ECONOMIC OUTLOOK

The National Bureau of Economic Research reported in July 2021 that the COVID-19 Recession ended in April 2020, just two months after its official start, making it the shortest recorded recession ever, while also being the worst recession since the Great Depression. While both the U.S. and California economies recovered to their pre-pandemic GDP levels in the first half of 2021, national and state employment are both still significantly below their pre-pandemic levels and disruptions created by the COVID-19 Pandemic remain.

The recovery of the U.S. and California economies continued in the third quarter of 2021, albeit at a slower rate, and despite an increase in COVID-19 cases, high inflation, and ongoing supply chain challenges. Through November 2021, the U.S. had recovered over four-fifths of all jobs lost from the height of the recession while California had added back about 70 percent of its total job losses.

The U.S. and California outlooks incorporate the $1.2 trillion federal Infrastructure Investment and Jobs Act (IIJA), signed into law in early November, but do not assume enactment of the so-called "Build Back Better" (BBB) plan or other potential federal legislation under consideration.

As of mid-November when the economic forecast was finalized, the U.S. and California each had around 60 percent of their total population fully vaccinated, with the state's vaccination rate being about 5 percentage points higher than the nation. This marks a substantial improvement from vaccination rates reflected in the May Revision economic outlook (about one third for both the state and nation in April). Vaccines for children between the ages of 5 and 11 were approved in early November and booster shots were also made available for all adults. The economic forecast was finalized before the first known case of the Omicron variant.

The public health situation is the linchpin of the economic forecast. The forecast does not assume the emergence of a disruptive variant, which could lead to a delayed return to pre-pandemic labor force participation, persistent high inflation, and continued supply chain bottlenecks. If, however, cases, hospitalization, and death rates continue at generally manageable levels, the economic recovery may be stronger than reflected in the forecast.

Similarly, the forecast assumes the Delta, Omicron, or any future COVID-19 variants do not create any further major disruptions nationally and internationally, and supply chain bottlenecks will ease and regular production will be restored by early 2023. The Budget economic forecast projects continued real GDP growth throughout the forecast period and recovery to pre-pandemic levels of nonfarm employment by the end of 2022.

Structural (non-pandemic) downside risks to the forecast remain, including the challenges of an aging population, declining migration flows, lower fertility rates, higher housing and living costs, increasing inequality, and stock market volatility.

CONTINUED RECOVERY

Since April 2021 when the May Revision economic forecast was finalized, various assistance programs put in place in response to the pandemic have expired, including the federal emergency unemployment insurance programs and the federal and state eviction moratoria. Despite this, U.S. and California real GDP have continued to grow, though at slower rates than earlier in the year.

U.S. real GDP surpassed its pre-pandemic (fourth quarter of 2019) level in the second quarter of 2021, recovering from a drop of around 10 percent within just six quarters. The stark turnaround is remarkable; in comparison, during the Great Recession, the U.S. real GDP drop was just about one-third as deep as the contraction during the COVID-19 Recession, but the recovery took more than twice as long.

In this current expansion, real GDP growth has been driven by consumption of goods, which was 18 percent over pre-pandemic levels as of the second quarter of 2021, while consumption of services was still 3.4 percent below pre-pandemic levels. As the Delta variant exacerbated global supply chain bottlenecks, U.S. real GDP growth slowed from an average growth of 6.5 percent seasonally adjusted annualized rate (SAAR) in the first half of 2021, meaning that annual GDP growth would equal 6.5 percent if the quarterly increase was sustained for the entire year, to 2.3 percent SAAR in the third quarter. Much of the deceleration in the third quarter was due to goods consumption, with durable goods expenditures contracting by nearly 25 percent.

California real GDP recovered and surpassed its pre-pandemic level in the first quarter of 2021—one quarter earlier than the nation's recovery. California real GDP recovered within just five quarters after dropping by nearly 10 percent in the first half of 2020. In comparison, during the Great Recession, California real GDP took more than three times as long to recover from a contraction that was about half as deep. Similar to the nation, California real GDP slowed down to 2.9 percent (SAAR) in the third quarter of 2021, following an average of 9.9 percent (SAAR) in the first half of 2021.

The U.S. unemployment rate peaked at a historic-high 14.8 percent in April 2020 before decreasing steadily to 4.2 percent in November 2021, compared to 3.5 percent just before the pandemic (February 2020). In November 2021, there were still 1.2 million (20 percent) more unemployed than in February 2020 and 2.4 million fewer people in the labor force for a combined civilian employment deficit of 3.6 million people.

