LOS ANGELES COUNTY ECONOMIC DEVELOPMENT CORPORATION

Collaboratively Advancing Growth and Prosperity for All

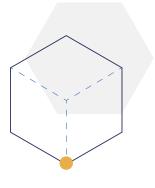
ZOZZ ECONOMIC FORECAST

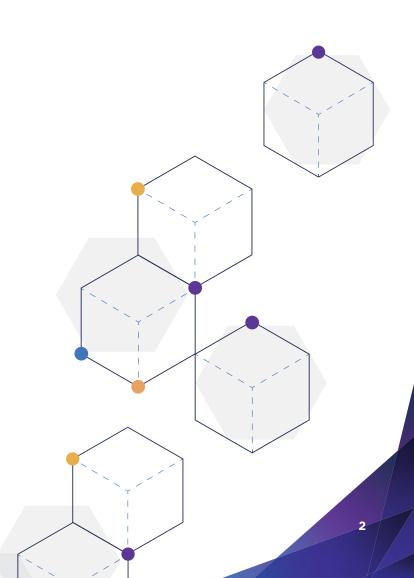
Moving Beyond the Recovery

Los Angeles County Economic Development Corporation | Institute for Applied Economics

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Foreword

As Los Angeles County's principal economic development organization, the Los Angeles County Economic Development Corporation (LAEDC) produces an annual forecast to assess and predict key national, state, regional, and local economic indicators. The forecast also deepens beneath those "headline" indicators to understand the key issues, pressing economic concerns, and longer-term trends that drive them. The forecast provides insights to inform policymakers' decisions and business and community leaders across the Los Angeles region and California.

As 2023 opens, we find ourselves further removed from the dramatic economic decline in 2020 brought on by the highly contagious novel coronavirus (herein "COVID-19") but now facing uncertainty because of inflation. Recall that the economy in 2021 was on a general path of recovery, with the gross domestic product and employment recouping a significant amount of their 2020 losses. At the time, we voiced concern over rising price levels, especially given the generous fiscal stimulus, which increased household incomes and consumption. Then, 2022 was a year of tremendous transition: as our economy progressed in its recovery from, and adaption to, the COVID-19 disruption, global supply chain issues were further complicated by Russia's invasion of Ukraine, bringing high inflation to the forefront of economic discussions from the Capitol to the dinner table. The Federal Reserve spent much of the year combating inflation with a series of large rate hikes intended to slow the economy and reduce the upward pressure on prices.

Getting control of inflation is critical, both nationally and locally. Inflation can be considered a tax on the economy because it saps the economic vitality of consumers and businesses alike. Plus, research has shown that over the past two years, inflation disparities have emerged by income level – as well as by race and ethnicity – affecting low-income and middle-income households. This is reinforced by recent data showing that poverty and income inequality in Los Angeles County has increased since the onset of the COVID-19 pandemic. At the same time, the Federal Reserve's sudden and sharp tightening of monetary policy has been the most dramatic in decades. It has created real concerns that a policy overcorrection may lead the United States into a recession, which would create its own problems in terms of business closures, job losses, and reductions in household income and tax revenue. Consequently, the central bank is at a critical juncture where it must skillfully plan and execute monetary policy to control inflation while avoiding a significant slowdown or even reversal in our economic recovery.

A positive sign is that buoyant nonfarm payroll growth and U.S. consumer spending has continued supporting GDP growth, despite the dual headwinds of rising interest rates and high inflation. That said, the equity markets, as leading indicators of future economic conditions, suggest pessimism or, at the very least, significant uncertainty with respect to the Federal Reserve's ability to tame inflation without slowing GDP growth and pushing the country into recession.

With continued economic uncertainty on the horizon, we highlight the need for those engaged in economic development to construct more resilient, industrially diverse, and inclusive economic systems to defend against uncertain futures. It is essential that organizations advocate for economic security, assist those most vulnerable to economic shocks, and connect more of our region's residents to the industrial drivers of our economy.

For example, small businesses, which have spent the last two years rebounding from the economic dislocations caused by the COVID-19 pandemic, are very exposed to the impacts of inflation and a potential recession and would need support through any difficult economic periods. In fact, small businesses have not fully "recovered" from the pandemic. About 12.8 percent of small businesses surveyed by the U.S. Census Bureau's Small Business Pulse Survey indicated that their businesses likely would never return to the pre-pandemic normal, and inflation and the threat of a recession in 2023 are hazards that will threaten further their economic gains. The disparate performance of the DJIA compared to the S&P 500 and the NASDAQ Composite also suggests that larger, non-technology companies might be better positioned to weather an economic downturn than smaller businesses.

The potential reshoring, nearshoring, and ally-shoring of manufacturing will change the geographic routes that intermediate inputs embark upon. Supply chain disruptions will continue to threaten the gradual economic progress as the economy transitions from COVID-19 recovery to the next paradigm.

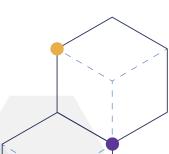
One result of the COVID-19 pandemic that continues to shape our economy is the emergence of remote work, which has increased commercial real estate vacancy rates. A drop in primary daytime occupancy has occurred in areas once filled with workers, such as central business districts, endangering the establishments that once catered to commuters. The pandemic has reshaped central business districts, and if continued, the practice of remote work may also, with changes having implications for real estate demand, prices, and future supply.

In terms of employment, overall payroll jobs are moving beyond pre-pandemic levels for the U.S., California, and Los Angeles County. Employment in the U.S. continued to grow in 2022, closing much of the unemployment gap that mass layoffs had created at the start of the COVID-19 pandemic. California has followed suit, where the State's unemployment rate finally returned to prepandemic levels and where recent data shows the disproportionate unemployment rates experienced by different demographic groups at the beginning of the pandemic have become more equally distributed. In Los Angeles County, the exodus from the workforce was led by those with lower educational attainment: those with a bachelor's degree or higher were the only group not to see decreases in labor force participation. While total employment in the County has fully rebounded, employment in hardest-hit service sectors has yet to return to pre-pandemic levels, while knowledge-based industries have grown beyond the recovery.

Optimism surrounds the impact that sizeable federal and State government investments will make in California and Los Angeles County to transform our regional economy.

^[1] See eda.gov/funding/programs/american-rescue-plan/build-backbetter. California will receive infrastructure investments from the Bipartisan Infrastructure Deal through formula funding and competitive grants. It is estimated that over five years (Fiscal Year 2022 through Fiscal Year 2026), California will receive \$41.9 billion in formula funding alone. It is estimated that the \$3.25 billion already spent in Bipartisan Infrastructure Deal funds in California has generated 42,308 jobs to date. Across all American Rescue Plan programs, California was awarded nearly \$195 million.[1] In addition to the federal investment identified, California has a series of largescale investment programs funding projects statewide, including The Road Repair and Accountability Act of 2017 (SB-1) and the Community Economic Resilience Fund (CERF) program.

As noted in previous years, economic forecasting uses historical data and current conditions to anticipate the economy's future performance, and as such, forecasts rely on certain assumptions. As such, forecasts rely on certain assumptions. Our economic forecast this year assumes: (1) Fed monetary policy is planned and executed in a manner that will not result in a policy overcorrection, since while the risk of a national economic downturn persists, there is compelling evidence of slowing inflation; (2) the \$24 billion-plus budget deficit faced by the State of California, and the potential ramifications from it, will have only a minor impact on economic growth; and (3) future adverse developments related to the pandemic will not occur, and the COVID-19 Public Health Emergency (PHE) and national emergency will end as planned on May 11, 2023. With this in mind, the LAEDC presents the 2023 Economic Forecast: Moving Beyond the Recovery.



Moving Beyond the Recovery

Before forecasting where the economy is headed, it is helpful to consider where it is coming from: for nearly a decade before the COVID-19 pandemic, the economy exhibited strong economic fundamentals, which were thrown into disarray three years ago. Unemployment had plateaued at around 4.5 percent from mid-2017 through the beginning of 2020, with Los Angeles County nonfarm employment reaching over 4.6 million in February 2020. Wages were consistently rising, and the real household income was were approximately 11 percent higher than in 1990 and about 18.5 percent higher than in postrecession 2010. California and the Los Angeles region were experiencing consistent, although slowing, GDP growth as the new decade approached.

However, 2020 departed from this economic paradigm, as pandemic-induced restrictions led to soaring unemployment and plummeting consumer spending. California and the Los Angeles region's consistent economic performance reversed quickly and significantly after the pandemic struck in March 2020. In the years since, pandemic stimulus and unemployment benefits buoyed many households as employment steadily returned, while businesses adapted to new conditions through strategies like pivoting to takeout, constructing online marketplaces, and switching to remote work.

While much of this pandemic-induced economic recovery has run its course, the COVID-19 pandemic has dramatically altered lives and significantly impacted regional, state, national, and global economies. Towering over the economic impacts is also the staggering death toll, as 1.1 million Americans, a tenth of whom were Californians, died from the novel coronavirus.

Beyond the fragility of Main Street, the COVID-19 pandemic exposed the precarious nature of the constellation of intermediate inputs that form our global supply chains. In the most notable local example, the Ports of Los Angeles and Long Beach became national news in 2021 for the duration that freight ships were waiting to dock and unload their cargo. However, these supply chain issues originated far beyond our nation's borders and continue to be exacerbated by international developments. Moving into 2023, the main international As the economy has mostly rebounded from the immediate impacts of the COVID-19 pandemic, concerns turn to the potential impacts of national monetary policy, global supply chain disruptions, and long-term economic restructuring moving forward.

concerns are centered around the Russo-Ukrainian War that was reinflamed in February of 2022 and the full reopening of China closer to the end of last year. Additionally, with the supply of semiconductors, known colloquially as chips, and other products becoming a national security concern, the potential reshoring, nearshoring, and ally-shoring of manufacturing are sure to change the geographic routes that intermediate inputs embark upon. Supply chain disruptions will continue to threaten the gradual economic progress being made as the economy transitions from COVID-19 recovery to the next paradigm.

Though the severity of the pandemic's economic impacts has waned at this point in the recovery, the start of 2023 provides an opportune moment to evaluate how the economy has structurally changed throughout the ordeal. The Fed began an aggressive campaign tightening monetary policy, with mega rate hikes not seen in decades. Gains made in reducing poverty and income inequality leading up to the pandemic reversed. The face of commercial real estate has changed in response to remote and hybrid work options. The labor force participation rates for workers with a high school degree are still lower than they were leading up to the pandemic. Interestingly, re-employment patterns differ from their pre-pandemic distribution, indicating that while total employment has recovered to its prepandemic normal, recovery has been uneven, and not every industry is expected to reach its former level in the

coming years. These structural changes and the potential impacts of national monetary policy are why today, at the beginning of 2023, we look out at the economic horizon and see uncertainty.

2022: A YEAR OF RISING PRICES AND TIGHTENING MONETARY POLICY

Rising price levels represent a decrease in the standard of living for many, especially for households on fixed incomes, households with workers whose wages do not adjust along with inflation, and households who hold cash balances.

The nation in 2022 found itself in a period of continued high inflation. Inflation, which is often referred to as a tax on the economy, saps the economic vitality of a region by adversely impacting the purchasing of consumers as well as the investment decisions of businesses. Additionally, these negative effects are often compounded by the policy actions taken at the federal level to tamp down on inflation.

High inflation rates hurt consumers primarily by reducing their purchasing power. The increasing cost of goods and services, including necessities like food, housing and transportation, means that households can afford less or only a lesser quality. This represents a decrease in the standard of living for many, especially for households on fixed incomes, households with workers whose wages do not adjust along with inflation, and households who hold cash balances.

U.S. consumer spending has been supporting GDP growth despite the dual headwinds of rising interest rates and high inflation. The significant impact of inflation on consumer spending is seen clearly in the personal consumption data. Between 1997 and 2020, national personal consumption expenditures are growing gradually and steadily, with two brief interruptions for the Great Recession (2008 to 2009) and the COVID-19 pandemic (2019 to 2020). But since 2020, personal spending has spiked noticeably (Figure 1).¹ One way households compensate for more expensive goods and services is by dipping into personal savings. U.S. household savings data show that has indeed happened, as savings plummeted in 2021 (Figure 2.) This means that households now have less of a safety net to address financial or medical emergencies or to weather economic downturns. In fact, high inflation can be especially destructive to household savings, as it drives people to accelerate their future purchases to the present for fear that they could become prohibitively expensive.²

Figure 1:

U.S. Personal Consumption Expenditures (\$U.S. Billions)

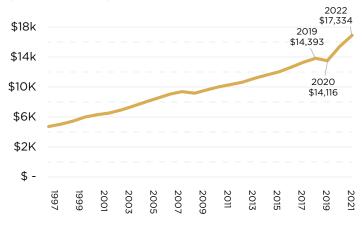


Figure 2:

U.S. Household Savings (\$U.S. Billions)

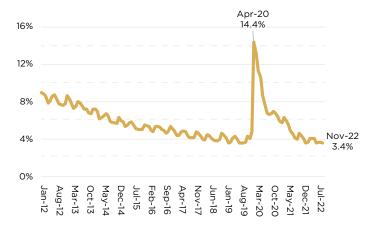


¹ U.S. Bureau of Economic Analysis, Personal Income and Outlays; Federal Reserve Bank of St. Louis.

