bls.gov/oes/current/naics3_541000.htm

Exhibit 6.4: Inland Empire Employment in Professional, Scientific, and Technical Services

Thousands of Jobs



Notes and Sources: Data from California Employment Development Department (2023).

The Inland Empire labor market had been especially vibrant in California since the end of the pandemic. Just over 85,400 jobs were created in 2022, a 5.4 percent rate of growth. This surge of employment accounted for 20 percent of all jobs created in the SCAG Region. The unemployment rate for the County declined to 4.1 percent in 2022, the lowest rate ever recorded. The expansive warehouse and transportation sector in an area just 2 hours’ drive from the Ports became a cascade of new job opportunities.

A soft patch in economic growth emerged, however. The slowdown became evident during the first half of 2023, with monthly employment contracting in four of the six months between November 2022 and March 2023. Job creation resumed in April and modest gains have been observed since.

The sectors where clear consolidations of the workforce are occurring are wholesale trade, transportation and warehousing, and manufacturing.¹⁷ These three industrial-using sectors contributed a third of all new jobs in the Inland Empire from 2019 to 2022.

¹⁷ Mortgage brokerage employment is also shrinking in view of the collapse of the existing housing market due to 22-year highs in financing costs. But this has been true for the entire SCAG region and California market.

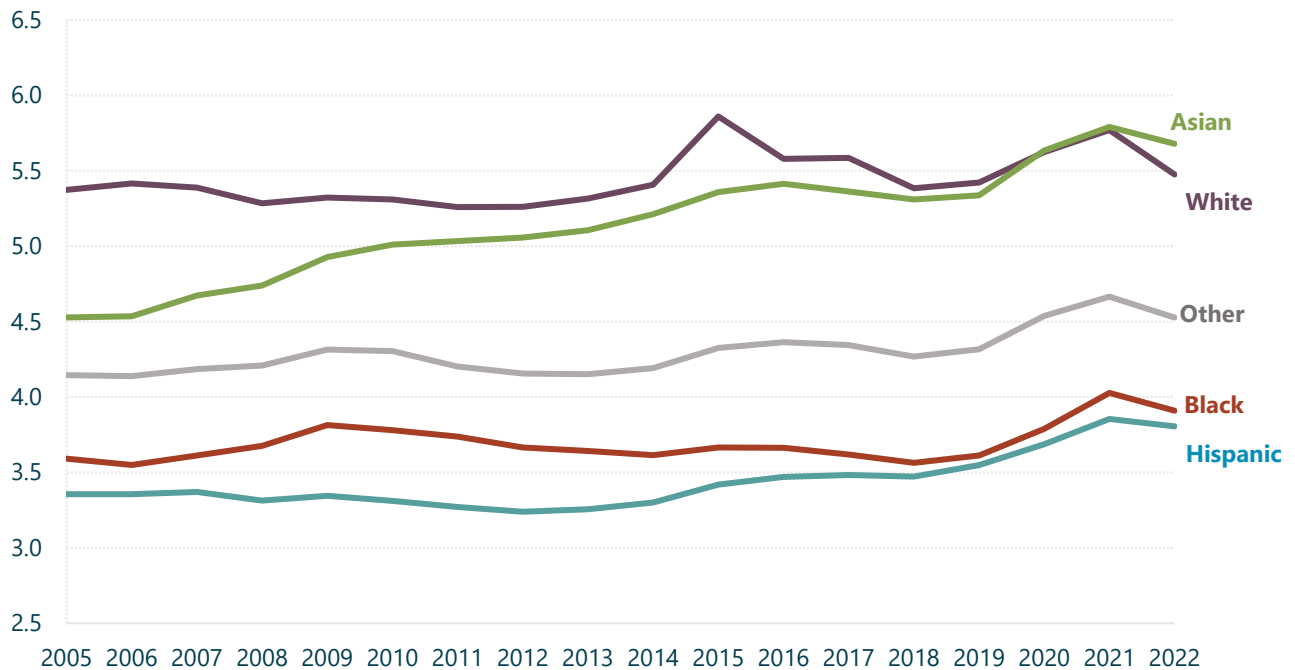
In 2023, the Inland Empire makes up 9.6 percent of all jobs in the SCAG region. Consequently, this particular labor market has slowed down the labor market for the region. During 2023 however, the professional and business services industry has emerged as a principal sector of job creation, all of it occurring in the technology-rich professional, scientific and technical consulting subsector. Healthcare lands in first place in job contribution to the IE workforce this year, followed by local government. Construction is in fourth place, generally confirming the strength of the new development sector for housing and commercial buildings.

WORKFORCE AND OCCUPATIONS, EDUCATIONAL ATTAINMENT

Riverside County and San Bernardino County experienced steady population growth until 2021 when the trend was slowed by a net out migration that partially offset natural population growth (births minus deaths). Net migration turned around with a slight gain in 2022. It is projected to accelerate slightly over the next two years and will contribute to growth in the region’s labor force over the near future. Increases in the region’s labor force participation rate will also help. In fact, the region’s labor force participation rate in 2022 rose to its highest in five years, despite being nearly two percentage points lower than that of the SCAG region (62.6 percent vs 64.4 percent). In both Riverside and San Bernardino counties, real wages (inflation-adjusted) rose in the region in 2020 and 2021 decreased in 2022.

Exhibit 6.5: Riverside County Real Weekly Wage by Race

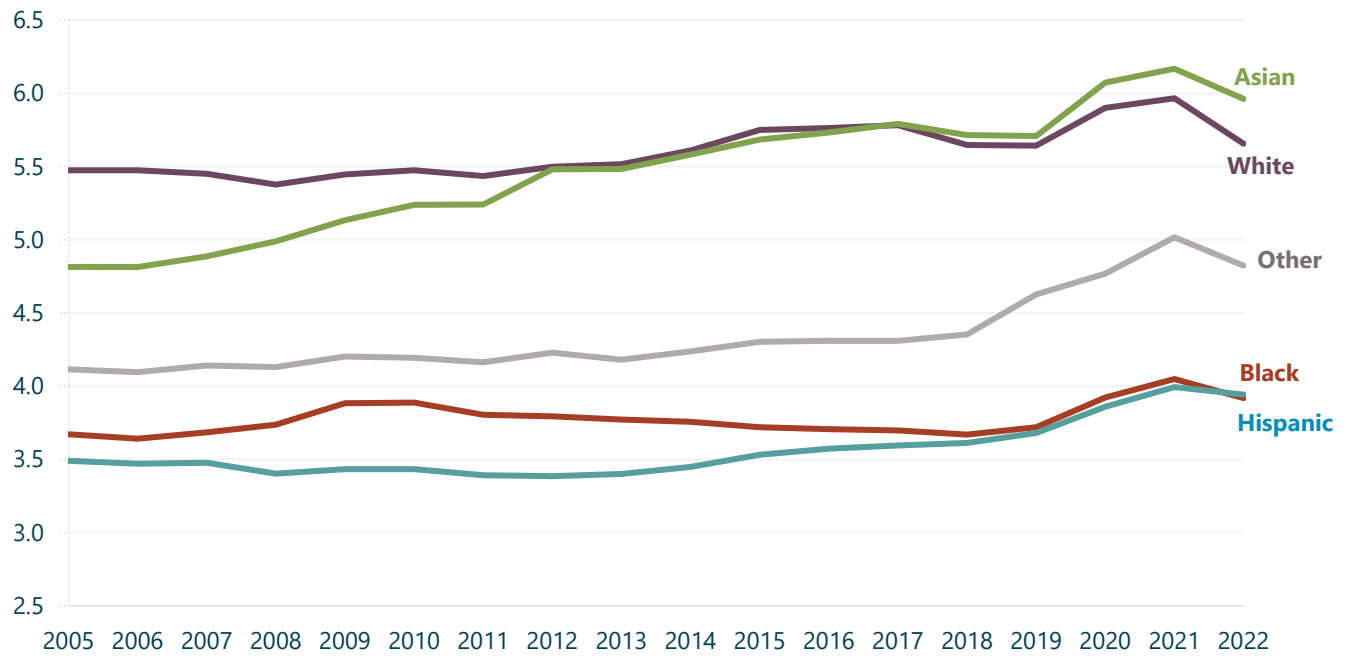
Thousands of 2022 Dollars



Notes and sources: Includes wage and salary workers only. Hispanic include all races. Based on data from U.S. Bureau of the Census, Quarterly Workforce Indicators (1990-2022).

Exhibit 6.6: San Bernardino County Real Weekly Wage by Race

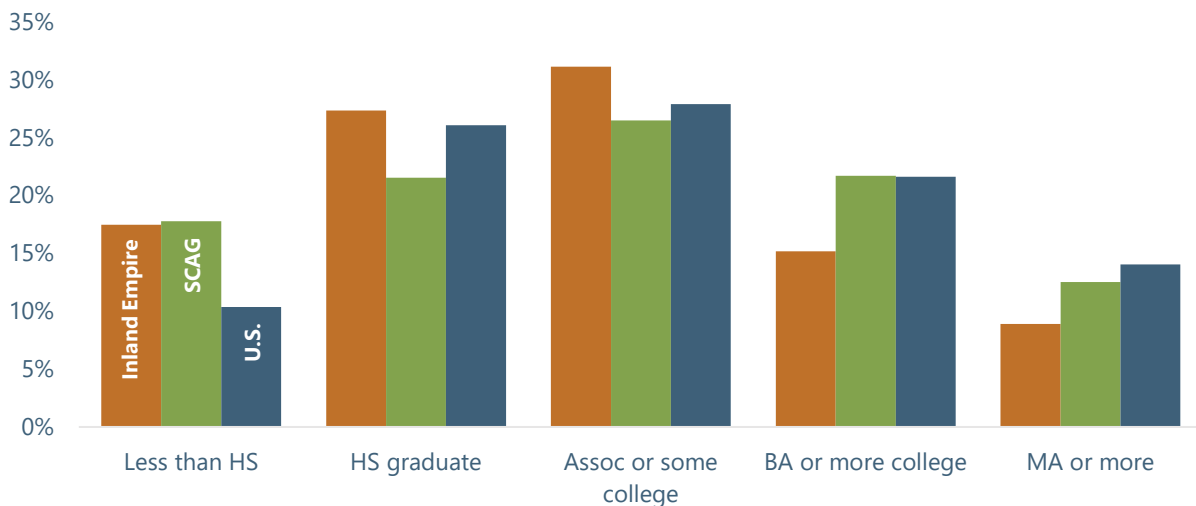
Thousands of 2022 Dollars



Notes and sources: Includes wage and salary workers only. Hispanic include all races. Based on data from U.S. Bureau of the Census, Quarterly Workforce Indicators (1990-2022).

Exhibit 6.7: Inland Empire Educational Attainment, 2022

Percent of Population Aged 25+



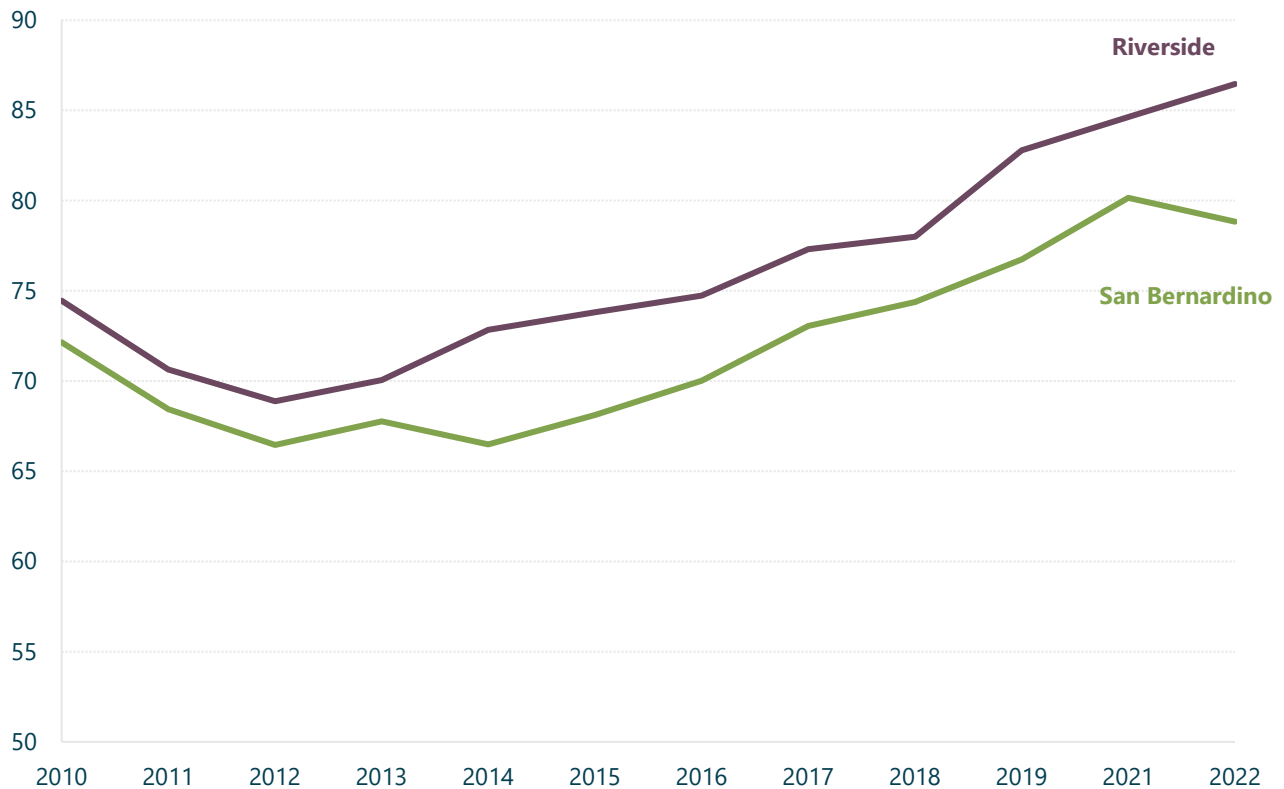
Source: U.S. Census Bureau, American Community Survey 1-year Sample (2022).

INCOME, POVERTY, AND EQUITY

As the region recovered from the pandemic downturn, real household income increased from 2019 to 2021. Inflation eroded purchasing power in 2022, causing household income in San Bernardino County to fall by nearly 1.7 percent (see Exhibit 6.8). However, household income in Riverside County managed to beat inflation with a 2.2 percent gain.

Exhibit 6.8: Real Median Household Income in Riverside and San Bernardino Counties

Thousands of 2022 Dollars



Source: U.S. Census Bureau, American Community Survey 1-year Sample (2022).

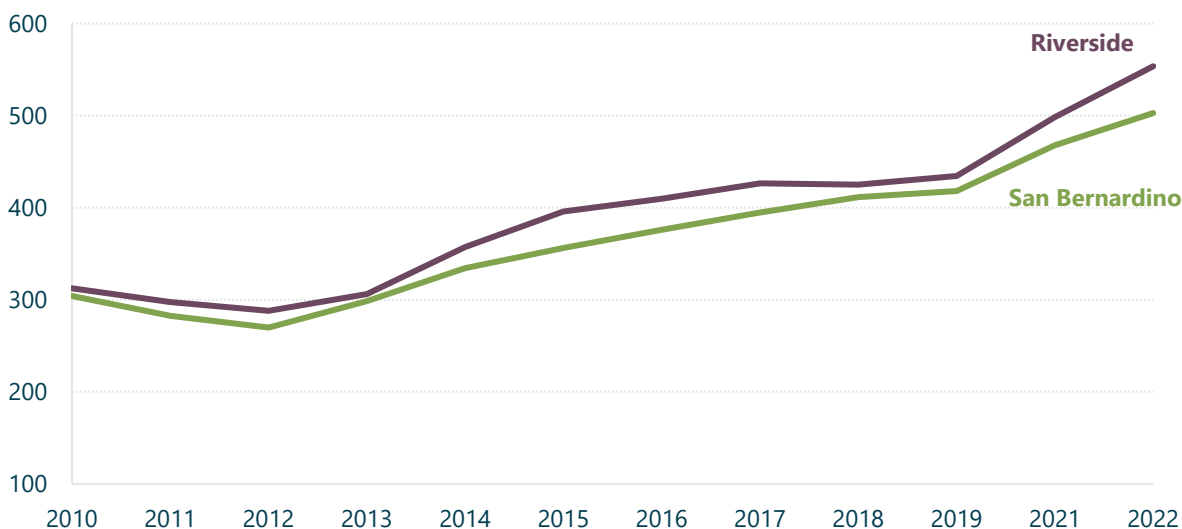
Similarly, poverty rates of the two counties moved in different directions. That of Riverside County fell from 11.6 percent in 2021 to 10.7 percent 2022, while San Bernardino County experienced a slight increase from 13.2 percent to 13.4 percent.

HOUSING MARKET

As the Federal Reserve Bank (the Fed) took steps to address inflation in 2023, the housing market faced yet another challenging year. Affordability in the Inland Empire fell as interest rates climbed and as limited supplies of homes exerted upward pressure on prices. With few changes expected in the coming months, there is little relief in sight for 2024.

Exhibit 6.9: Real Median Home Values in Riverside and San Bernardino Counties

Thousands of 2022 Dollars



Source: U.S. Census Bureau, American Community Survey 1-year Sample (2022).

Home prices fell in year-to-year terms during the first part of 2023 but remained elevated. With rising mortgage interest rates, affordability fell in the Inland Empire, decreasing home sales. In July 2023, the real median price of a home was \$615,000 in Riverside County and \$485,000 in San Bernardino County. Having peaked in the spring of 2022, home prices fell as interest rates ratcheted up. As of July 2023, the Riverside County median home price fell in yearly terms 11 months in a row, while the San Bernardino median fell for 10 straight months. Based on the California Association of Realtors Housing Affordability Index (HAI), which measured the percent of households that can afford the median-priced home, was at in Riverside County in the second quarter of this year and 30 percent San Bernardino County considerably higher at 30 percent. By comparison, the HAI was 36 percent nationally.

Rents climbed throughout the first part of this year, although the rate of growth slowed. In January, rents in the two counties, as represented by the Zillow's Observed Rent Index, rose by more than 5 percent year-to-year. By July, the average increase had cooled considerably to one percent. Zillow reported an average rent of \$2,600 in Riverside County and \$2,500 in San Bernardino County for the month of July 2023.