² U.S. Bureau of Economic Analysis, Gross Domestic Product; Federal Reserve Bank of St. Louis.

Figure 3:

U.S. Unemployment Rate (Not Seasonally Adjusted)



Inflation impacts the entire economy. However, not all households have been impacted equally. Over the past two years, inflation disparities have emerged by income level - as well as race and ethnicity - based on the spending patterns of these groups. Typically, lowerincome households have been disproportionately hurt by their need to spend a higher percentage of their income on necessities, particularly food and housing. While this has indeed happened, the Federal Reserve Bank of New York also found an interesting result: inflation in transportation (especially for used cars and motor fuel) in 2021 resulted in an outsized impact on middle-income households. This appears to be an artifact of the supply chain disruptions resulting directly from the COVID-19 pandemic. Nevertheless, it is indicative that the effects of inflation can be wide-reaching and that different groups have greater or lesser means to address these impacts.³

The continued strong labor market has challenged federal policymakers in dealing with persistent, high inflation. The U.S. Federal Reserve has used many monetary tools to tighten the money supply and slow the economy to address inflation. For example, the Federal Reserve raised the federal funds rate seven times in 2022 and once in 2023 to where it now stands at 4.50 percent to 4.75 percent, spurring higher interest rates for credit cards, auto loans, and mortgages in the process.

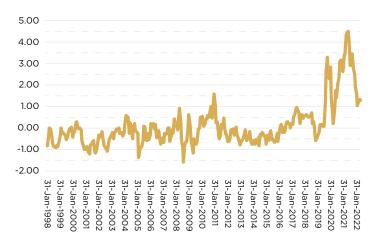
³ Chakrabarti, R., Garcia, D. & Pinkovskiy, M. (2023, January 18). Inflation disparities by race and income narrow. Federal Reserve Bank of New York, Liberty Street Economics. However, despite the Federal Reserve's efforts, the labor market shows little sign of slowing, with unemployment (3.3 percent in December 2022) at decade lows (Figure 3).

We are continuing to experience buoyant nonfarm payroll growth. If the strength in the labor market persists, the Federal Reserve might need to implement additional rate hikes and other actions in 2023 to tamp down the economy. This runs the risk of inducing a recession rather than the much-hoped-for "soft landing," should the Fed's accumulated actions prove too much for the economy to withstand. Depending on its severity, a recession could result in prolonged economic dislocations and job losses that impact households and businesses as much, if not more, than inflation.

One factor that in the Federal Reserve's favor for controlling inflation is easing supply chain bottlenecks. The COVID-19 pandemic severely disrupted supply chains across the globe, first by upending supply and demand balances for particular goods and services and second by creating congestion of transportation assets (i.e., cargo ships and containers) in and around ports and other infrastructure. These disruptions have been compounded by spillovers from the war in Ukraine, a major wheat and grain exporter. However, global suppliers worked diligently in 2022 to restore equilibrium to the system, and the Global Supply Chain Pressure Index (GSCPI) created by the Federal Reserve of New York suggests that this is occurring (Figure 4). The GSCPI shows

Figure 4:

Global Supply Chain Pressure Index



⁴ U.S. Bureau of Labor Statistics.

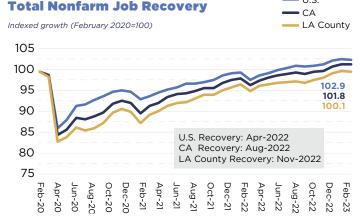
deviations from the average of multiple inputs, and with a reading of 1.18 in December 2022 (down from a high of 4.30 a year earlier), supply chain pressures indeed have returned to more normal levels.⁵

ARE WE FACING A RECESSION?

The nation is nearly at the point where having a recession is equally likely as not.

Nevertheless, a look at yield curves suggests that the likelihood of a recession within 12 months is growing. Yield curves are comparisons between the interest payouts provided by short-term Treasury bills against those provided by longer-term Treasury notes and bonds, and investors often use them to forecast future economic performance.⁶ The Federal Reserve Bank of New York uses the 3-month/10-year yield curve to calculate the probability of a recession in the next 12 months, and the most recent readings show this probability starting to spike in mid-2023 (Figure 5). Current spreads indicate there is now a 47 percent chance of a recession by the end of 2023. In other words, the nation is nearly at the point where having a recession is equally likely as not.⁷

Figure 5:



U.S.

⁵ Federal Reserve Bank of New York, Applied Macroeconomics & Econometrics Center

⁶ Under a normal yield curve, longer maturity bonds present a higher yield compared to shorter-term bonds attributable to the risks associated with time; under an inverted yield curve, shorter-term yields are higher than longer-term yields and are suggestive of an upcoming recession.

NATIONAL MONETARY POLICY

Fiscal and monetary policy will be significant determinants of economic performance and the inflation rate in the coming years. A deflationary policy that is not well planned and executed can subsequently lead to an economic downturn.

The United States Federal Reserve conducts monetary policy by influencing short-term interest rates and the amount of money and credit circulating in the economy. The three conventional tools that the Fed uses to conduct monetary policy are open market operations, the discount rate, and reserve requirements. Using these tools, Fed policy triggers a chain of events that impacts the Federal Funds rate – the overnight interest rate at which commercial banks lend and borrow excess reserves. Changes in the Federal Funds rate affect short- and long-term interest rates, foreign exchange rates, the money supply, and the level of credit available to borrowers in the economy. These monetary factors significantly influence employment, prices, and economic output.⁸

How the Federal Reserve conducts monetary policy in 2023 to combat inflation will significantly determine U.S. economic performance this year and beyond. Deflationary policies that tighten the money supply too much or too suddenly could result in an economic downturn. The resulting losses in output and employment could potentially reverse the economic gains seen since the COVID-19 pandemic.

The Federal Funds rate stands at 4.33 percent as of January 2023. This comes after a rapid increase in 2022 - in February 2022, the rate measured only 0.08 percent (Figure 6) The question is: How far and how fast will rate increases occur this year?

The current Federal Funds rate is still low by historical standards, especially considering the nearly 20-year stretch between June 1972 and December 1991 when the rate never fell below 4.43 percent. But the historical record does present causes for concern given our current

⁷ Federal Reserve Bank of New York, The Yield Curve as a Leading Indicator, https://www.newyorkfed.org/research/capital_markets/ ycfaq.html

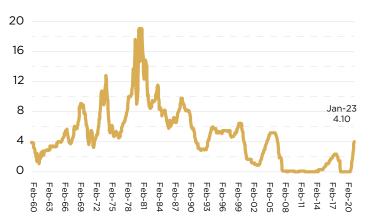
⁸ Board of Governors of the Federal Reserve System. https://www. federalreserve.gov/monetarypolicy/fomc.htm.

situation. The first is that the very large rates seen in 1980 (topping out at over 17 percent) were a response to previous failures to get inflation under control from the stagflation of the 1970s. This is a situation the Federal Reserve is determined not to repeat today, suggesting continued vigilance on their part regarding rate hikes. The second is that the record low rates to stimulate the economy after the Great Recession and the COVID-19 economic shutdowns have helped, combined with fiscal policy and supply chain bottlenecks, to set the stage for inflation are seeing today. This suggests that the Federal Reserve could have gone further to rein in inflation.

Overall, there is compelling evidence of slowing inflation, but the national trend in inflation is still above the Fed's 2 percent target. As such, we expect the Fed to continue its tightening albeit with smaller rate hikes; as the economy begins to cool, the Institute expects any further rate hikes to be closer to 25-basis points instead of the 75-basis point mega rate hikes seen in late 2022.

Figure 6:







Lasting Changes Related to the COVID-19 Pandemic

EMPLOYMENT PATTERNS CHANGED DURING THE COVID-19 PANDEMIC

Knowledge-based industries demonstrated more robust growth beyond the recovery, while many service industries still fall short of pre-pandemic levels.

The pandemic has triggered long-lasting changes within industries and has accelerated changes that have been taking place over time. These major structural shifts occurred in response to continuing remote and hybrid work effects and their associated economy-wide consequences, increased digitization of service provision, labor market supply shifts, and the shift towards e-commerce.

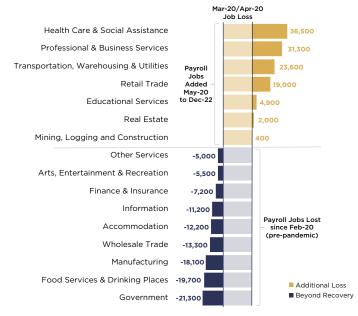
By the end of 2022, total nonfarm employment had reached and even exceeded pre-pandemic levels across the U.S. (April 2022), the State of California (August 2022), and then in Los Angeles County (November 2022); in terms of employment, we have reached full recovery. However, the COVID-19 experience has led to permanent changes in the Los Angeles economy.

Looking below the surface of recovery, the impact of the pandemic and the recovery experience has been uneven across Los Angeles County's diverse industry base (Figure 7). Influencing factors include which industries were impacted the most by changes in consumer behavior related to fear and uncertainty, and the extent that the health order restrictions impacted particular industries, whether businesses were mandated to close or operate under reduced capacity restrictions. Tourism-based industries and services whose provision required close proximity to their customers were hit extremely hard, facing the most restrictive measures. And tourism-based industries' negative impacts were compounded by domestic travel restrictions and longerlived international travel bans and restrictions. Many businesses had to adapt to changed business models to survive the disruption, including learning to operate more leanly, finding a way to conduct their business online, shifting operations outdoors, or looking to technology for solutions. Disruptions in the U.S.'s widespread global supply chains impacted domestic production as inputs that were sourced outside of the U.S. were harder to

Figure 7:

Below the Surface of Recovery in LA County

The Change in Monthly Payroll Jobs by Industry, Feb-20 to Dec-22



obtain. Imported products were also affected as foreign production ceased in response to their efforts to mitigate the spread of COVID-19. All of these factors resulted in uneven experience and recovery across industries.

Figures 7, and 8 on the following page, present the change in jobs from February 2020 (the last month before restrictive health orders) through December 2022, the most current data available. Despite total nonfarm jobs returning to their pre-pandemic level, not all industries have recovered; some of Los Angeles County's hardest-hit industries, such as leisure and hospitality (food service, accommodation, art, entertainment and recreation), never returned the jobs lost in March and April of 2020; combined, these three industries are still more than 37,000 payroll jobs below February 2020 (pre-pandemic baseline).

Observing recovery at the industry level reveals that knowledge-based industries, such as health care and professional business services, have continued to grow jobs. Before the pandemic, the third-ranked industry with the most job growth over the prior decade included food services and drinking places (adding 127,700 jobs). Currently, that same industry ranks second to last in terms of jobs lost since the pandemic; food services are 19,700 jobs short of the pre-pandemic baseline (February 2020). Other service industries didn't fare much better, accommodation, arts, entertainment and recreation, and other services (which include personal services, including hair and nail salons) are present among the industries that have reported fewer jobs in December 2022 than in February 2020.

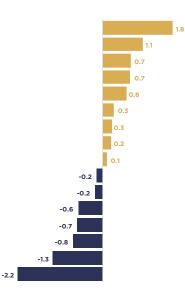
Changes in the job growth rate across industries in Los Angeles County since the start of the pandemic have resulted in minor changes to the employment distribution (Figure 8) and the concentration of employment across industries. Focusing on industries whose share of total nonfarm employment changed by 1.0 percentage points or more, health care and social assistance and transportation, warehousing and utilities increased their shares by 1.8 percentage points and 1.1 percentage points, respectively. Focusing on industries whose share of total nonfarm employment dropped by 1.0 percentage points or more, government and manufacturing fell by 1.3 and 2.2 percentage points, respectively. Future changes in employment distribution will depend upon multiple factors, such as whether these longer-lasting pandemicrelated changes are permanent or changes related to disruptive technology.

Figure 8:

Employment Distribution Changes by Industry in Los Angeles County

Percentage Point Changes in Nonfarm Payroll Job Shares between 2019 and 2022

Health Care & Social Assistance Transportation, Warehousing & Utilities Professional & Business Services Mining, Logging and Construction Food Services & Drinking Places Information Arts. Entertainment & Recreation **Educational Services** Real Estate Other Services Accommodation Wholesale Trade Finance & Insurance Retail Trade Government Manufacturing -2.



The Recovery of Payroll Jobs in Los Angeles County Was Uneven Across Industries

Industry**	Pre-COVID Feb-20 Jobs	COVID-19 Job Loss Mar-20/Apr-20	Recovery Status	Recovery Month*	Pre-COVID Dec-22/Feb-20
Mining, Logging and Construction	155,300	-23,000	Recovered	May-22	400
Manufacturing	337,900	-45,000	No Recovery	N/A	-18,100
Wholesale Trade	218,300	-37,000	No Recovery	N/A	-13,300
Retail Trade	413,100	-90,100	Recovered	Jun-22	19,000
Transp., Warehousing & Utilities	212,200	-18,400	Recovered	Aug-21	23,600
Information	236,800	-68,700	No Recovery	N/A	-11,200
Finance & Insurance	135,300	-4,400	No Recovery	N/A	-7,200
Real Estate	88,400	-11,800	Recovered	Oct-22	2,000
Professional & Business Services	650,700	-90,900	Recovered	Nov-21	31,300
Educational Services (prvt)	140,400	-16,200	Recovered	Oct-22	4,900
Health Care & Social Assistance	723,900	-63,400	Recovered	Nov-21	36,500
Arts, Entertainment & Recreation	98,000	-43,300	No Recovery	N/A	-5,500
Accommodation	51,700	-27,400	No Recovery	N/A	-12,200
Food Services & Drinking Places	397,900	-182,200	No Recovery	N/A	-19,700
Other Services	162,600	-53,400	No Recovery	N/A	-5,000
Government	598,000	-9,600	No Recovery	N/A	-21,300
Total Nonfarm	4,620,500	-784,800	Recovered	Nov-22	4,200

Source: CA EDD, LMID, CES; analysis by LAEDC IAE

*Recovery month is the first of two-months with consecutive positive job growth over February 2020 (last month prior to restrictive health orders issued) **Recovered industries in bolded yellow font

POVERTY AND THE COVID-19 PANDEMIC

Both poverty and income inequality in California and Los Angeles County have increased since the onset of the COVID-19 pandemic.

While inflation impacts the entire economy, rapidly rising prices often negatively affect low-income individuals. When prices are high, lower-income households typically spend more than they earn by dipping into savings and taking on debt, as wages are slower to react.

Inflation significantly impacts those who rely on cash instead of investing in real estate, stocks, or bonds. Lowincome households find it relatively difficult to own a home compared to other income groups. With real estate ownership providing one of the most effective hedges against inflation, low-income households do not have the same opportunity as higher-income households to protect against the adverse wealth effects of inflation. Lower-income households often hold more wealth through cash balances than higher-income households. Cash balances are relatively unprotected against the negative effects of inflation on purchasing power compared to more sophisticated forms of holding wealth, such as stocks and bonds.

The prospect of further economic pain via inflation for low-income households builds upon a situation where the national, California, and Los Angeles poverty rates rose during the pandemic (Figure 9). Severe income inequality has been associated with slower economic growth and other adverse impacts on health, crime, and social cohesion. Supporting the growth of a more equitable and prosperous local economy will be critical for the continued economic health of Los Angeles.

With Los Angeles County home to more impoverished households than any other county in the nation and the specter of inflation looming for low-income households, it is also important to look at income inequality. Income inequality has been rising over the last ten years in Los Angeles County (Figure 10). While the rate of growth was more drastic in the early 2010s, 2020 saw the largest growth in the past five years, suggesting that the pandemic has led to greater income inequality. Los Angeles County has the worst income inequality in Southern California, though the neighboring counties of Orange and Ventura outpaced Los Angeles' increase in the ratio last year.

In the early 2010s, the pace of change was more drastic. However, the percent change from 2020 to 2021 was the highest in the last five years, indicating that the pandemic has led to greater income inequality. Los Angeles County has the worst income inequality in Southern California, though the neighboring counties of Orange and Ventura outpaced Los Angeles' increase in the ratio last year.

Income inequality has been shown to hamper economic growth and lessen the percentage of income spent in the economy, in addition to other ramifications in health, crime, and social cohesion. Supporting the growth of a more equitable and prosperous local economy will be critical for the continued economic health of Los Angeles.

Figure 9:

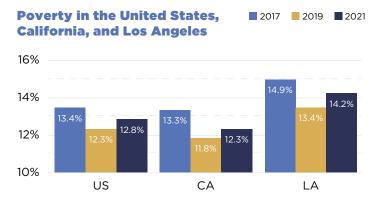
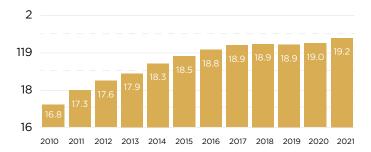


Figure 10:

Income Inequality Index

Los Angeles County



SMALL BUSINESS: THEIR VULNERABILITY CONTINUES

Inflation and the threat of a recession in 2023 create headwinds that threaten further economic gains for small businesses.

Small businesses have spent the last two years rebounding from the economic dislocations caused by the COVID-19 pandemic. However, there are indications that their struggle is not yet over. Inflation and the threat of a recession in 2023 create headwinds that threaten further economic gains.

A recent analysis by the Office of Advocacy in the U.S. Small Business Administration (SBA) finds that small businesses recovered unevenly by size and industry in the first year after the President's emergency declaration on the COVID-19 outbreak. While firms with 1 to 4 employees saw robust growth in the net number of establishments (5.2 percent) and the number of employees (13.5 percent), most other small business categories experienced no net growth in establishments and net losses in employment (Figure 11). In fact, firms with 50 to 99 employees saw a net decrease in employment of 7.8 percent. The SBA analysis indicates that much of the employment losses were concentrated in the leisure and hospitality industry.

By April 2022, small businesses were continuing their recovery from the pandemic, but many reported that there was still a long way to go. The Small Business Pulse Survey conducted by the U.S. Census Bureau asked small businesses about their expectations for the length of time needed to return to normal operations. About 40 percent stated that full recovery would need at least another 4 months, while another 12.8 percent indicated that their businesses likely would never return to normal. (Figure 12).

Today, with the pandemic set more and more in the rearview mirror, small businesses have turned their attention to another pressing issue: inflation. The National Federation of Independent Business (NFIB) reports that 32 percent of the businesses surveyed said that inflation was their number one problem (Figure 13). The quality of labor was second at 23 percent, and taxes were a distant third at 11 percent. This compares with one year ago when inflation was the second-ranked concern at only 22 percent.

Figure 11:

Net % Change by Firm Size

Employment Size	Establishment	Employment
1-4	5.2	13.5
5-9	1.1	0.2
10-19	0.3	-3.8
20-49	O.1	-6.9
50-99	O.1	-7.8
100-499	-0.1	-7.6
500+	-0.9	-4.8
All	2.2	-4.4

Note: Color formatting scaled to maximum absolute value in the table (-13.5 is yellow and 13.5 is blue). Source: BED.

Figure 12:

Question: Expected Time Before This Business Returns to Its Normal Level of Operations (As of 4/11/2022 to 4/17/2022)

Answer	Percentage
1 month or less	0.8
2 to 3 months	7.4
4 to 6 months	3
Over 6 months	2.6
Business will never return to normal	12.8
Business has permanently closed	1.5
There has been little or no effect	19.1
Business has returned to normal	22.7
	99.9

Note: Numbers do not sum to 100.0 because of rounding. Source: U.S. Census Bureau, Small Business Pulse Survey

NFIB also reports that an increasing number of small businesses expect sales and business conditions to deteriorate in 2023. This, coupled with concerns over pervasive inflation, led to another decline in the NFIB Small Business Optimism Index (Figure 14). The index, currently at 89.8, marks the 12th consecutive month that the index has been below the 49-year average of 98. Moreover, the index has not fallen to these levels in roughly the past 10 years and now sits below the levels witnessed during the COVID-19 pandemic.

THE SBA notes that one interesting phenomenon has arisen from the COVID-19 pandemic: a sharp rise in business applications, as measured by the Census Bureau's Business Formation Statistics. These show that as of September 2022, monthly business applications have exceeded pre-pandemic highs in every month since June 2020. This spurt of business creation helps explain some of the strength in establishments and employment exhibited by firms with 1 to 4 employees. However, it also creates some cause for concern since many businesses start to presage many business failures over the next five years or so, given the difficulties that startups face in keeping afloat. Should there be many business failures in the coming years, these entrepreneurs and workers could place stress on the labor market as they rejoin the workforce.

Figure 14: Optimism Index

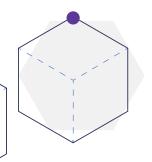
Based on Ten Survey Indicators Seasonally Adjusted (1986=100)



Figure 13:

The Single Most Important Problem for Small Businesses

	December 2022				
Problem	Current	One Year Ago	Survey High		
Taxes	11	14	32		
Inflation	32	22	41		
Poor Sales	4	5	34		
Fin. & Interest Rates	3	0	37		
Cost of Labor	8	13	13		
Government Regulation	6	10	27		
Comp. from Large Bus.	5	0	14		
Quality of Labor	23	25	29		
Cost/Avail. of Insurance	5	3	29		
Other	3	8	31		



Looking Ahead: Planned Federal and State Investment Provide Optimism

Federal and state governments are poised to make sizeable investments in California and Los Angeles County that could transform the regional economy.

Although there are some dark clouds on the national horizon regarding inflation and the possibility of a recession later this year or next, there are also bright spots. Namely, the federal government is poised to make sizeable investments in California and Los Angeles County. These investments over five years could transform the regional economy by facilitating the movement of people and freight, as well as enhancing the quality of life of our residents.

The most prominent investments come through the 2021 Bipartisan Infrastructure Deal, also known as the Infrastructure Investment and Jobs Act. The Bipartisan Infrastructure Deal promises to repair and rebuild America's transportation network; expand access to clean drinking water; provide access to high-speed internet to all Americans; address the climate crisis; advance environmental justice; and invest in traditionally underinvested and disinvested communities. Combined with the Build Back Better Framework, it is expected to add, on average, 1.5 million jobs nationally per year for the next 10 years.⁹

⁹ See whitehouse.gov/briefing-room/statements-releases/2021/11/06/ fact-sheet-the-bipartisan-infrastructure-deal/.

¹⁰ See rebuildingca.ca.gov/iija-by-the-numbers

California will receive infrastructure investments from the Bipartisan Infrastructure Deal through formula funding and competitive grants. It is estimated that over 5 years (Fiscal Year 2022 through Fiscal Year 2026), California will receive \$41.9 billion in formula funding alone. As of October 2022, the federal government has announced approximately \$6.5 billion in grants and \$7.5 billion in formula funding to California, with the formula funding being allocated as follows:

- Roads, bridges, and freight projects: \$4.938 billion
- Active and public transportation: \$1.962 billion
- Safety: \$331 million
- Climate, energy and the environment: \$228 million
- Electric vehicles, buses and ferries: \$57 million
- Ports and waterways: \$10 million

It is estimated that the \$3.25 billion already spent in Bipartisan Infrastructure deal funds in California has generated 42,308 jobs to date.¹⁰

Federal investments are also coming to California through other avenues, for example, the Build Back Better Regional Challenge program of the American Rescue Plan. This \$1 billion program is intended to boost economic recovery from the COVID-19 pandemic and help rebuild American communities, including disinvested communities. In 2022, California was awarded \$67.1 million through the Build Back Better program, of which \$49.0 was awarded to the innovative Fresno-Merced Future of Food (F3) coalition. Across all American Rescue Plan programs, California was awarded nearly \$195 million.¹¹

In addition to the federal investment identified, California has a series of large-scale investment programs funding projects throughout the State, including The Road Repair and Accountability Act of 2017 (SB-1) and the Community Economic Resilience Fund (CERF) program.

¹¹ See eda.gov/funding/programs/american-rescue-plan/build-backbetter.

The United States

While recovering from the economic pain brought by the COVID-19 pandemic was paramount in 2021, inflation and the Federal Reserve's response to it dominated the national narrative this past year. Rapid price increases, at levels not seen since the stagflation of the 1970s and early 1980s, threatened to become entrenched in the U.S. economy and hurt both households and businesses over the long term. To combat this, the Federal Reserve attempted to cool the economy and rein in inflation by raising the federal funds rate seven times in 2022.

As 2023 opens, inflation shows improvement but remains stubbornly high. At the same time, the economy shows continued strength, with the U.S. GDP reporting solid growth in the second half of 2022 and the labor market experiencing robust job production and record low unemployment. Moreover, the Federal Reserve remains committed to taming inflation. Consequently, the overarching question for the year is, can the Federal Reserve successfully orchestrate a soft landing for the economy (i.e., two quarters of flat growth) without pushing the country into a recession?

While the final figures for 2022 are still being tallied, U.S. GDP is expected to increase at a real annualized rate of just 1.1 percent for the year, falling by -1.6 percent in the first quarter, dropping another -0.6 percent in the second quarter, and increasing by 3.2 percent and 2.9 percent in the third and fourth quarters, respectively¹³ This comes after a year of rapid growth, rebounding from the economic dislocations of the pandemic.