High home prices and high rents are symptomatic of chronic underbuilding over many years. Through July 2023, total permits rose 10 percent year-over-year to 12,000 units. For all of 2021, there were 15,000 total permits with 19,000 in 2022. These gains are welcome, but the region needs to more than double production of new home construction through 2029 to meet its estimated housing needs, which are partly driven by the large Millennial generation. These individuals will be in their prime years for household formation and home buying over the next decade.

In Riverside County, an average of 8,900 residential units were built each year between 2017 and 2022, where homebuilding was largely (84 percent) focused on single-family homes. Between 2023 and 2028, production is expected to average 11,235 units per year, an increase of 26 percent over the 2017-2022 housing authorizations. In San Bernardino County, over 34,000 residential units were built between 2017 and 2022, with 68 percent of the units being single-family homes. Between 2023 and 2028, production is expected to be over 38,000 units. 55 percent will be single-family homes.

NEW DEVELOPMENT AS AN ENGINE OF GROWTH

An engine of growth in the Inland Empire continues to be new development. The Coachella Valley is now the most sought-after location in the Inland Empire for new development, particularly projects supporting the expansion of tourism. Hotel development continues in the Palm Springs area, including large developments approved or under construction such as the Dream Hotel, a 156-room resort including 40 condominiums is approved, and the Andaz, with 150 rooms. In addition, smaller boutique hotels are also approved or under construction such as the Talus luxury resort under construction in La Quinta scheduled for completion in May 2023 and the Coral Mountain Resort. Both projects include 150-300 hotel rooms and residential units.

In San Bernardino County, Tapestry, the largest housing project in the Inland Empire broke ground in 2021 in Hesperia with site work. Vertical construction finally started in July of 2022. The master-planned community will accommodate 15,663 homes, and 700,000 square feet of retail and commercial space. This is a 20-year project, and it will increase the city's population by an estimated 40,000 residents. The first homes are now for sale.

Calimesa has 3,052 approved home sites which were purchased in 2021 by two builders for development. The Summerwind master-planned community first phase is under construction with 600 homes. The Summerwind Park opened in August of 2023. Housing projects in Ontario Ranch now comprise an approved total of 10,455 single family homes and 10,659 multiple-family residences. This master-planned community is one of the fastest-growing in the U.S.

These new developments in the Inland Empire not only bring jobs to Riverside and San Bernardino counties but produce much needed housing for the area.

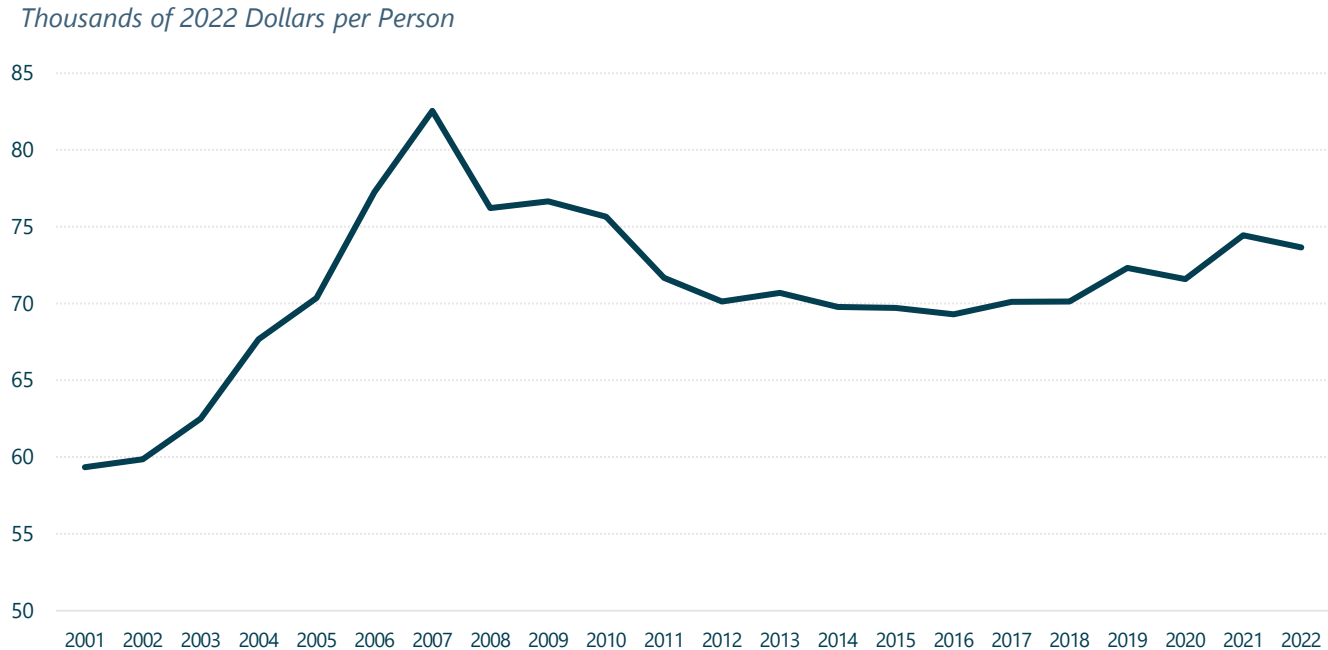
7. Ventura County

Since the pandemic, the labor market in Ventura County has added over 27,400 jobs, the most for a 3-year period since 1998. The growth rate in new employment was 4.2 percent in 2022. In 2023, job growth is estimated at 2.0 percent. Employment gains during 2022 and 2023 were largest in leisure services and healthcare. Another fast-growing sector in Ventura County is the Transportation and Warehousing sector (NAICS 48), which grew 21 percent (1,300 new jobs) in 2022. This was driven by the hiring surge at the new Amazon warehouse in Oxnard, which employs 1,500 workers. In 2023, this sector has remained stable.

As for much of the SCAG region, Ventura’s population has been shrinking since 2016, and this trajectory will continue through the next year due to persistent out-migration. The labor force has not fully recovered from the 2020 pandemic recession. Ventura’s labor force is still 2 percent below its size before the COVID-19 pandemic.

Nominal Gross Domestic Product (GDP) increased by 8 percent in 2021, part of the restoration to full economic activity from the pandemic recession. The California Economic Forecast estimates 2022 GDP, which implies a growth rate of 4.8 percent, due largely to a surge in housing projects, the sharp increase in the warehousing sector, and a 2.6 percent increase in manufacturing employment. The GDP is rising, but on a per capita basis and adjusted for inflation in recent years, the county real GDP per capita fell in 2022 from the previous year. The long period of stagnant growth that had characterized the Ventura County economy reversed in 2019 with the creation of higher paying jobs in manufacturing, professional, technical and scientific services, healthcare professionals, construction, and the public sector.

Exhibit 7.1: Real Gross Domestic Product per capita 2001-2022



Notes and sources: U.S. Bureau of Economic Analysis (2023); 2022 forecasted by M. Schniepp based on data from U.S. Bureau of Economic Analysis (2023).

VENTURA COUNTY ENGINES OF GROWTH

Ventura County's economy is bolstered by its diverse industry sectors. Its workforce spans a range of sectors, including professional business services, healthcare, leisure and hospitality, and state and local government, mirroring the SCAG region's employment distribution. This economic diversity provides economic stability and resilience over economic cycles. However, three key sectors in Ventura are unique to the county: a commercial seaport, a large naval base, and a thriving agricultural sector.

NAVAL BASE VENTURA COUNTY

Since 1940, the base has been an anti-aircraft training center, missile test facility, and support-providing facility for Navy air, sea, and shore operations. It is the largest employer in the County, with 17,320 military, DoD civilian and contractor personnel. Department of Defense civilian employment remains relatively stable in Ventura County. DOD budgets continue to rise from Congressional budget appropriations. The Naval Base, including the Construction Battalion Center at Port Hueneme, should continue providing employment opportunities and significant positive indirect effects for the local economy. The base livelihood rests mostly on the appropriation of funds from the DOD budget. The last several Congresses have been generous to the DOD with continuous increases in annual appropriations. This has benefited the Naval Air station bases at Pt Mugu and its sister location, China Lake, in northeast Kern County and the Navy's largest single landholding representing 85 percent of the Navy's land for research and testing.