While recovering from the COVID-19 pandemic was foremost in 2021, inflation and the Federal Reserve's response to it dominated the national narrative in 2022.

Real personal income showed strong growth through 2021. The sizeable 5.4 percent gain in 2020 reflected the large stimulus payments issued by the federal government to address the pandemic. However, the expected decline of 0.5 percent for 2022 indicates the bite that inflation has had on the nation.

The U.S. labor market has rebounded from the pandemic as well. The U.S. labor force reached 164.3 million in 2022, 748,000 higher than the pre-pandemic level in 2019. The unemployment rate, which was 5.4 percent in 2021, improved significantly during the year closing out 2022 with an annualized rate of 3.7 percent, the same annual unemployment rate as in 2019 before the pandemic hit.

The Consumer Price Index also rose significantly again in 2022 as consumers continued spending despite higher prices and tightening monetary policy. The inflation rate rose to 8.0 percent in 2022, representing the highest inflation rate since 1979.

United States Headline Statistics and Forecast							
	2018	2019	2020	2021	2022f	2023f	2024f
Real GDP Growth	2.3%	2.9%	-2.8%	5.9%	1.1%	0.8%	1.5%
Real Personal Income Growth	2.8%	3.6%	5.4%	3.4%	-0.5%	2.8%	3.1%
Total Employment Growth	1.6%	1.3%	-5.8%	2.9%	4.1%	1.0%	0.4%
Unemployment Rate	3.9%	3.7%	8.1%	5.4%	3.7%	4.2%	4.7%
СРІ	2.4%	1.8%	1.2%	4.7%	8.0%	4.0%	2.5%

¹³ Bureau of Economic Analysis. "National Income and Product Accounts." https://apps.bea.gov/iTable/iTable. fcr2ice.id=10% to accounts.

cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey

Returning to labor markets, after losing nearly 21 million jobs between March 2020 and April 2020, the monthly pre-pandemic comparison for nonfarm jobs turned positive starting January 2022, according to the U.S. Department of Labor. As of January 2023, nonfarm employment in the U.S. is close to 2.8 million jobs higher than in January 2020, with 152.8 million jobs in 2023 compared to 150.1 million jobs in 2020.

The U.S. labor market has been experiencing a steady decline in the labor force participation rate since its peak in the late 1990s/early 2000s. The supply side of the labor market has been severely impacted due to the COVID-19 pandemic, which caused a sudden and significant decline in the labor force participation rate at the onset of the pandemic.

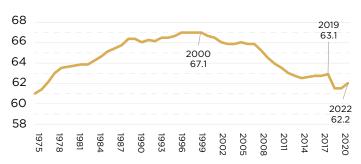
While it has been slow to recover, the trajectory of the labor participation rate has been positive, with workers returning to the workforce. For the first time since 2019, the labor force participation rate has risen above 62 percent. While it is still below its pre-pandemic rate of 63 percent and far off the pre-Great Recession mark of 66 percent, the 0.5 percent increase indicates workforce participation rebounding and adjusting to a new equilibrium (Figure 15).

Employee quits have moderated slightly but remain higher than seen before the pandemic. The "Great Resignation" of 2021 resulted in an economy-wide quits rate of 3 percent in both November and December. The number of workers quitting has decreased only slightly since then. As of December 2022, the quit rate was still at 2.7 percent, 0.4 percentage points higher than in January 2020, just before the pandemic hit (Figure 16).

The record-high number of job openings continued from 2021 through 2022, as did the difficulty in filling those openings. In 2021, the gap between annual average job openings and hires hit an all-time high amidst a tight labor market; however, this opening/hiring gap has not only persisted but has increased even wider in 2022. According to the U.S. Bureau of Labor Statistics, in 2021, job openings exceeded hires by just over 3.5 million per month; in 2022, they exceeded hires by around 4.7 million.¹⁴ In fact, 2022's gap between job openings and hires was greater than the two highest pre-pandemic years on record combined (Figure 17).¹⁵

¹⁴ Bureau of Labor Statistics. 2021. "Job Openings, Hires, and Separations Levels, Seasonally Adjusted." https://www.bls.gov/charts/jobopenings-and-labor-turnover/opening-hire-seps-level.htm In 2022, the number of hires averaged 6.3 million per month, well below the average number of job openings, totaling just over 11 million. One year earlier, in 2021, job openings averaged close to 9.8 million, while hires equaled around 6.3 million. The historically high gap between job openings and hires has negatively impacted many businesses, and labor shortages are particularly hard on small businesses.

Figure 15:



U.S. Labor Force Participation Rate

Figure 16:

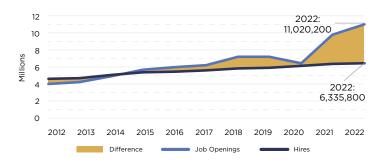
Quits Rate, Total Nonfarm

Seasonally Adjusted



Figure 17:

Gap Between Job Openings and Hires



¹⁵ The two next highest years were 2018 with 16,692 and 2019 with 15,915.

MAJOR ECONOMIC INDICATORS: INFLATION RATE

Inflation became the main economic headline in 2022, and how the Federal Reserve handles it will be the main economic headline of 2023.

The nation currently finds itself in a period of sharply rising prices for goods and services. The U.S. Consumer Price Index measured inflation by 8.0 percent over 2022 (Figure 18). This is notable because it is far higher than the Federal Reserve's target of 2.0 percent and is a level unseen in over two generations: not since the stagflation of the 1970s and early 1980s has the United States experienced such rapid price rises.

There have been multiple reasons cited for this high inflation. These include the boost in demand created by the more than \$2 trillion in savings Americans have accumulated during the pandemic; large-scale Federal Reserve debt purchases; approximately \$3 trillion in fiscal stimulus passed by Congress; and soaring stock and real estate prices.

Regardless, this level of inflation is concerning. Inflation erodes households' purchasing power and savings, interfering with businesses' operations as they experience higher input costs. But high inflation is especially pernicious because it upends people's expectations for the future. Under inflationary conditions, households have trouble planning for the future, especially when buying a house, moving across the country for work, and making other large financial and personal decisions. Businesses similarly have trouble making hiring and investment decisions for the future.

These expectations have significant implications for the nation's economic outlook over the foreseeable future, which is why the Federal Reserve is taking concerted steps to get the inflation rate back under control.

While inflation did measure 8.0 percent for 2022, the most recent release in December showed an annualized rise of only 6.5 percent. This follows monthly declines in the year's second half, so there is some optimism that inflation could return to more manageable levels.

Figure 18:

Over-the-year % change in U.S. CPI-U



REAL GROSS DOMESTIC PRODUCT

With the losses of 2020 recouped in 2021, 2022 was a year of slow growth, with more such years forecasted to follow.

Real gross domestic product (GDP) fell 2.8 percent in 2020 as a response to the pandemic, as important industries faced varying degrees of restrictions on business that constrained their output. Subsequently, 2021 was characterized by economic recovery, with real GDP growth soaring to 5.9 percent over the prior year of disruption, recouping the whole loss (Figure 19).

In 2022 and beyond, economic growth portends to be more moderate, with yearly real GDP growth expected to reach 1.1 percent in 2022. In 2023, we predict a mild recession may occur, but overall growth for the year will remain positive. In 2024, we forecast growth to rebound to 1.5 percent.



Figure 19: United States Real GDP Growth by Year

THE STOCK MARKET

The weak performance of stock markets and increasing volatility in 2022 suggest investor pessimism heading into 2023.

Contrary to their strong performances in 2020 and 2021, U.S. securities markets experienced sizeable losses and increasing volatility in 2022. As leading indicators of future economic conditions, the equity markets suggest pessimism, or at least significant uncertainty, for the Federal Reserve's ability to tame inflation without pushing the country into recession.

The Dow Jones Industrial Average (DJIA), a stock market index that tracks 30 large and prominent publicly owned companies, declined 9 percent for the year, from 36,585 on January 1 to 33,147 on December 30 (Figure 20). This decline was relatively small compared to those experienced by the other major indices, as described below, but still nearly met the threshold for a market correction (i.e., a 10 percent decline). The DJIA also exhibited increasing volatility in 2022, including large swings in the summer and fall, as the markets processed the implications of continued high inflation readings and Federal Reserve rate hikes.

The S&P 500 index tracks just over 500 common stocks issued by large-capitalization, publicly traded companies. The S&P 500 fell nearly 20 percent in 2022, doubling the decline of the DJIA (Figure 21). In doing so, the S&P 500 also nearly entered a bear market, represented by a 20 percent drop. The S&P 500 showed significant volatility in 2022 as well, similar to that witnessed in the DJIA. Because the S&P 500 tracks a broader range of stocks than the DJIA, it is thought to be much more representative of the entire securities market.

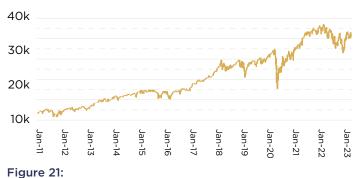
The NASDAQ Composite index includes nearly all the stocks listed on the Nasdaq Stock Exchange. It is also considered more representative of the broader market. However, it heavily weighs information technology stocks like Apple, Amazon, and Tesla. In 2022, the NASDAQ Composite fell almost 34 percent, from a high of 15,832 on January 3 to 10,466 on December 30 (Figure 22). The NASDAQ Composite also exhibited increased volatility, although this was somewhat overshadowed by the steep declines in the index.

The poor performance of these indices, particularly the NASDAQ Composite, indicates investor concerns about the Federal Reserve's ability to orchestrate a soft landing for the economy. A recession would severely impact consumers' ability to purchase goods and services, especially technology purchases that could be considered discretionary in many ways. The disparate performance of the DJIA compared to the S&P 500 and the NASDAQ Composite also suggests that larger, nontechnology companies might be better positioned to weather an economic downturn than smaller businesses.

Figure 20:

Dow Jones Industrial Average

Index, Daily, Not Seasonally Adjusted



S&P 500 Index

Index. Daily. Not Seasonally Adjusted

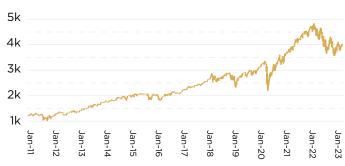


Figure 22:

NASDAQ Composite Index

Index Feb 5, 1971=100, Daily, Not Seasonally Adjusted



CONSUMER SENTIMENT

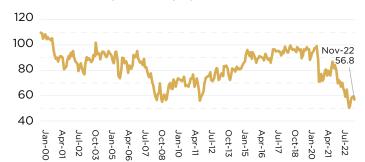
Consumer sentiment has recently reached lows not seen since the Great Recession.

The University of Michigan Consumer Sentiment Index provides insight into U.S. households' expectations regarding the nation's economy. A monthly survey is sent to households across the United States to measure changes in attitudes concerning personal finances, business conditions, and consumer purchases. Figure 26 tracks the Consumer Sentiment Index from 2000 through 2022.

Although the substantial decline in consumer sentiment at the onset of the pandemic was less pronounced than the drop following the 2008 financial crisis, it was significantly more sudden.

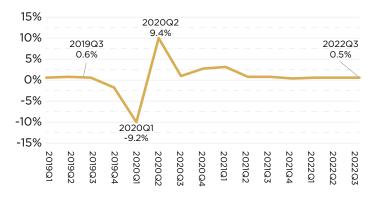
Consumer sentiment began trending upward in the summer of 2020 as the economy began reopening. However, it took another drop starting late summer of 2021. This fall continued through the summer of 2022 as price levels rose before a small rebound around year-end. Currently, consumer confidence has eroded in response to inflation concerns, with relatively high inflation contributing to pessimistic consumer expectations of the economic future.

Figure 23:



Consumer Sentiment Index 2000 to 2022 Index 1966:Q1=100, Monthly, Not Seasonally Adjusted

Figure 24: % Change in Real Personal Consumption Expenditures



CONSUMER SPENDING

Consumer spending has been holding steady, despite rising prices as consumers spend down their savings.

Savings, the gap between consumer income and consumer spending, accumulated during the first two years of the pandemic. Additionally, spending patterns changed in response to restrictive health orders intended to slow the spread of the virus; previous spending on services and entertainment switched to spending on goods, paying down debt, or keeping money in reserve.

U.S. consumer spending, encouraged by multiple rounds of U.S. government stimulus checks and supplemental unemployment benefits, remained strong in 2021. Savings has been propping up consumer spending throughout 2022, even though consumer income has moderated with the ending of stimulus payments and other pandemic-related assistance programs that boosted income for many through the latter half of 2020 and in 2021. Quarterly changes in total consumer spending hovered between increases of 0.5 percent and 0.6 percent during the first 3 quarters of 2022.¹⁶

In the next two years, consumer spending will likely exhibit slower growth as the economy cools in response to persistent inflation, tightening federal monetary policy, and depleting savings. But given that we do not expect a recession in 2023 or 2024, consumer spending should not see declines over this period.