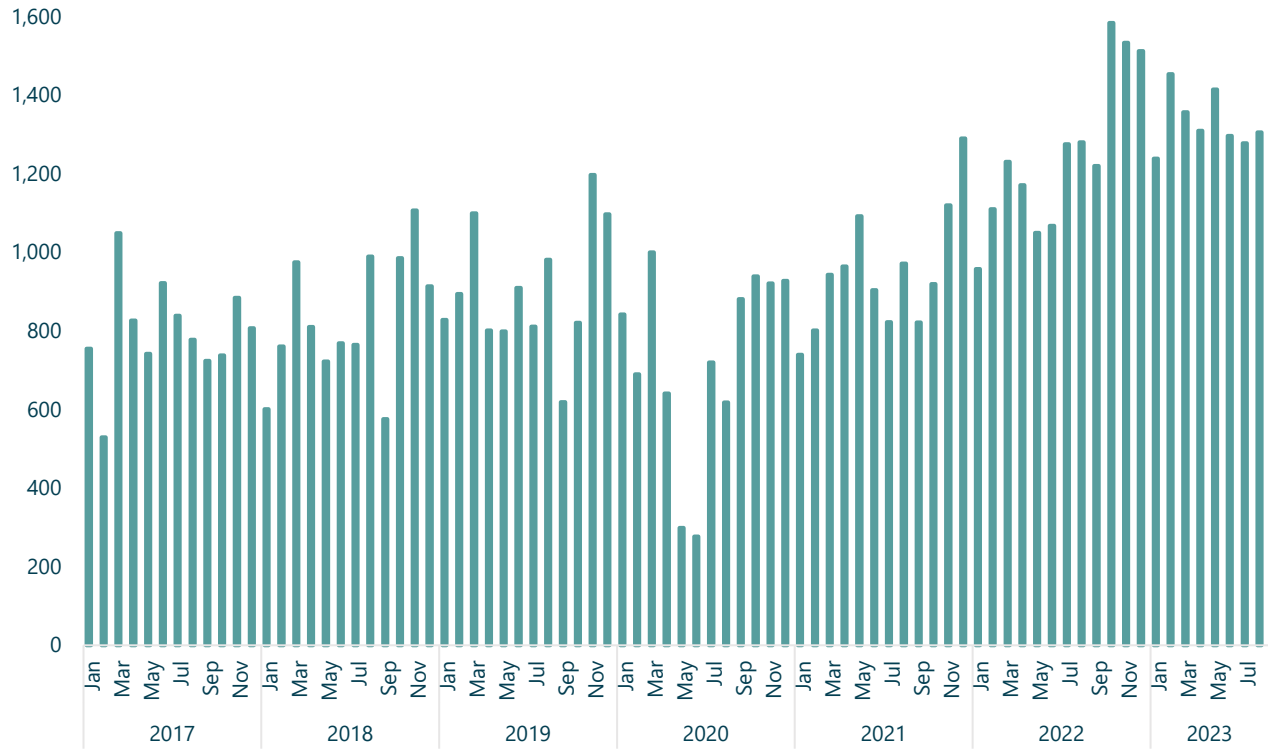
PORT HUENEME

The commercial port receives automobiles, general cargo, agricultural products, regional fish, and liquid bulk products. Its exports include local agricultural products such as lemons, avocados, and general cargo products.

Cargo values at the port are soaring this year, rising 16.5 percent year to date (through August) versus a year ago. Total trade value for the first 8 months of the year is on pace to reach \$16.6 billion, the highest value of trade volume on record. Imports comprise 90 percent of the total cargo flow, dominated by automobiles.

Exhibit 7.2: Import and Export Values at Port Hueneme

Millions of Dollars
1,800



Sources: Port Hueneme Trade Statistics (2023)

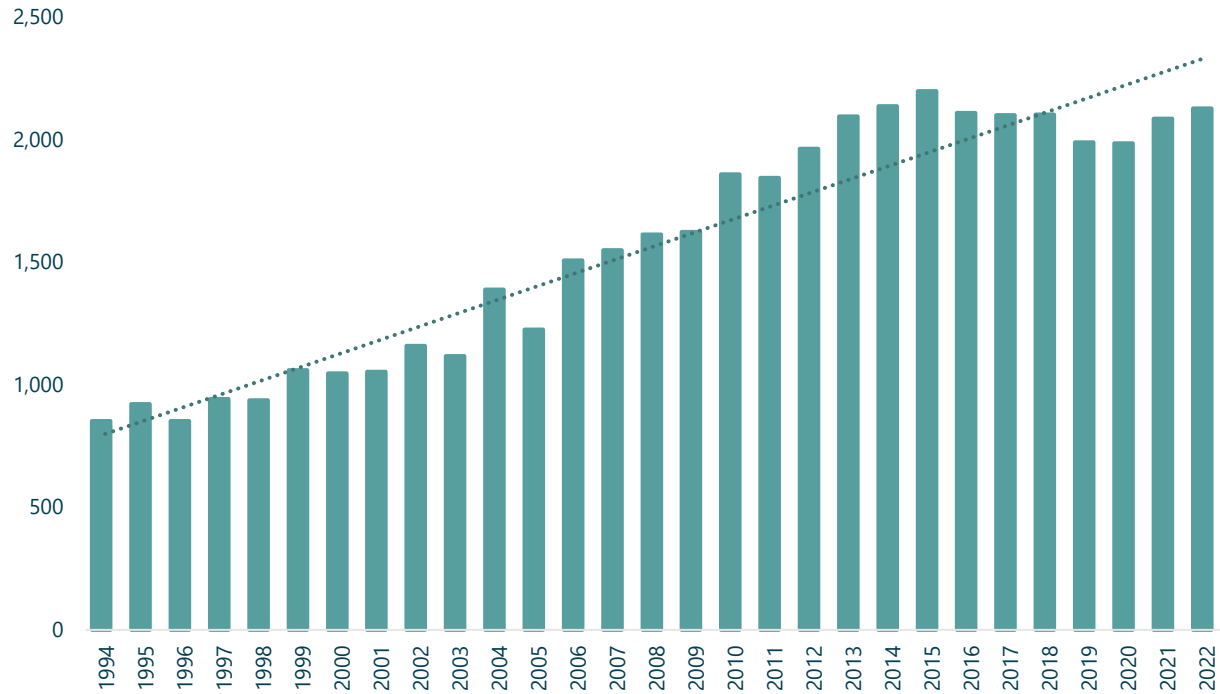
AGRICULTURE

In 2022, Ventura County agriculture was valued at \$2.1 billion, up 2 percent since 2021. The county’s top crops are strawberries, avocados and lemons, leading California’s production of these crops. Only a handful of counties eclipse Ventura County in total annual crop value. Ventura’s Oxnard Plain is one of California’s three largest and most important strawberry-producing regions, along with Salinas and the Santa Maria Valleys.

The farm sector constitutes a relatively large labor market with 27,000 workers as of September 2023, accounting for 8 percent of the total workforce in the county. Employment surged in 2023, rising 8.1 percent from the annual average in 2022.

Exhibit 7.3: Ventura County Value of Agricultural Products with Trendline

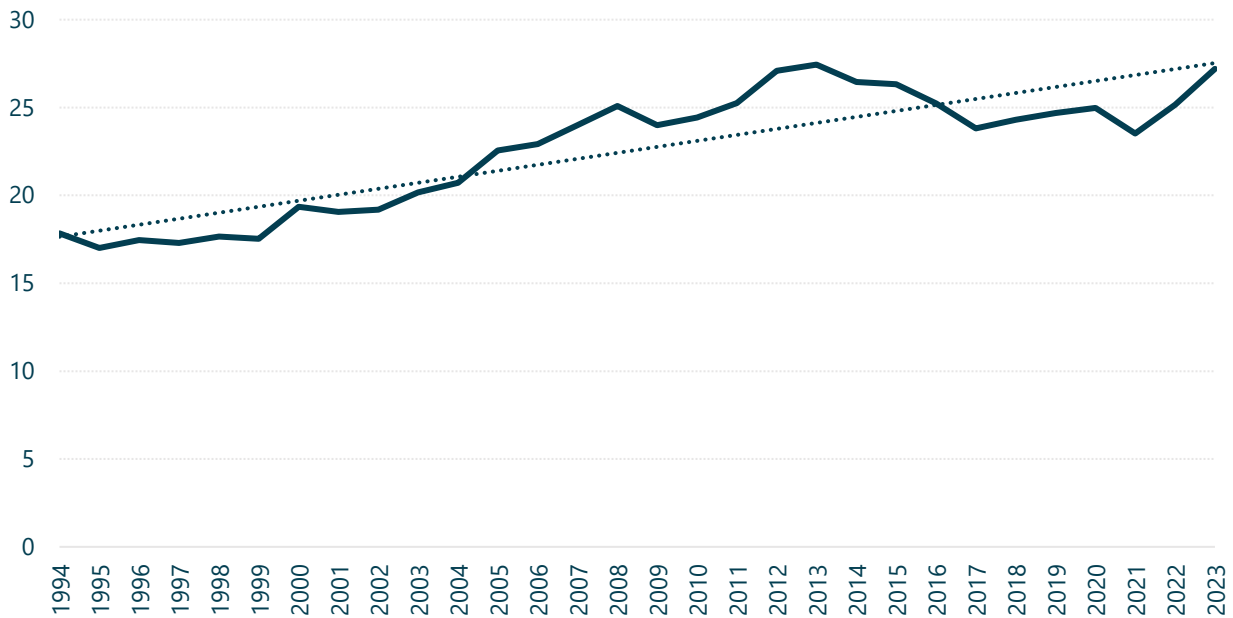
Millions of Dollars



Source: Ventura County Agricultural Commissioner, Crop Report, 1994-2022.