¹⁶ U.S. Bureau of Economic Analysis, Personal Consumption Expenditures [PCE], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PCE, December 24, 2021.

EMPLOYMENT

Employment in the U.S. continued to grow in 2022, closing much of the unemployment gap created by mass layoffs at the start of the COVID-19 pandemic.

After two years of high unemployment, as the economy wrestled with the impacts of the COVID-19 pandemic, the unemployment rate in 2022 fell to the same level as in 2019, 3.7 percent (Figure 25). Outside of the first two months of 2022, the unemployment rate remained below 4 percent throughout 2022, indicating that, after two years, there is no discernable impact of the COVID-19 pandemic on the national unemployment rate. With the Fed's attempt to cool the economy, the annual unemployment rate is not expected to decline.

Figure 26 displays the year-over-year percent changes in nonfarm employment for the United States, California, and Los Angeles County since 2000. Employment changes are shown year-over-year to control for potential seasonality effects. Employment estimates from 2022 show a strong recovery, with nearly six million nonfarm jobs added since 2021 for an annualized growth rate of 4.1 percent. However, new employment challenges remain. The Fed's efforts to cool the economy to control inflation portends a negative impact on employment.

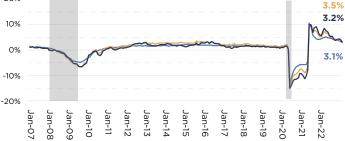
Figure 25:

Unemployment Rate in the U.S.



The sector with the most growth and the highest growth rate in the U.S. was Leisure and Hospitality, adding 1.6 million jobs for a growth rate of 11.1 percent. The Leisure and Hospitality sector growth accounted for more than a quarter of the jobs regained in 2022. The hiring in this sector closed much of the unemployment gap created by mass layoffs at the start of the COVID-19 pandemic, with the sector approaching its pre-pandemic employment level. Looking forward, Leisure and Hospitality in the U.S. is expected to continue adding jobs, with employment in the sector expected to reach 16 million in 2023. However, employment in the sector is not expected to surpass prepandemic levels in the next few years, as establishments may have closed or jobs may have been automated. The forecasted leader in job growth is the Educational and Health Services sector, with a growth rate of 2.6 percent. Meanwhile, the Construction, Natural Resources, and Mining sector is expected to decrease slightly, and very little job growth is expected in the Professional and Business Services sector.

Figure 26: Year-over-year % Change in Nonfarm Employment (NSA) 20% 20% 3.2 3.2



HOUSEHOLD DEBT PAYMENTS AND DISPOSABLE INCOME

Household debt payments as a percent of disposable income have reached parity with the pre-pandemic level. Real disposable income per capita is now just below the pre-pandemic level.

Household debt payments represented around 9.8 percent of disposable income at the beginning of 2020 before the pandemic struck. This figure was around 9 percent in April 2021 (Figure 27) as interest rates were lowered and the Coronavirus Aid, Relief, and Economic Security (CARES) Act granted many homeowners the right to mortgage forbearance. The decreased interest owed and participation in forbearance programs reduced debt payments throughout the U.S. economy.

However, these measures were short-lived, as interest rates have the Fed has increased rates to control inflation, and the CARES Act benefit has come to an end. As a result, the ratio has been on the rise and has parity with the pre-pandemic level of 9.8 percent as of July 2022.

Figure 27: Household Debt Service Payments as a % of Personal Disposable Income

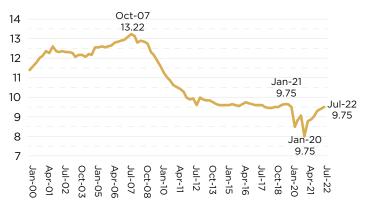
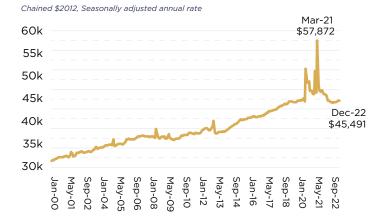


Figure 28:

Real Disposable Income Per Capita



Real disposable income per capita increased dramatically in the months following the onset of the pandemic. This spike is largely due to the impact of the economic stimulus provided by the CARES Act and the increase in unemployment benefits paid out in the early months of the pandemic. The disproportionate loss of low-income jobs after the pandemic-induced downturn may have also contributed to this observed spike as measured per capita income was higher than it would have been otherwise. After the spike, real disposable income per capita fell just as quickly as it grew, with these programs ending. As of December 2022, real disposable income per capita reached nearly \$45,500, slightly lower than the approximately \$46,000 in February 2020.



22

California

The California economy is moving beyond pandemicrelated recovery and will instead be concerned about the effects of national monetary policy and global supply chain instability.

As with the nation, California is moving into a new economic paradigm: state policymakers are shifting their focus from overcoming the pandemic's economic impacts to addressing the effects of national monetary policy and global supply chain instability on the State. This progression is due to the number of signs that indicate California has discovered its oft-mentioned "new normal," with employment indicators showing parity with their pre-pandemic levels and discussions of consumer spending now refocused around cooling demand to temper high inflation. Additionally, the aggressive tightening of monetary policy at the national level has stoked fears that continued action by the Federal Reserve in early 2023 might lead to a shallow recession for the nation, which would affect California's economic condition. Moreover, while global supply chains are more stable than during the midst of the pandemic, supply chain pressure remains elevated, with the continued Russo-Ukraine war, China's pandemic recovery, and the nearshoring/ally-shoring of intermediate inputs all impacting global trade flows.

Although national monetary policy and global supply chains cannot be influenced at the State level, California's government can focus on planning for the impact of these and other pressing economic issues, such as fostering equitable economic development and addressing the housing needs of communities.

The year 2022 was characterized by continued nonfarm employment growth and California's unemployment rate dipping below pre-pandemic levels for the latter half of the year. The State's yearly GDP growth and personal income growth moderated compared to 2021, when most of the economic recovery occurred, and all stimulus payments ended.

In 2023, job growth is expected to slow, with a forecasted nonfarm job growth rate of 0.8 percent. The Construction, Natural Resources, Mining, Manufacturing, Trade, Transportation, and Utilities, and Financial Activities sectors are all expected to see a contraction in the workforce in 2023, with most of those sectors experiencing a further contraction in 2024. The sector where the most job growth is expected in the coming years is Educational and Health Services, forecasted to grow by 3.0 percent and 1.9 percent in 2023 and 2024, respectively.

The State has made steps to clear red tape from the development of housing, promote density, and facilitate the construction of affordable housing to address the housing crisis. Development of new construction, whether it is residential, commercial, or industrial, will be an essential counterweight to the impact of the Fed's interest rate changes on investment in the State. Beyond interest rate changes, 2023 may see a continued decrease in California's population and a change in the dynamics of the commercial real estate market, both of which could pose issues for the State in the long term.

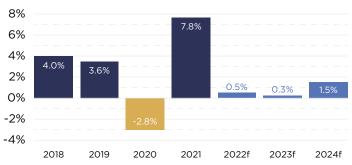
California Headline Statistics and Forecast							
	2018	2019	2020	2021	2022f	2023f	2024f
Real GDP Growth	4.2%	3.2%	-2.3%	7.8%	0.5%	0.3%	1.5%
Real Personal Income Growth	1.8%	4.9%	6.6%	3.7%	0.5%	4.1%	4.4%
Total Employment Growth	2.1%	1.5%	-7.1%	3.2%	5.0%	0.8%	0.2%
Unemployment Rate	4.3%	4.1%	10.2%	7.3%	4.4%	4.9%	5.5%
CPI	3.4%	2.7%	1.7%	4.5%	7.7%	4.5%	2.9%

MAJOR ECONOMIC INDICATORS: REAL GROSS STATE PRODUCT

Growth in real GSP cooled after a strong 2021.

In 2021, as California recovered from the pandemicinduced shutdowns, the real gross state product grew by 7.8 percent over the prior year. Economic growth is projected to continue through 2024, albeit at much lower rates, as the economy cools in response to the Fed's tightening monetary policy. California's real gross state product in 2022 and 2023 is forecasted at 0.5 percent or less, followed by 1.5 percent growth in 2024.

Figure 29:



California Real GDP Growth by Year

UNEMPLOYMENT

California's unemployment rate finally returned to prepandemic levels.

Similar to the national experience, it took roughly 24 months for the State's unemployment rate to reach prepandemic levels, though pandemic-induced restrictions enacted in California resulted in a more extended period of high unemployment rates during the period. Additionally, despite California's labor force participation rate being lower than the national rate after the onset of the COVID-19 pandemic, the State's labor force participation rate is now much closer to the national average, even surpassing it for several months during the summer of 2022.

In 2022, the employment situation continued to improve, with California's unemployment rate dipping below its pre-pandemic level for the first time in the latter half of 2022; from July to December 2022, the State's unemployment rate was at or below 4.1 percent. Over the last three years, unemployment has become more equally distributed across demographic groups in California. In 2020, when the pandemic hit, youth ages 16 to 19 years, women, and nonwhite workers experienced higher rates of unemployment compared to their older, male, and white peers; unemployment rates ranged from 9.5 percent to 23.6 percent in December of 2020, a 14.1 percentage point spread. From December 2020 to December 2022, the unemployment rate for youth ages 16 to 19 years, women, and nonwhite workers fell by 12.1 percentage points, 6.9 percentage points, and 6.2 percentage points, respectively. Unemployment rates ranged from 4.0 percent to 4.7 percent in December 2020, with only a 0.7 percentage point spread across the different demographic groups.

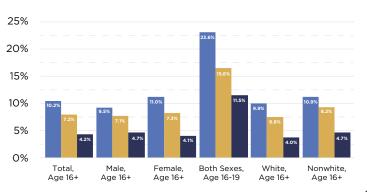
Looking ahead, the State's unemployment rate is expected to rise slightly as the economy begins to cool, reaching 4.9 percent in 2023 and 5.5 percent in 2024.

Figure 30: Unemployment Rate in California



Figure 31:

Unemployment Rate by Demographic Group, California



Dec-20

Dec-2

Dec-21

EMPLOYMENT

Employment in hardest hit service sectors have yet to return to pre-pandemic levels, while knowledge-based industries have more than fully recovered.

Job gains in 2022 built upon those experienced in 2021. Employment growth in California accounted for close to fifteen percent of national employment growth for 2022. Nonfarm employment in the State grew by 5 percent in 2022. Leisure and Hospitality was the fastest-growing industry in the State, with a growth rate of 16.1 percent, adding 264,700 jobs in 2022.

Other Services (which include personal care and laundry services) and Information also experienced rapid job growth in 2022, with growth rates of 9.5 percent and 6.2 percent, respectively. Despite recovering most of the jobs lost in the first year of the pandemic in 2021, the Trade, Transportation, and Utilities, Professional and Business Services, Educational and Health Services, and Information sectors each experienced further job growth in 2022; those four sectors, along with Construction, Natural Resources, and Mining, have reached their pre-pandemic employment levels. These represent many of the largest sectors of the California economy, where employment levels have fully recovered from the pandemic or have grown beyond recovery, signaling a curtailing of their recent rapid growth.

The Leisure and Hospitality industry experienced the greatest job loss between 2019 and 2020. In 2021 and 2022, Leisure and Hospitality gained more jobs than any other industry; combined across the two years, this industry added 424,300 payroll jobs, slightly more than 75 percent of those lost in the first year of the pandemic. Payrolls still remain 128,000 jobs below the pre-pandemic level. This industry continues to be negatively impacted by low levels of international tourism, continued use of virtual platforms instead of in-person events, and the adoption of long-term fully remote and hybrid work schedules, jeopardizing a return to the industrial employment level seen pre-pandemic.

In 2023, job growth is expected to slow, with a forecasted nonfarm job growth rate declining to 0.8 percent. The sector where the most job growth is

expected in the coming years is Educational and Health Services, forecasted to grow by 3.0 percent and 1.9 percent in 2023 and 2024, respectively. Construction, Natural Resources and Mining, Manufacturing, Trade, Transportation, and Utilities, and Financial Activities sectors are all expected to see a contraction in the workforce in 2023, with most of those followed by further contractions in 2024.