Exhibit 7.4: Ventura County Farm Employment with Trendline

Thousands of Jobs



Sources: California Employment Development Department (2023)

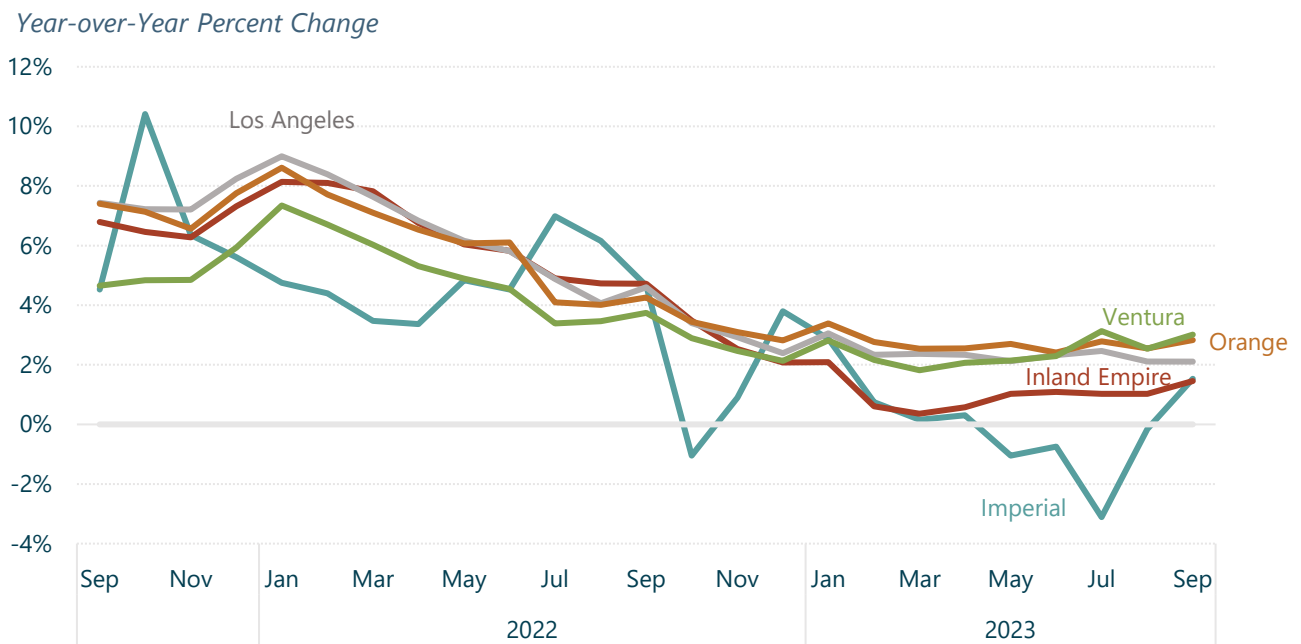
THE VENTURA ECONOMY

LABOR MARKETS

As of September 2023, Ventura County’s unemployment was 4.7 percent, compared to 4.5 percent for California. For all California counties, the unemployment rate has generally been rising over the last year, in tandem with the growth of the labor force. Ventura County’s total employment grew by 1.9 percent for the first 9 months of 2023, relative to year ago using seasonally adjusted data, and 2.0 percent for the first 9 months of 2023 using non -seasonally adjusted data.

Ventura’s continued sluggish labor markets is a principal concern for the county.¹⁸ Compared to all county labor markets in the SCAG region except the Inland Empire, Ventura County is still lagging in job growth, attributable to both the lack of labor force growth and the lack of new business formation or organic business expansion.¹⁹

Exhibit 7.5: Ventura Job Growth Compared to all SCAG Region Counties



Sources: California Employment Development Department (2023)

In 2023, the sectors adding the most jobs were also the lower-paying sectors: Healthcare services and Leisure and hospitality. Of the total nonfarm employment increase for 2023, these sectors account for 71 percent. The public sector accounted for another 23 percent. Consequently, this year, job gains have been

¹⁸ The other issues of concern that I have addressed in the past are sluggish labor force growth and the sluggish development environment. Both are examined in this report.

¹⁹ There are reasons for this which have been documented in many of our past commentaries and forecasts on the Ventura County economy. Principal among those reasons is the restrictive impediment to new growth represented by SOAR. In the absence of SOAR, more opportunities for both residential and non-residential expansion could occur, attracting business and a qualified labor force to the region.

limited and dominated by three labor market sectors. Broad-based participation of the overall labor market has been relatively absent in 2023.

Whereas the tech industry has rebounded in most coastal counties and is generally leading the surging California labor market, the restoration of jobs in technology services has been underwhelming in Ventura County. Jobs in high technology are largely in the professional, scientific & technical services sector, which added jobs in October 2022 but had few gains since March 2023. There appears to be a stalling of growth in this sector in Ventura County because elsewhere in the SCAG region, the expansion of this sector has been more impressive and has shown no signs of tiring. Other than Imperial County, where same period information on the professional, technical, and scientific sector is delayed, Ventura County ranks last in "technology" sector job growth in the SCAG region, as shown in Exhibit 7.6.²⁰

Exhibit 7.6: Ventura Job Growth in Professional, Technical, and Scientific Services Compared to Other SCAG Counties (September 2022-September 2023)

County	Jobs Created	Year-over-Year Change
Inland Empire	4,500	8.6%
Orange	7,700	5.6%
Los Angeles	16,000	4.1%
Ventura	600	2.8%
Imperial	-60	-6.1%

Sources: California Employment Development Department (2023).

The inability of the Ventura County labor market to generate as much momentum this year as other county labor markets is principally due to the pandemic contraction of labor force participation, which has not recovered to pre-pandemic levels. The demand for jobs remains high, so the county's issue is labor supply. Stronger signs of the labor force returning were observed through March of 2023, but there has been no progress in restoring labor force participants through September 2023. The County's labor force is off by 8,200 participants from February 2020. This has occurred in tandem with, or as a result of, recent accelerated out-migration of Ventura County residents. The population of Ventura County has been in decline since 2017 as families have left the county for jobs or more affordable housing elsewhere.

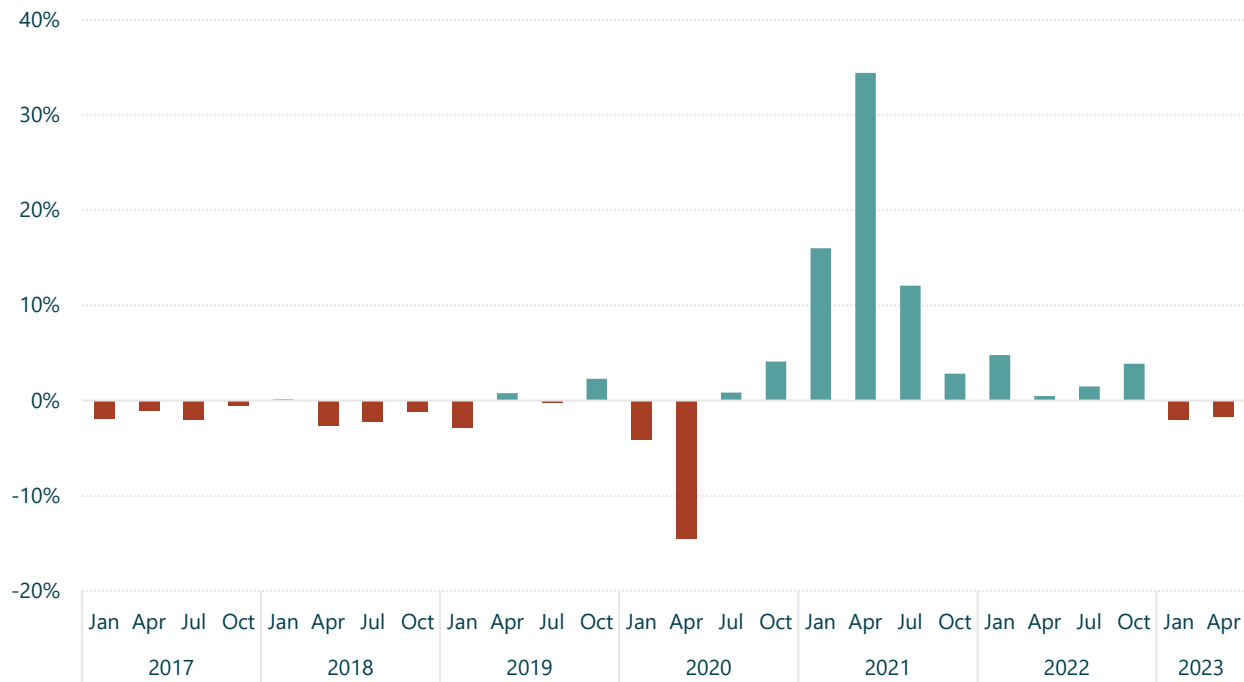
²⁰ The BLS series for professional, scientific, technical services jobs for Imperial County is available through March 2023. Consequently, the table shows the employment change in this sector from 2022 Q1 to 2023 Q1.

TAXABLE SALES

Taxable Sales serves as a proxy for consumer spending. Taxable sales soared in the county, and after the pandemic when restrictions were lifted in the Spring of 2021. This growth has continued to increase every quarter since. However, adjusted for the rising level of prices, spending on retail goods and services, adjusted for inflation, moved lower in 2023. Exhibit 7.7 demonstrates the stagnant retail spending in Ventura County this year. It is even more evident in the presentation of real taxable sales growth rates.

Exhibit 7.7: Shrinking taxable sales

Year-over-Year Percent Change



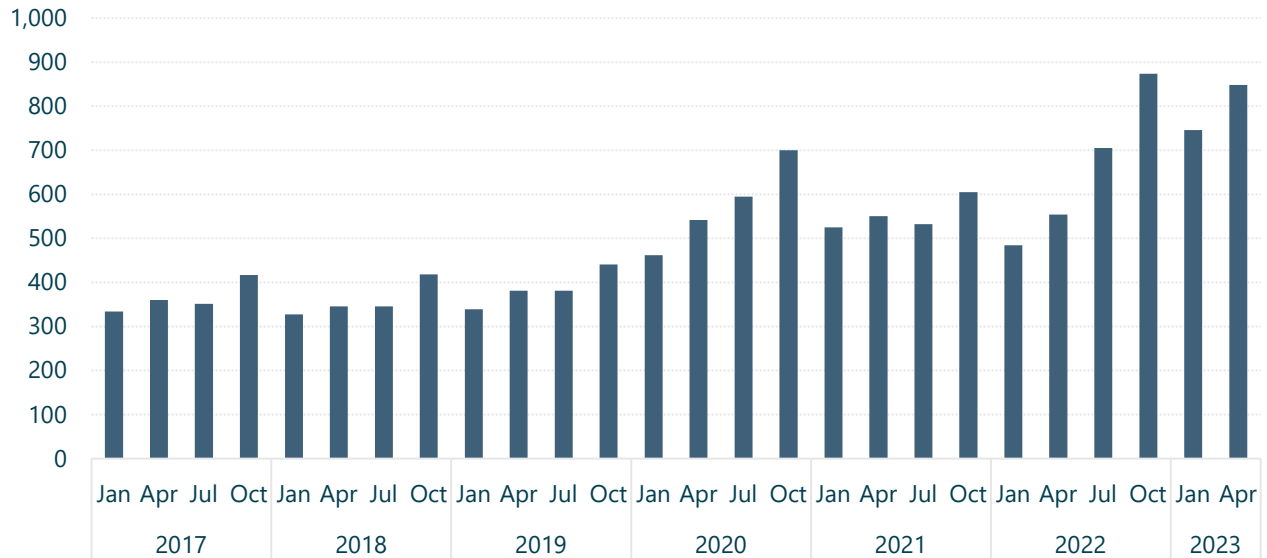
Source: California Department of Tax and Fee Administration (2023).

This same trend is generally being observed throughout the SCAG region. However, the real taxable sales decline is much less severe in Ventura County than in all other counties. Ventura County has recorded a 1.1 percent fallout in taxable goods spending during the first half of 2023. The entire SCAG region has suffered a 7 percent decline, led by significant spending contractions in Los Angeles and San Bernardino Counties.

Much of the reason for the buoyant retail sales observed for Ventura County in the first two quarters of 2023 can be attributed to Amazon's opening of the mega fulfillment center in Oxnard in the Fall of 2021. By mid-2022, the warehouse was in full operation. Previously, online sales were attributed (and sales and use taxes were distributed) to counties from a state-wide pool on the basis of population share. Sales tax is now collected in the jurisdiction where the distribution of online goods sold originates from storage.

Exhibit 7.8: Ventura County Taxable Sales Growth in “Other Retail”

Millions of 2022 Dollars



Source: California Department of Tax and Fee Administration (2023).

Riverside and San Bernardino Counties were beneficiaries of this tax shift in 2020 and 2021 when this measure changed the California sales tax code to benefit counties directly for online sales. If real total taxable sales are adjusted for the “Other retail group” sales in which the warehouse sales are categorized, real adjusted total taxable sales in Ventura County decline 12.3 percent in quarter 1, and 11 percent in quarter 2.

Inflation has run its course and is weighing on consumer spending in the SCAG region. As inflation abates, we expect to see rising real taxable sales in Ventura County and throughout California. However, the expectation of inflation moderating enough to prevent negative real spending is not part of the base forecast for 2024.

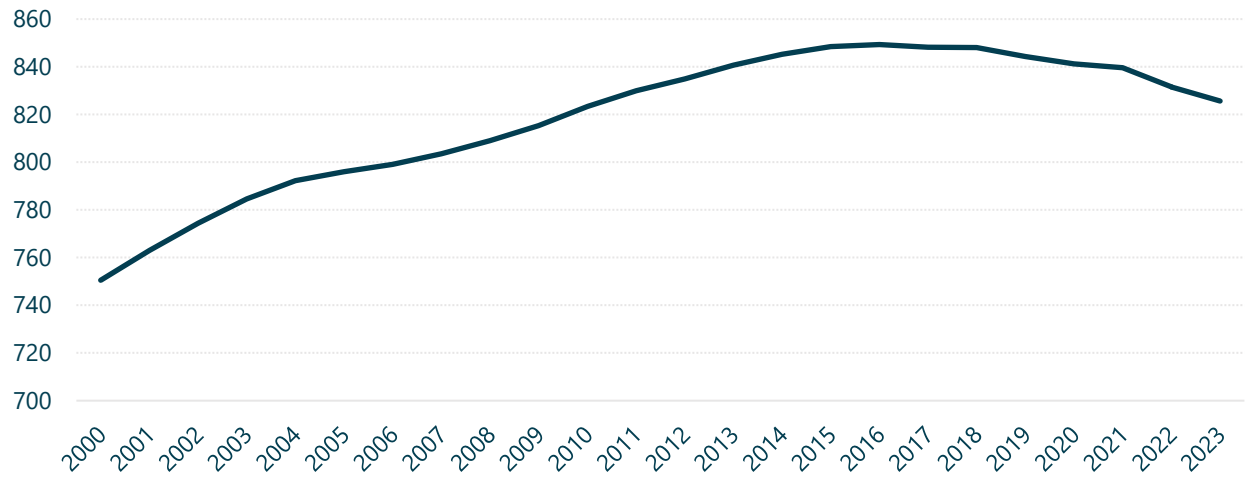
VENTURA DEMOGRAPHICS

POPULATION

Total population in Ventura County peaked in 2016 and has been in a steady though gradual decline since. Both components of the population---the natural increase and net in-migration---have been declining for nearly a decade. Currently, the natural increase, or births less deaths, still contributes positively to population, but those gains are more than offset by progressively larger outflows of net resident migrants.

Exhibit 7.9: Ventura County Population

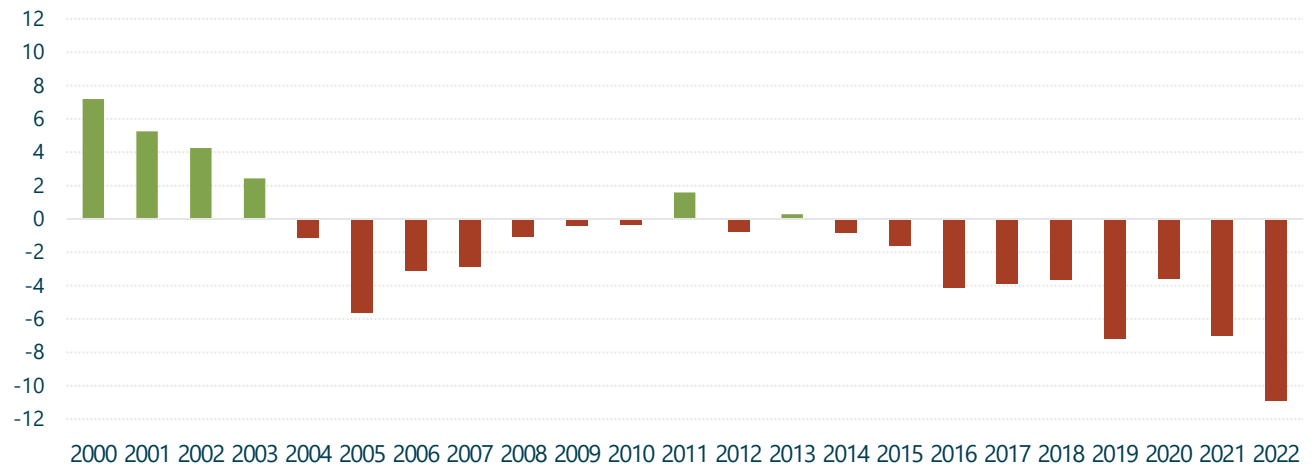
Thousands of Residents



Source: CA DOF E-2 estimates

Exhibit 7.10: Ventura County Net Domestic Migration

Thousands of People



Source: CA DOF E-2 estimates

A principal reason for the accelerating defection of resident populations is the county's slow rate of job creation over the last 10 years and the lack of housing choices and affordable housing up to now. This is not unique to Ventura County. Populations are declining in most coastal counties due to housing issues, which is quite pervasive from San Diego to Mendocino Counties.

Ventura County has lost 2.8 percent of its population since 2016, 24,000 residents. The decline in population is assumed to be a contributing factor to the slow recovery of the labor force. The population of Ventura County has declined by 24,000 people since the peak year of 2016. The decline is due entirely to an out-migration flow of residents which hastened with the sharp rise in shelter cost for both purchase and rental housing.