Figure 32: Change in Payroll Employment, 2019 to 2022

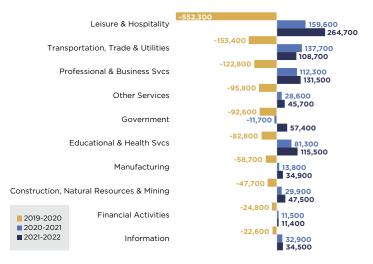
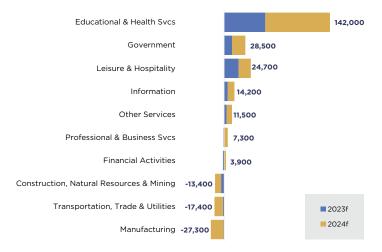


Figure 33:

2022 to 2024 Employment Growth by Industry



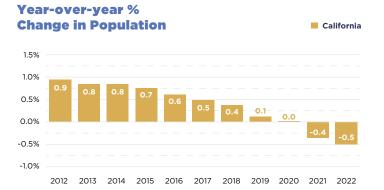
POPULATION MIGRATION

California's population growth rate has been steadily declining since 2012. The rate of population change due to migration far outweighs the decline due to natural population change.

There has been a steady decline in California's population growth rate since 2012, culminating with the loss of over 210,000 residents in 2022; the year prior, the State experienced its first decline in population in over ten years, losing 170,000 residents. In 2021, the number of deaths in California rose about 25 percent; however, this corresponded with a slight decrease in the number of births, leading to a natural increase of only 76,000 people. This level of natural increase is half of what was seen in 2020 and a third of what was seen in 2016, a notable decline in the rate of natural population increase.

The rate of population change due to migration is even more drastic than the decline due to natural population change: while domestic net migration has increased from an exodus of 34,000 in 2012 to 407,000 in 2022, foreign net immigration has fallen from 128,000 to just 90,000 over the same period, with a fall to 27,000 in 2021. These two forces have resulted in net migration becoming negative in 2016 and, with the increase in natural population dropping down, the fall in the total population of the State.

Figure 34:



This gradual decline can be seen in Figure 34, which shows percent change, as California goes from increasing its population by a little less than one percent each year to experiencing its first decline in over a decade.

Further declines in the annual natural population increase and net total migration into California could have implications over the longer term on the State's economic vitality and should be a cause for concern for California policymakers.

TODAY'S RESIDENTIAL REAL ESTATE MARKET

Since the Great Recession, the California housing market has deviated from the general trend of affordability observed for the nation at-large.

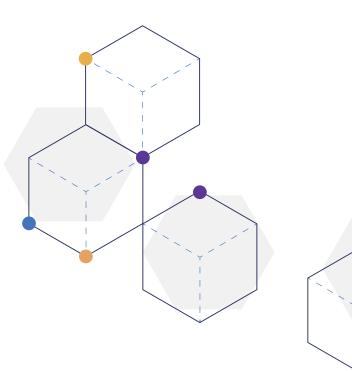
Though California and the United States were similarly unaffordable ahead of the 2008 Global Financial Crisis, the nation is now far more affordable than the State, with more than twice the percentage of households able to purchase a single-family home. The Housing Affordability Index, published by the California Association of Realtors, measures the percentage of households that can afford to purchase a single-family home at the median list price of each geography, facilitating a comparison of affordability across geographies. The index has shown that the pandemic has made housing even more unaffordable for households, with the figure for California falling to just 18 percent.

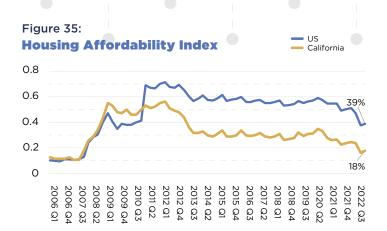
Looking at the median home price gives insight into why affordability has dropped since the onset of the pandemic, as there haven't been major declines in median household income following the pandemic. The fall is largely a supply-side effect, as the affordability crunch has resulted from higher home prices than most households' wealth.

The pandemic has seen median home prices skyrocket: when the housing market was at its peak, prices were 25 percent higher than pre-pandemic levels in California and 12 percent higher in Los Angeles. However, after increasing for the first six months of 2022, the housing market has begun cooling as interest rates rise and households have less cash. There is an element of seasonality, as home prices tend to fall in the latter half of the year; however, macroeconomic effects and a shifting economy give hope to a steady decline in median home prices to increase affordability in the California housing market.

The affordability of rental units is also an important issue, as 44.1 percent of occupied housing units in California are renter-occupied, and homeownership rates dip below 55 percent. The data show that renters are spending an overly large portion of their incomes on housing: 54.8 percent of units in California are considered costburdened, defined as paying 30 percent or more of a household's income on rent by the Department of Housing and Urban Development.

California's high cost of living, driven mainly by housing costs, remains an ongoing public policy challenge that reduces opportunities for many of the State's residents. A healthy and sustainable housing market in California requires increases in affordability for rental- and owneroccupied units. Consequently, finding ways to incentivize new and affordable housing construction should be a priority of state policymakers.





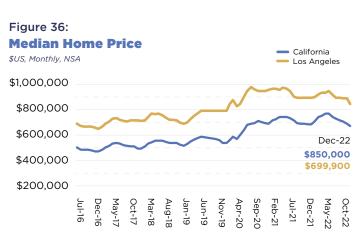
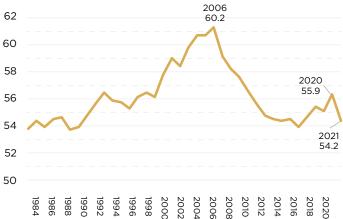


Figure 37: California Homeownership Rates by Year (%)



CALIFORNIA STATE INVESTMENT

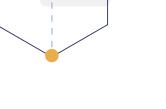
In addition to the federal investment identified, California has a series of large-scale investment programs funding projects throughout the State, including The Road Repair and Accountability Act of 2017 (SB-1) and the Community Economic Resilience Fund (CERF) program.

The Bipartisan Infrastructure Deal grabbed the headlines in 2021 because of the scope and scale of the investments planned nationally. California, however, had already begun a series of large-scale investment programs years earlier.

The Road Repair and Accountability Act of 2017 (Senate Bill 1 or SB 1) was one of these. Signed into law by Governor Jerry Brown, SB 1 was designed to invest \$54 billion in transportation repairs and improvements over 10 years. This includes fixing California's roads and bridges, reducing traffic delays, improving goods movement, and increasing options for transit, intercity rail, and active transportation.

In Fiscal Year 2022/23, California is set to spend \$1.4 billion in SB 1 funding to support nearly \$8 billion of projects across the State. Most of these funds are earmarked for the State Highway Operations and Protection program and the Trade Corridor Enhancement Program. Projects in and around Los Angeles County are set to receive \$368 million in SB 1 funding in Fiscal Year 2022/23 to support \$1.7 billion in projects.¹⁷ The Community Economic Resilience Fund (CERF) is a more recent high-priority investment program. Governor Gavin Newsom's administration created the CERF program to promote a sustainable and equitable recovery from the economic distress of the COVID-19 pandemic. The intention was to support new strategies to help diversify local economies and to develop sustainable industries with high-quality, broadly accessible jobs.¹⁸

The CERF program's funding of \$600 million was initially expected to come from American Rescue Plan appropriations. However, the California Legislature in 2022 modified the source of funds to come instead from the State General Fund. CERF expects to allocate \$5 million to each of 13 Regional Collaboratives - one of which is led by the Los Angeles County Economic Development Corporation - that will then have the opportunity to apply for competitive grants totaling approximately \$500 million from 2023 to 2026.



- ¹⁷ See rebuildingca.ca.gov/sb-1-by-thenumbers.
- ¹⁸ See opr.ca.gov/economic-development/cerf/

Los Angeles County

While Los Angeles County employment has not fully recovered from the COVID-19 pandemic, remaining shortfalls are concentrated in tourism-related industries. Current and future federal, state and local investments present opportunities for growth and resilience moving forward.

Los Angeles has weathered the many impacts of the COVID-19 pandemic; however, there remains an employment gap of 25,000 jobs in December 2022 compared to December 2019. This deficit in prepandemic employment is concentrated in only a few sectors, such as Leisure and Hospitality, Manufacturing, and Wholesale Trade. At the same time, other sectors have experienced robust growth coming out of the pandemic, including Educational and Health Services and Professional and Business Services. While the recovery in total employment is promising, these shifting trends in sectorial employment, should they continue, have the power to shape the future of the Los Angeles economy.

One of the lingering effects of the pandemic (which directly impacts employment in the Leisure and Hospitality industry) is the lack of tourism. LAX's December air traffic data show that domestic and international arrivals remain around 75 percent of prepandemic levels. The volume of international visitors has been greatly depressed by the lack of tourism from China, although this could change in 2023 as the country reopens from COVID-19-related restrictions.

While the reduction in visitors affects the local economy, so does the exodus of its residents. The California Department of Finance estimates that over 300,000

Angelenos have left the county since 2019, with the City of Los Angeles shouldering more than half of that decrease. One commonly cited reason for leaving is the unaffordability of the housing market in the region.

At the same time, Los Angeles County should benefit from significant funding through announced public investment and private procurement. Notably, the State's Community Economic Resilience Fund and the Economic Development Agency's Build Back Better are intended to bring equitable, accessible, and sustainable jobs to the region.

Overall, the forecasted economic indicators for Los Angeles County point to a small economic contraction, despite the principal economic concerns brought on by the COVID-19 pandemic mainly being resolved. The growth in real GCP slowed after its big recovery in 2021, with the forecast for the coming year expecting a slight decrease. Meanwhile, real personal income lost most of the increase it experienced in 2021, with 2023 expected to be a year with limited growth before a modest increase in 2024. Nonfarm employment growth did not fully rebound from the effects of the pandemic, nor is it forecasted to do so in the coming years. Meanwhile, the unemployment rate dropped close to the pre-pandemic level, though a slight labor market contraction is expected to increase in the coming years. Finally, though the consumer price index (CPI) rose at a rate not seen in decades in 2022, it is expected to gradually decline in 2023 and 2024 as inflation returns to around prepandemic rates.

Los Angeles Headline Statistics and Forecast							
	2018	2019	2020	2021	2022f	2023f	2024f
Real GDP Growth	3.4%	2.5%	-5.8%	7.8%	0.1%	-0.2%	1.3%
Real Personal Income Growth	1.2%	1.4%	3.1%	6.2%	-6.0%	0.1%	2.3%
Total Employment Growth	1.6%	1.5%	0.8%	-11.8%	5.4%	0.2%	0.2%
Unemployment Rate	4.8%	4.7%	4.6%	12.8%	4.9%	6.4%	6.7%
CPI	3.8%	3.1%	1.6%	3.8%	7.9%	5.2%	3.5%

MAJOR ECONOMIC INDICATORS: REAL GROSS COUNTY PRODUCT

The Los Angeles County economy is expected to flatline in 2022 and 2023 as the economy cools.

Gross county product is expected to have grown by just 0.1 percent in 2022 and is projected to drop by -0.2 percent in 2023. Although growth is expected to essentially flatline over these two years, there are expectations that growth in the county will resume in 2024, with the GCP expanding by 1.3 percent once inflation has moderated and the Fed has stopped its tightening of monetary policy (Figure 38).

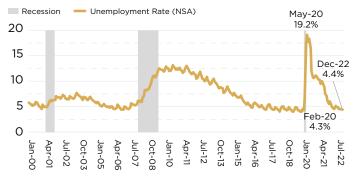
Figure 38:



Los Angeles County Real GCP Growth by Year

Figure 39:

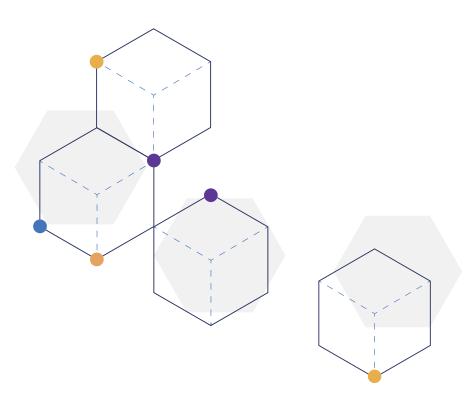




UNEMPLOYMENT

The unemployment rate in Los Angeles County has nearly returned to its pre-pandemic rate.

Unlike the United States and California, the annual unemployment rate for the region remains slightly above the pre-pandemic level, at 4.4 percent in December 2022 compared to 4.3 percent in February 2020 (Figure 39). The bulk of the year-over-year change, a drop of 4.0 percent from 2021 to 2022, occurred from October 2021 to February of 2022; since March, the unemployment rate has continued to fall, but not at the same pace as before, indicating that the county is reaching its 'new normal' in the aftermath of the COVID-19 pandemic.



EMPLOYMENT

Los Angeles County continues to steer the California economy due to the size of its population and reputation as a center of commerce.

Employment changes in Los Angeles County are very similar to those experienced by California, as the county represents roughly a quarter of all jobs in the State. As of December 2022, total payroll employment in Los Angeles County reached 4,629,500 jobs; this remains slightly below the pre-pandemic peak in December 2019 of 4,654,500 jobs by 25,000 jobs (Figure 40).