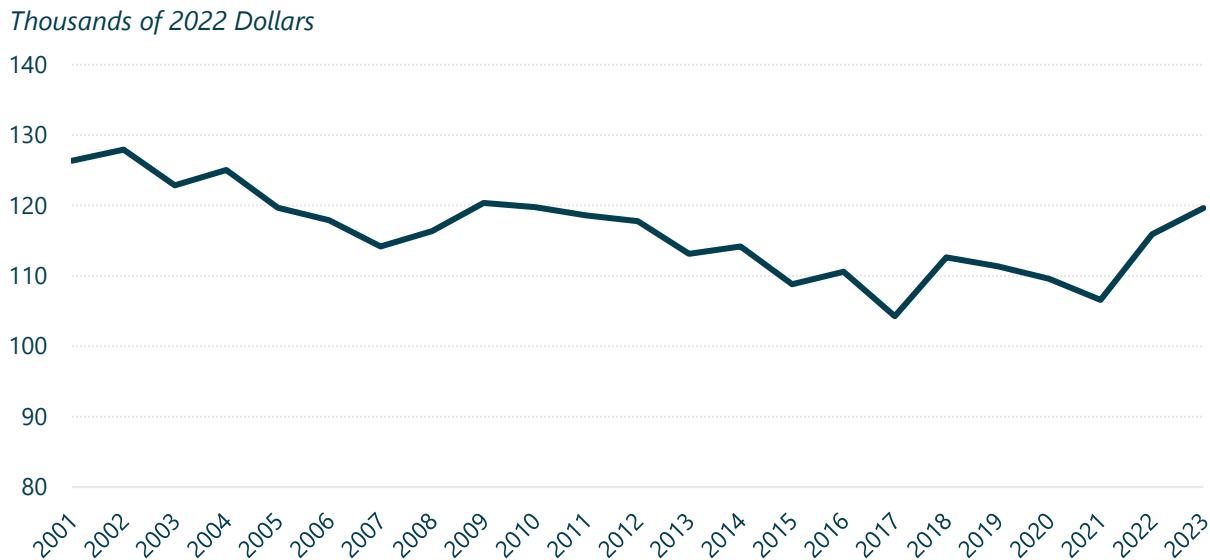
There are no shifts in Ventura County that would suggest this trend will reverse. Even if net migration immediately went to zero, the age distribution in the county leans older. The natural increase in population continues to decline and will turn negative in 2028. Consequently, out-migration will need to be reversed, or the County will face longer-term population decline.

Currently, Ventura County has been losing population longer, and except for one year, faster than the state or the Greater SCAG Region.

INCOMES

Income for family households has not kept pace with inflation since the turn of the century. However, over the last two years, including 2023, HUD reported a surge in California household incomes for many counties, including Ventura County. The data are deflated by the CPI for the greater Los Angeles region and are expressed in 2022 dollars. Ventura County households have rebounded, restoring the level of purchasing that has been in general decline since 2009.

Exhibit 7.11: Real Median Family Income



Source: HUD (2023)

The recent surge is due to wage adjustments the last two years that employers have had to make to compensate workers for the inflationary environment, and the adjustments made by the Social Security Administration which hiked payments to all recipients by 5.9 percent in 2022 and 8.7 percent in 2023.

As a proportion of the total population, Ventura County has more residents 65 and older (17.9 percent) than most counties in California, including the Inland Empire, Los Angeles, Orange, and Imperial Counties. The surge in transfer payment increases was a meaningful boost to family income the last two years. Ventura County still ranks last in the growth of income over the last 8 years to 2023 compared to the SCAG counties.

HOUSING

NEW HOUSING

New housing has been scarce in Ventura County, especially since the Great Recession. While 2021 and 2022 have represented a Renaissance in home building for much of California, there has been less new development of housing in Ventura County. New home production during 2022 was the highest since the bubble days of 2006. Most (76 percent) of new residential development was apartments. Currently, an estimated 1,000 apartment units are under construction. Most of the projects currently underway are legacy projects in Ventura, Oxnard, and Simi Valley--- those that have been in planning for years and years and are finally being built. Most planned projects in the entitlement queue are now high-density unit projects.

Less housing (and less population) was originally the goal of SOAR when it was first introduced to voters in the late 1990s. Over time, the general lack of new housing in the county has impacted population growth and housing affordability, and the hard evidence for net migration, population, and home prices demonstrates this.

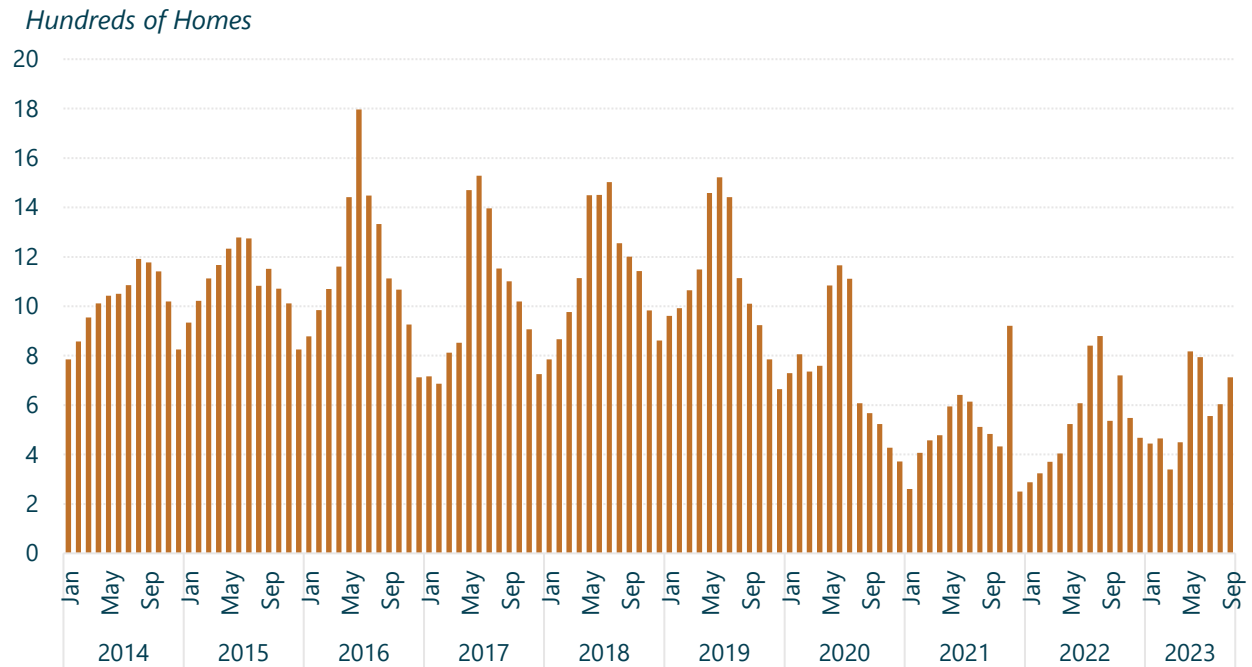
NEW HOUSING DEVELOPMENT

Over the last 20 years, Save Open Space and Agricultural Resources (SOAR) has imposed restrictive growth controls in Ventura County. SOAR is a principal reason for the austere development environment in Ventura County. While SOAR has limited new housing and new investment dollars in non-residential structures over the foreseeable future, there has been a spate of recent development applications and/or project approvals in the county. Many of these are legacies.

EXISTING HOME MARKET

Existing home sales were off 26 percent in 2022 and declined another 35 percent in 2023. Since 2021, sales are 51 percent lower in 2023. Mortgage rates and selling values have depressed demand, but the larger factor is inventory.

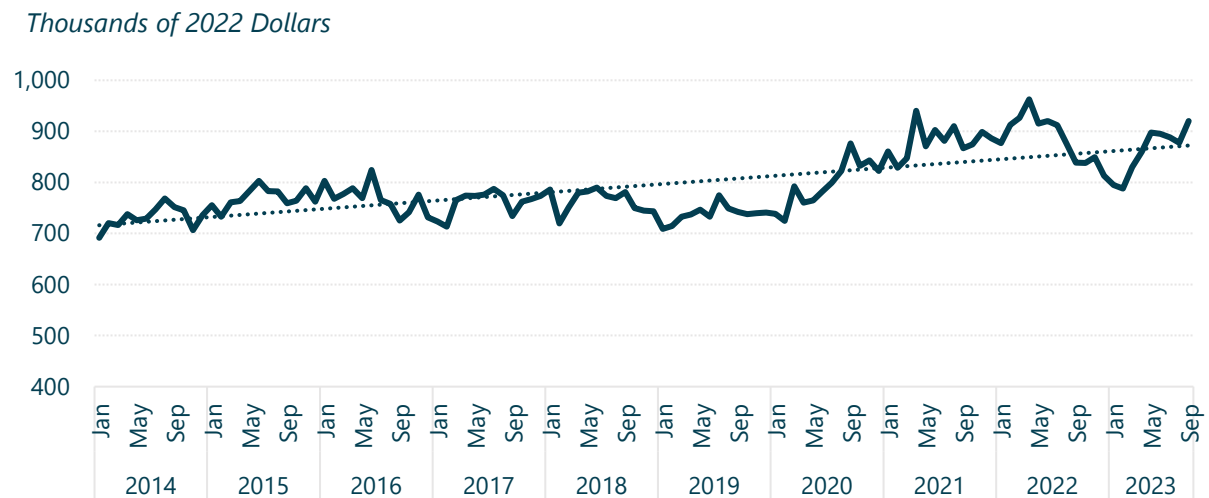
Exhibit 7.12: Existing Housing Inventory



Sources: California Association of Realtors (2023)

Other than the year 2021, when the euphoric buying spree following the pandemic decimated available inventory that year, the current 2023 inventory represents the lowest level of homes for sale on record. The median home value for all housing types was \$897,500 in 2022, a 9.2 percent increase from the previous year. Prices declined in the second half of 2022 and continued through February 2023 but reversed course by March. Since then, home selling values have retraced their original path to the peak value for homes sent in June of 2022. The annualized median home value for 2023 will decline 1 to 2 percent, but by December 2023, a new housing value peak will be reached.

Exhibit 7.13: Ventura County Real Median Home Prices with Trendline



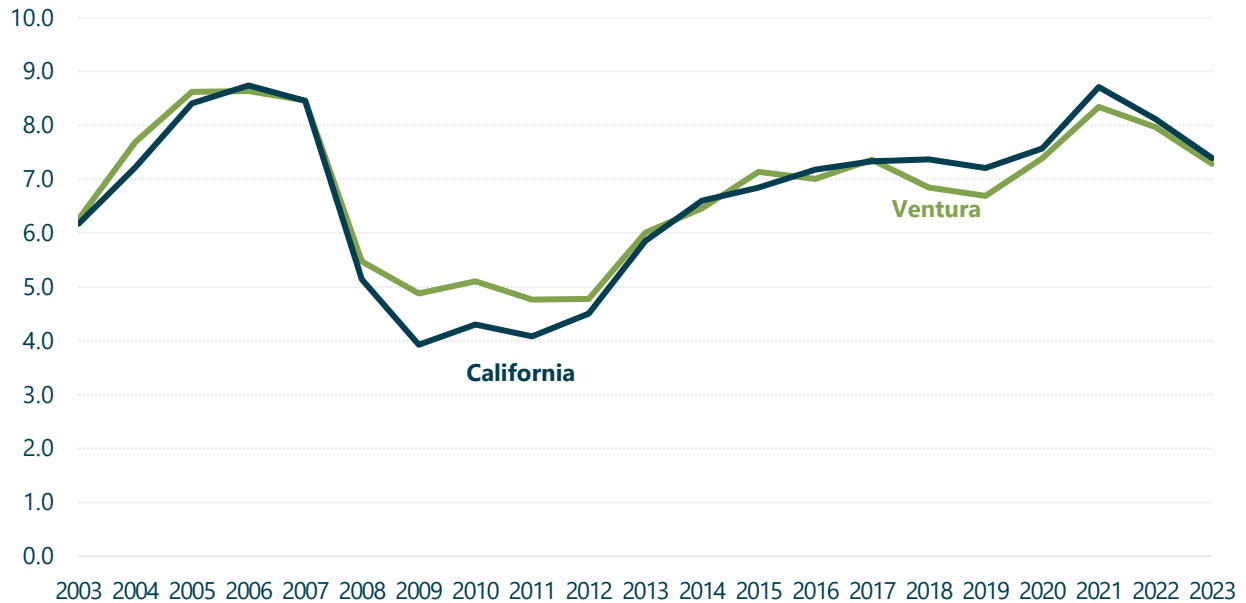
Sources: California Association of Realtors (2023)

A 20 percent down payment on the median-priced home in September 2023 would be \$180,000, an amount typically out of reach for most households. At current mortgage rates, the monthly payment for a home purchased in 2023 is double that of the same home purchased in 2020.

The Home Price Ratio shows Ventura County is running neck and neck with the California housing market. For both, the median home price in 2023 is 7.3 times the median family income. While not the highest ratio observed over time, it demonstrates the magnitude of home prices versus the annual income for the median family in the County.

Exhibit 7.14: Home-to-Income Ratio/Affordability

Ratio of Median Home Price to Median Family Income



Sources: California Association of Realtors (2023)

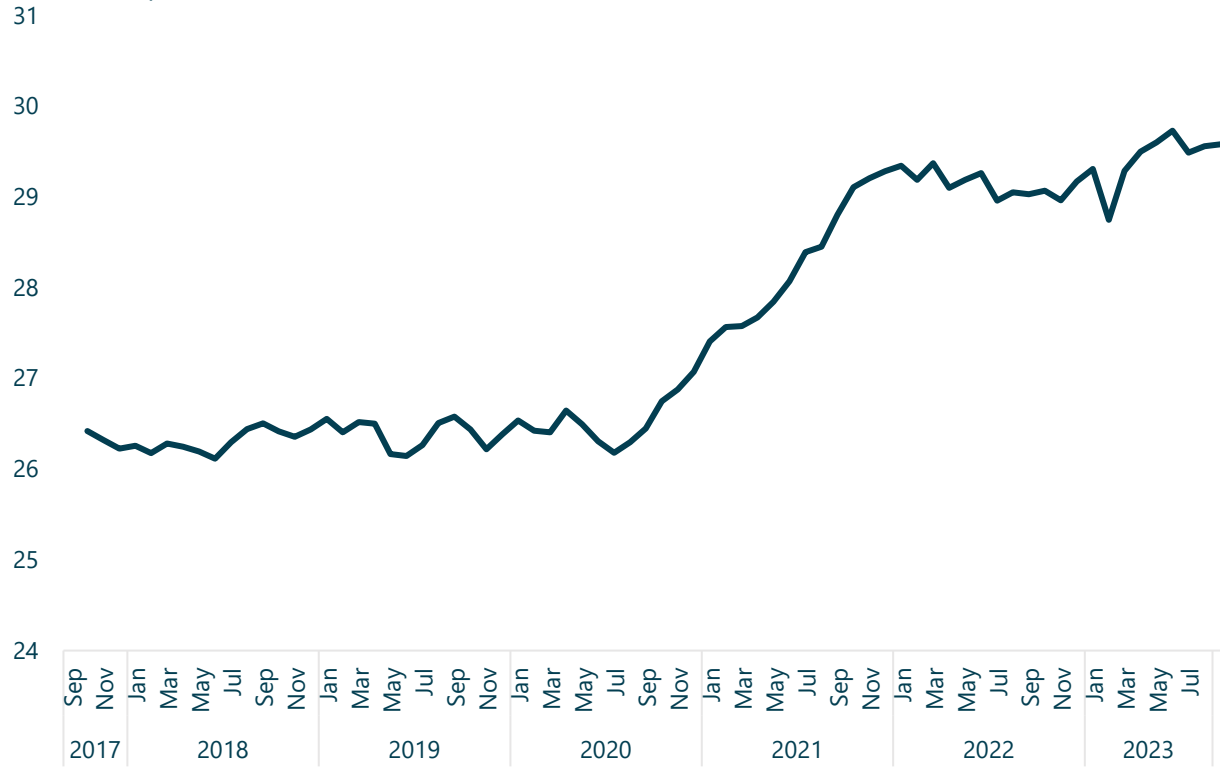
The California Association Affordability Index improved marginally for Ventura County during Q2 of 2023. The index will likely decline in Q3 due to much higher home prices prevailing during summer. Relative to the rest of the SCAG region, only Orange County has a lower affordability index for purchasing housing than Ventura County.

The unaffordability of purchasing housing has pushed more families into the rental market. Supply of the rental stock has been rising faster in Ventura County the last two years, but monthly rents continue to rise in the County. Rapidly rising rents were indicative of the immediate post-pandemic period. Subsequently, rental price inflation has slowed considerably over the last year.

The substitution of rental housing for purchase housing amid an environment of both rising home prices and rising mortgage rates pushed apartment rental rates to their highest levels ever recorded in August 2023. In September, the average reported monthly rent fell \$104.

Exhibit 7.15: Ventura County Rent Index

Hundreds of 2022 Dollars



Sources: Zillow (2023)

THE OUTLOOK FOR VENTURA COUNTY IN 2024

The labor markets have demonstrated momentum this year; Ventura County will not lag the rest of the SCAG region as it has for many of the last 10 years. The problem going forward is the shrinking labor force which has not provided enough workers to fill open positions in the County.

Population growth has been negative for five consecutive years. The decline has impacted the resident labor force and the ability of Ventura County employers to recruit workers. A weakening economy in 2024 will soften the demand for workers.

Persistent inflation that remains at levels that exceed the goals of the Federal Reserve may trigger further rate hikes in 2024. Continued high inflation would deteriorate real household income and consumer spending further in the region. The likelihood of inflation remaining above the Federal Reserve’s target through 2024 is part of the forecast, plus an additional rate hike. More progress towards the 2 percent inflation goal will be evident by 2025.

Exhibit 7.16: Ventura County Forecast

	Actual	Forecast	
	2022	2023	2024
Employment growth (%)	4.2	2.0	0.4
Unemployment rate (%)	3.7	4.2	4.8
New housing units	2,224	850	1,100

Sources: California Economic Forecast (2023)

The outflow of residents is forecast to continue along a path that has generally been in place since 2014. Consequently, the forecast calls for a population decline in 2023 at a negative growth rate of 0.7 percent, continuing into the forecast period at an average annual negative growth rate of 0.4 percent. The county population is expected to decline by up to 23,000 more people by 2028 due to net out-migration.

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ORANGE COUNTY

OCTA Building
600 S. Main St., Ste. 1143
Orange, CA 92868
Tel: (213) 630-1548

RIVERSIDE COUNTY

3403 10th St., Ste. 805
Riverside, CA 92501
Tel: (951) 784-1513

SAN BERNARDINO COUNTY

1170 W. Third St., Ste. 140
San Bernardino, CA 92410
Tel: (213) 630-1499

VENTURA COUNTY

4001 Mission Oaks Blvd., Ste. L
Camarillo, CA 93012
Tel: (213) 236-1960