In 2022, Los Angeles saw a 5.4 percent increase in nonfarm jobs compared to 2021. The fastest growing industries by growth rate were Leisure and Hospitality and Other Services, expanding by 15.6 percent and 13.3 percent, respectively. Despite also leading in terms of jobs added, only about 70 percent of the pre-pandemic employment in the Leisure and Hospitality sector has returned, with close to 45,000 jobs still missing. Furthermore, the Leisure and Hospitality sector is forecasted to decrease in size in 2023 and 2024, so the jobs lost during the pandemic are not expected to return immediately.

Pre-pandemic employment levels have been exceeded in the Construction, Natural Resources, and Mining, Information, Professional and Business Services, and Educational and Health Services.

Over the next two years, job growth will be led by gains in Educational and Health Services employment; however, with employment in Leisure and Hospitality, Manufacturing, Trade, Transportation, and Utilities, and Government expected to fall, it may be a long time before employment levels in those sectors reach those seen before the pandemic, if at all.

Figure 40: LA County Total Wage and Salary Employment



Figure 41: Change in Payroll Employment, Dec-19 to Dec-22

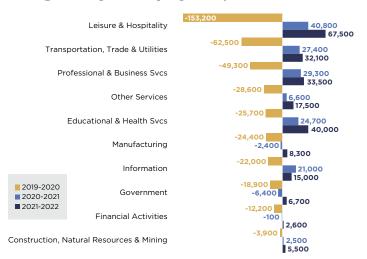
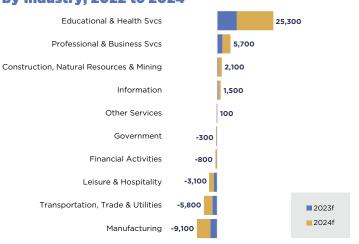
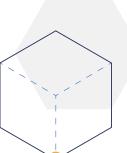


Figure 42: Forecasted Employment Growth by Industry, 2022 to 2024





Notable Trends

Post-pandemic changes have occurred in labor force participation, income inequality, demographics, housing, daytime populations, and commercial real estate.

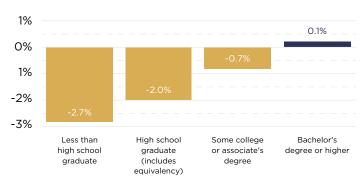
LABOR FORCE PARTICIPATION

The unemployment rate in Los Angeles County has nearly returned to its pre-pandemic rate.

Comparing the 2019 and 2021 American Community Survey 1-year estimates provides insight into changes in the labor force during the pandemic. The labor force participation rate for the county was still depressed in 2021, with an overall decrease of 1.0 percent. By age, the labor force participation of those older than 55 increased, while young workers and prime-age workers drove the fall. Additionally, while women did not see a decrease in their labor force participation, the rate of men in the workforce fell by 1.7 percent.

Figure 43:

Change in Labor Force Participation Rate by Educational Attainment, 2019 to 2021



The exodus from the workforce was led by those with lower educational attainment: those with a bachelor's degree or higher were the only group to not see decreases in labor force participation, while the rate of those without a high school education fell by 2.7 percent. One of the largest increases in labor force participation was seen by those with a disability; as remote work became more commonplace, it enabled access to a greater number of jobs for individuals with a disability, leading to an increase of 4.9 percent in their labor force participation rate.

POPULATION DECLINE

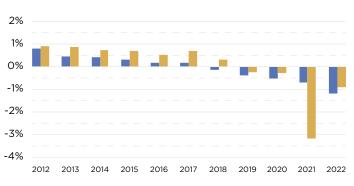
Los Angeles, both the county and the city, have seen an acceleration in the decline of their population since the onset of the COVID-19 pandemic.

Los Angeles County's rapid rate of population decline is the headline among demographic changes, as the county has seen a decrease in its population each year since 2018. The rate of population decline has also been increasing, from 0.1 percent leaving in 2018 to 1.1 percent in 2022, resulting in the population falling below 10 million for the first time since 2012. While the City of Los Angeles saw a sharp drop in population in 2021, population levels in 2022 have resumed the previous, more gradual decline.

Figure 44:

Year-over-year Percent Change in Population

Los Angeles County City of Los Angeles



Like in California, this change resulted from a sudden increase in deaths, leading to a very small natural increase in the population. Also, the county's number of births has steadily declined, falling below 100,000 in 2021. This is coupled with the changes in migration, with net migration changing from a 5,000-person increase in 2012 to a 135,000-person decrease in 2022.

However, not all cities in the county are experiencing a decrease in population. Northern areas in Los Angeles County have experienced increases in the past few years. Lancaster, Palmdale, and Santa Clarita had growth rates of 8.1 percent, 6.7 percent, and 3.5 percent, respectively, from 2020 to 2022. Other areas, such as Long Beach and Pomona, also saw increases, adding fewer than 1,000 residents each between 2021 and 2022. Meanwhile, the City of Los Angeles has seen significant declines in the population, losing 122,000 residents from 2020 to 2021 and 34,000 the following year. The geography with the next largest drop was the county's unincorporated areas, which lost 27,000 residents over the two periods. While the county's overall population is declining, the population effects are geographically heterogeneous.

HOUSING AFFORDABILITY

Municipalities recognize the need to quadruple their current rates of housing construction to address urgent affordability issues.

As detailed above, California is dealing with a housing crisis, with Los Angeles being one of the most troubled areas of the State in this regard. Compared to 18 percent of households in California being able to afford a median-priced single-family home, only 13 percent of Los Angeles County households can do so. This is because of a tremendous 22 percent jump in the median home price between January and August 2020, from roughly \$800,000 to about \$975,000. Since that initial spike and the subsequent two years spent above \$900,000, the price has fallen but remains 6 percent above the January 2020 figure. Renters also face affordability difficulties, with 58.8 percent of county units and 60.6 percent of the City of Los Angeles units spending more than thirty percent of their income on housing. One of the main ways to increase affordability is to increase the supply of housing stock by building new units. The Regional Housing Needs Assessments (RHNAs), completed by each city, convey the scale of new construction municipalities believe needed to house their residents. In Los Angeles County, the total number of units needed between 2021 and 2029 is over 812,000, with 457,000 in the City of Los Angeles.

The map shows the growth in units between 2020 and 2022: in those two years, 43,155 units were added across the county, with more than 70 percent, or 30,219 units, coming in the City of Los Angeles. This means that the region needs to more than quadruple its current rate of housing construction to meet the goals laid out by RHNAs, with more development needed in smaller cities around the county.

CHANGES IN DAYTIME POPULATION

The drop in primary daytime occupancy was starkest among the areas once filled with workers, such as central business districts. These changes affect real estate demand, prices, and future supply.

A significant number of workers in knowledge-based industries, such as Professional and Business Services, Financial Activities, and Information, transitioned to working remotely from home during the pandemic. While initially considered by many to be a temporary measure, many jobs have made their shift to remote work or hybrid work schedules permanent. These changes affect real estate demand, prices, and future supply.

Without comprehensive local data on the number or rate of individuals working from home, LAEDC analyzed the changes in where individuals throughout Los Angeles County primarily spend the hours between 9am and 5pm. The analysis focused on changes in the average primary daytime occupancy of a census block group¹⁹ from January 2020 (pre-pandemic) compared to January 2021, 2022, and 2023 to detect changes from the prepandemic pattern and account for seasonality.

Figure 50 shows how the overall level of primary daytime occupancy fell by 20 percent in the first year of the pandemic, followed by another 12 percent in the second year. As a result, January 2022 saw primary daytime occupancy levels at just two-thirds of what they were before the onset of the pandemic. However, January 2023 shows a rebound beyond the pre-pandemic baseline, as unemployment levels have returned to their 2019 numbers, and workers are again spending much of their day in the same place.

The maps show the change in primary daytime occupancy between January 2020 and each of the three Januarys since the onset of the pandemic in the census tract geography. The census tracts shown are restricted to just those in the top quartile of primary daytime occupancy in 2020, signaling that they were where many people spent working hours; areas shown include Downtown Los Angeles, Mid-Wilshire, El Segundo and LAX, Downtown Long Beach, Torrance, the San Gabriel Valley, and others. Areas in green have seen primary daytime occupancy in January increase by more than 10 percent that year, while those in red have decreased by 10 percent or more. In 2021, the central business districts shown all experienced stark declines in primary daytime occupancy; Downtown LA was hit especially hard, with the Financial District and South Park having a January 2021 daytime occupancy of less than a tenth of what was since before the COVID-19 pandemic. That decline continued and deepened going into 2022, with most census tracts that previously had high daytime occupancy seeing levels stay below 75 percent of the pre-pandemic average.

This pattern changed in 2023: daytime occupancy in most high occupancy areas bounced back to 90 percent

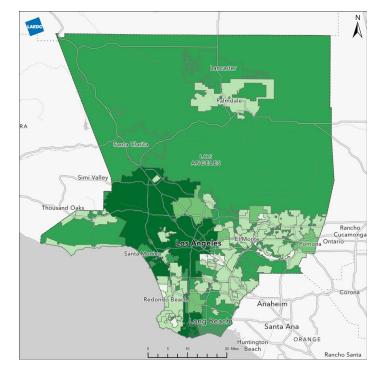
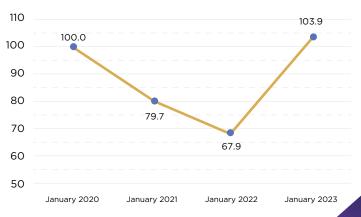
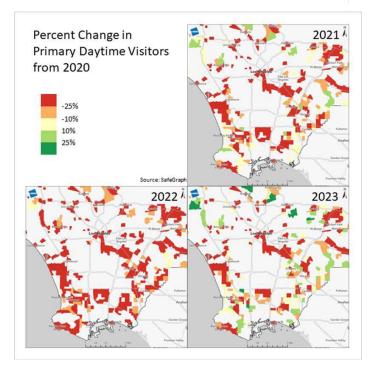


Figure 45: Primary Daytime Visits

% of January 2019 visists (2019=100)



¹⁹ Using census block group level data from SafeGraph

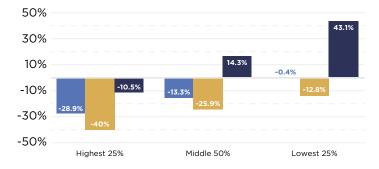


working hours in the area. The drop in primary daytime occupancy was starkest among the areas once filled with workers during the daytime, such as central business districts, falling by more than a quarter in the first year, with the second year showing a 40 percent drop in primary daytime occupancy. Meanwhile, the lowest quartile was barely affected in the first year, while the impact on the middle fifty percent did not reach the magnitude of the highest quartile; in January of 2022, both areas saw a decrease compared to the prior year. However, levels in 2023 show that those in the bottom 75 percent of pre-pandemic primary daytime occupancy are above pre-pandemic levels, while the highest quartile has seen a major rebound, indicating that a large number of workers have returned to central business districts.

Figure 46:

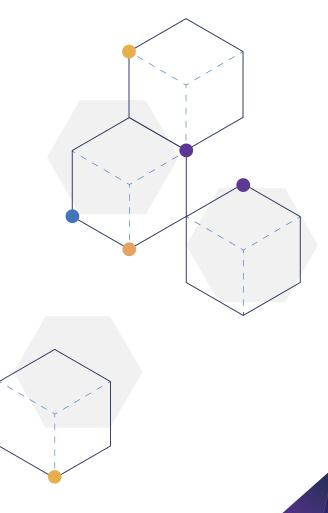
Change in Primary Daytime Visitors by Density Quartile

% change from January 2020 visists (2020=100)



of its previous level, with multiple areas seeing increases of 10 percent and even more than 25 percent above pre-pandemic levels. Notably, the downtowns of Los Angeles, Long Beach, and El Segundo and LAX have not fully recovered yet; the rebound is mainly observed in the South Bay, Gateway Cities, and Verdugos regions of the county.

This rebound is apparent when the data is aggregated based on the pre-pandemic primary daytime occupancy. Those in the highest quartile had the highest daytime primary occupancy levels, while those in the lowest quartile did not have many individuals spending



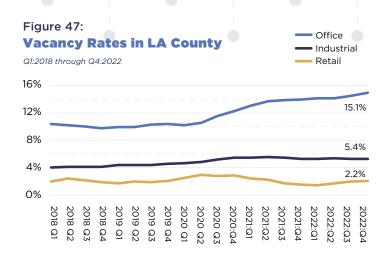
THE SHIFT IN COMMERCIAL REAL ESTATE

The pandemic has reshaped central business districts; the location and class of buildings affect vacancy rates.

As the economic landscape of Los Angeles County shifts, it is important to understand the pandemic-induced changes and future expectations of the commercial real estate market. The pandemic has reshaped central business districts due to the plethora of office space no longer leased and the number of retail establishments that have shuttered without commerce from those office workers. Meanwhile, macroeconomic effects have also impacted the industrial sector, which saw an increase in vacancy in 2022 despite a decrease from 2020 to 2021.

Reports from Jones Lang Lasalle22 show that, in the last quarter of 2022, total office vacancy reached a record high at 22.5 percent, about one and half times the pre-pandemic vacancy rate, with the number forecasted to rise moving into 2023. Leasing activity remains depressed, with the fourth guarter registering 2.2 million square feet worth of leasing, far below the pre-pandemic five-year average of 3.7 million square feet. For the third year in a row, net absorption of office space was negative, despite consistent increases in the delivery of new office space into the market; notably, the 2022 net absorption figures are higher than in 2020 or 2021. Additionally, more tenants are attempting to sublease their space as much of it is no longer needed in many companies' new modes of working. While average direct asking rents for office leases remain stable, around \$3.86 per square foot, sublease rents have fallen over the year as the market has become more saturated, with an average asking rent of \$3.10 per square foot.

Additionally, the location and class of buildings affect the vacancy rate. Class C buildings in downtown Los



Angeles have the highest total vacancy at 45.2 percent, but only make up less than 3 percent of space in the area. Class B office buildings make up a much larger percentage, around a quarter of square footage in Downtown Los Angeles, and have a higher-than-average vacancy rate of 27.3 percent, while Class A buildings in Downtown Los Angeles have a rate of 20.6 percent. For Class A buildings, vacancy is lowest in the central business district of downtown Los Angeles, while urban areas, such as Mid-Wilshire, the South Bay, Tri-Cities, and Westside, and suburban areas, like the north of the county and San Gabriel Valley, have slightly higher rates. However, the opposite is true for Class B buildings, with lower vacancy outside of the central business district, which helps pull down the total vacancy rate for the region.

Data from NAI Capital show a slight uptick in vacancy for industrial properties in 2022, rising to 2.2 percent, with Jones Lang Lasalle²³ anticipating it to grow in 2023. However, there is still demand for large spaces among major corporations. This demand has increased the average asking price for direct leases, though the

Vacancy Rates in Los Angeles County by Location and Class Type

	Class A	Class B	Class C
Central Business District	20.6%	26.4%	44.2%
Urban Areas	25.3%	18.9%	-
Suburban Areas	21.4%	17.7%	-

Source: Jones Lang Lasalle

sublease prices have fallen. In 2023, direct asking prices are expected to remain stable, while sublease asking prices are expected to continue falling. Total availability for industrial space is lowest in the San Fernando Valley (2.5 percent) and highest in the San Gabriel Valley (4.8 percent), with most areas averaging between 3 and 4 percent.

Data from NAI Capital shows that retail vacancy rates remain elevated compared to the pre-pandemic period, though they have fallen since their peak in 2021 (Figure 53). A report from Kidder Matthews indicates that, while vacancy rates remain elevated, average asking prices and rents are over 10 percent higher than in the fourth quarter of 2022. This may be due to reduced supply, as less than 65 percent less retail square footage was released into the market, and over 25 percent less was under construction in the fourth quarter of 2022 compared to the previous year. Meanwhile, the net absorption in the fourth quarter of 2022 was negative, as more space became available than was rented, marking a decrease in the annual net absorption from 2021.

LOCAL GOVERNMENT INVESTMENT

Local county and city governments are undertaking their own efforts to attract and facilitate regional investments to transform the economy positively and equitably.

While constrained financially, both Los Angeles County and the City of Los Angeles are undertaking their own efforts to attract and facilitate regional investments in infrastructure over the next few years. These efforts share the goal of helping transform the economy positively and equitably.

For example, by adopting a motion on July 13, 2021, the Los Angeles County Board of Supervisors acted preemptively to maximize the allocation and use of American Rescue Plan funds. The Board recognized that an estimated \$1.9 billion in funding from the American Rescue Plan was available to the county and another \$2.6 billion across its 88 cities. The Board decided to strategically use these funds to maximize the benefits for communities suffering disproportionate health and

²³ See ceo.lacounty.gov/recovery/arp/.

²⁴ https://kidder.com,

economic impacts from the COVID-19 pandemic, and so established specific equity principles and guidelines for their use.

At the city level, the Los Angeles Department of Water and Power launched the innovative HyDeal LA (later renamed HyBuild LA) in conjunction with the Green Hydrogen Coalition. Through the partnership, the City of Los Angeles is working to become the first city in North America to accelerate green hydrogen at scale. The goal is to develop the production of low-cost, green hydrogen that can displace fossil fuels based on price and, in so doing, decarbonize the economy and reduce local pollution. Ultimately, the initiative will serve as a template for other cities nationwide.

> The Community Economic Resilience Fund (CERF) Program was created to promote a sustainable and equitable recovery from the economic distress of COVID-19 by supporting new plans and strategies to diversify local economies and develop sustainable industries that create high-quality, broadly accessible jobs for all Californians.

> To achieve this goal, the State will allocate \$600 million across thirteen designated regions to fund the development of region-specific economic development strategies that support the creation of quality jobs and equal access to those jobs.

LAEDC serves as the regional convener for the Los Angeles Region for the CERF program.

LOOKING FOR MORE DATA?

The appendix of this report includes forecast tables and quick facts for the United States, California, the 5-county Southern California region and for each of its individual counties. It is available at the LAEDC website at: https://laedc.org/economicforecast2023/ or upon request.

Appendix

UNITED STATES

Quick Facts	
Population*	331.9 million
Prime Age %*	39.0%
Gross Domestic Product**	\$19.4 trillion
Median Household Income*	\$69,700
Poverty Rate*	12.8%
Pre-Pandemic Unemployment Rate (20	19)^ 3.7%
Current Unemployment Rate (2022)^	3.7%

Source: *2021 ACS 1-year estimates, **Bureau of Economic Analysis 2021 (2012 Chained Dollars), ^Bureau of Labor Statistics

Economic Metrics	2018	2019	2020	2021	2022e	2023f	2024f	
Real GDP Growth	2.3%	2.9%	-2.8%	5.9%	2.1%	0.8%	1.5%	
Real Personal Income Growth	2.8%	3.6%	5.4%	3.4%	-0.5%	2.8%	3.1%	
Total Employment Growth	1.6%	1.3%	-5.8%	2.9%	4.3%	1.0%	0.4%	
Unemployment Rate	3.9%	3.7%	8.1%	5.4%	3.7%	4.2%	4.7%	
СРІ	2.4%	1.8%	1.2%	4.7%	8.0%	4.0%	2.5%	
Home Sales	-	-	-	8.5%	-17.1%	-6.6%	7.9%	
Median Listing Price	\$292,000	\$309,000	\$332,000	\$367,000	\$417,000	\$368,700	\$371,600	

Employment Growth by Sector

Construction, Natural Resources, and Mining	4.5%	1.0%	-3.8%	1.6%	4.0%	-0.1%	-0.4%
Manufacturing	2.1%	0.0%	-4.7%	3.2%	3.7%	0.4%	-1.8%
Trade, Transportation, and Utilities	0.6%	0.5%	-2.3%	7.0%	3.4%	0.3%	-0.2%
Information	1.3%	1.4%	-6.0%	7.5%	6.0%	1.0%	0.8%
Financial Activities	1.9%	1.9%	-1.1%	2.0%	2.0%	0.3%	1.0%
Professional and Business Services	2.2%	1.3%	-3.3%	6.2%	4.8%	0.0%	0.6%
Education and Health Services	2.0%	2.4%	-4.4%	3.2%	3.2%	2.6%	1.8%
Leisure and Hospitality	1.3%	2.3%	-24.0%	16.0%	11.1%	2.3%	0.3%
Other Services	0.8%	1.2%	-10.2%	5.0%	4.4%	1.6%	1.6%
Government	0.6%	1.0%	-4.6%	3.4%	1.2%	0.9%	0.7%

CALIFORNIA

Quick Facts	
Population*	39.2 million
Prime Age %*	41.2%
Gross State Product**	\$2.9 trillion
Median Household Income*	\$84,900
Poverty Rate*	12.3%
Pre-Pandemic Unemployment Rate (2)	019)^ 4.1%
Current Unemployment Rate (2022)^	4.1%

Source: *2021 ACS 1-year estimates, **Bureau of Economic Analysis 2021 (2012 Chained Dollars), ^CA EDD LMID

Economic Metrics	2018	2019	2020	2021	2022e	2023f	2024f
Real GDP Growth	4.2%	3.2%	-2.3%	7.8%	0.5%	0.3%	1.5%
Real Personal Income Growth	1.8%	4.9%	6.6%	3.7%	0.5%	4.1%	4.4%
Total Employment Growth	2.1%	1.5%	-7.1%	3.2%	5.0%	0.8%	0.2%
Unemployment Rate	4.3%	4.1%	10.2%	7.3%	4.4%	4.9%	5.5%
CPI	3.4%	2.7%	1.7%	4.5%	7.7%	4.5%	2.9%
Home Sales	-5.1%	-1.0%	3.5%	14.3%	-23.4%	-11.9%	4.5%
Median Listing Price	\$569,500	\$592,400	\$659,400	\$786,700	\$831,500	\$767,700	\$754,900
Employment Growth by Sector							
Construction, Natural Resources, and Mining	4.2%	2.1%	-2.2%	1.2%	3.6%	-0.6%	-0.8%
Manufacturing	0.6%	0.1%	-6.1%	2.4%	2.7%	-0.1%	-2.0%
Trade, Transportation, and Utilities	0.4%	0.7%	-4.1%	2.9%	3.6%	-0.1%	-0.5%
Information	1.8%	3.0%	-8.4%	7.6%	6.2%	1.3%	1.0%
Financial Activities	-0.1%	1.6%	-4.7%	0.6%	1.4%	-0.2%	0.7%
Professional and Business Services	3.6%	1.4%	-5.2%	6.3%	4.8%	0.0%	0.3%
Education and Health Services	2.6%	3.4%	-4.3%	3.5%	4.2%	3.0%	1.9%
Leisure and Hospitality	2.4%	1.9%	-35.4%	31.7%	16.1%	1.6%	-0.3%
Other Services	1.1%	1.1%	-24.1%	15.5%	9.5%	1.1%	1.1%
Government	1.0%	-0.1%	-7.4%	2.1%	2.4%	0.7%	0.5%

LOS ANGELES COUNTY

Quick Facts	
Population*	9.8 million
Prime Age %*	43.1%
Gross State Product**	\$711.8 billion
Median Household Income*	\$77,500
Poverty Rate*	14.2%
Pre-Pandemic Unemployment Rate (20	4.4%
Current Unemployment Rate (2022)^	4.9%

Source: *2021 ACS 1-year estimates, **Bureau of Economic Analysis 2021 (2012 Chained Dollars), ^CA EDD LMID

Economic Metrics	2018	2019	2020	2021	2022e	2023f	2024f
Real GDP Growth	3.4%	2.5%	-5.7%	7.9%	0.3%	-0.5%	1.1%
Real Personal Income Growth	0.4%	4.8%	4.4%		-0.2%	2.3%	4.6%
Total Employment Growth	0.4%	0.8%	-11.6%	4.4%	4.3%	0.2%	0.2%
Unemployment Rate	4.6%	4.4%	12.3%	8.9%	4.9%	6.4%	6.7%
CPI	3.8%	3.1%	1.6%	3.8%	7.4%	5.2%	3.5%
Home Sales					-24.6%	-11.4%	6.4%
Median Listing Price \$	5743,700	\$773,100	\$905,300	\$936,900	\$1,303,100	\$1,176,700	\$1,133,200
Employment Growth by Sector							
Construction, Natural Resources, and Mining	4.4%	1.0%	-4.1%	4.3%	3.5%	0.6%	0.7%
Manufacturing	-1.6%	0.0%	-9.8%	1.4%	2.7%	-1.5%	-1.4%
Trade, Transportation, and Utilities	0.3%	0.5%	-6.8%	3.2%	4.0%	-0.4%	-0.3%
Information	-1.5%	1.4%	-19.0%	8.2%	7.3%	0.4%	0.3%
Financial Activities	0.3%	1.9%	-7.3%	-0.1%	1.2%	-0.2%	-0.2%
Professional and Business Services	4.3%	1.3%	-9.9%	6.2%	5.4%	0.5%	0.4%
Education and Health Services	2.3%	2.4%	-4.3%	5.1%	4.8%	1.5%	1.4%
Leisure and Hospitality	2.3%	2.3%	-36.7%	33.5%	15.6%	-0.5%	-0.2%
Other Services	0.6%	1.2%	-27.8%	15.5%	13.3%	0.0%	0.1%
Government	1.0%	1.0%	-6.8%	4.4%	1.2%	-0.1%	0.0%



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