California's unemployment rate generally moves in line with the nation's rate, however, the state tends to experience sharper increases during economic downturns. Similar to the nation, California's unemployment rate reached a record-high 16 percent in April 2020 before decreasing to 6.9 percent in November 2021, or 2.6 percentage points higher than its February 2020 rate of 4.3 percent. As of November 2021, California's civilian employment was still 868,000 below pre-pandemic levels as there were 476,000 more unemployed Californians than in February 2020 and 392,000 fewer people in the labor force. Labor force participation rates remain lower than pre-pandemic rates, more so for men than women, and for groups with less education, as referenced in the Demographic Information Chapter.

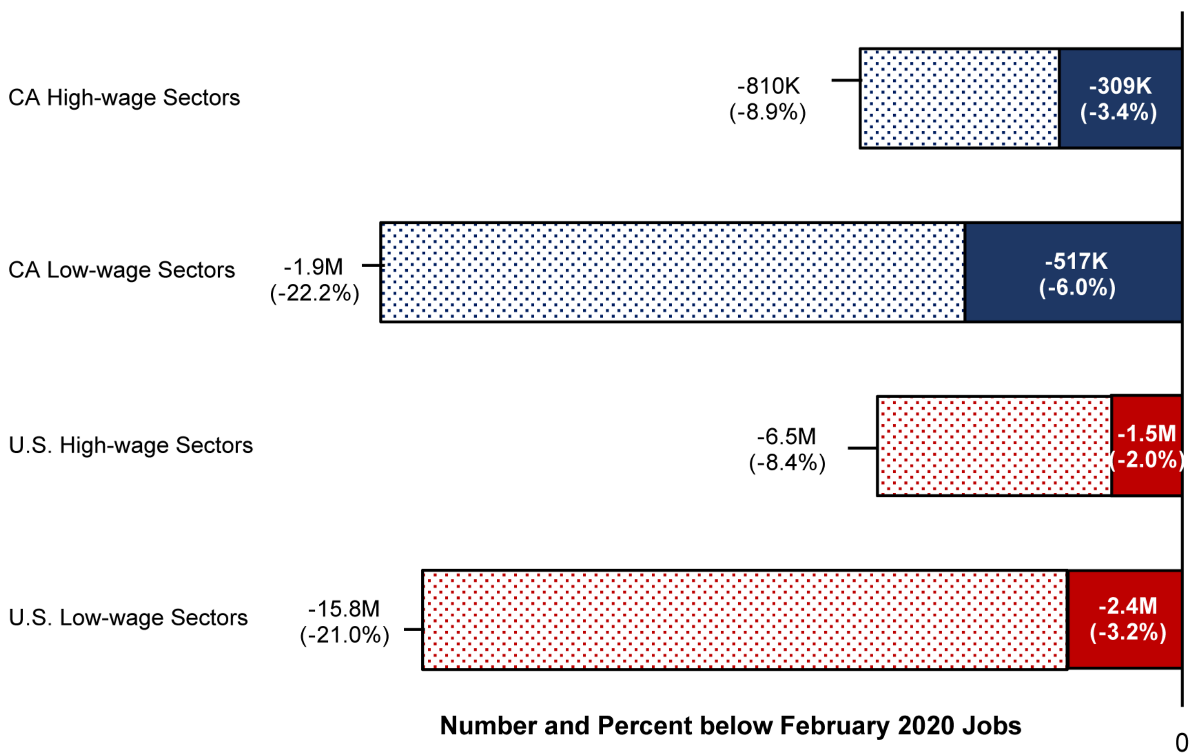
The U.S. added back nearly 18.5 million jobs between May 2020 and November 2021, or more than four-fifths of the 22.4 million nonfarm jobs lost in March and April 2020. The nation has consistently added jobs every month since May 2020 except in December 2020 when COVID-19 cases rose sharply. In response to the summer surge in cases due to the Delta variant, job growth slowed in the nation, averaging 405,000 jobs added per month between August and November 2021, compared to 650,000 jobs from January through July 2021.

Similarly, California added back 1.9 million jobs between May 2020 and November 2021, or about 70 percent of the 2.7 million jobs lost in March and April 2020. California was also negatively impacted by the 2020 winter surge in COVID-19 cases, as the state experienced two consecutive months of job losses in December 2020 and in January 2021. California's job growth then accelerated to an average of 112,000 jobs added per month from February to July 2021, before slowing to around 77,000 jobs added per month between August and November 2021. Since February 2021, California has accounted for one-sixth of the nation's gains while accounting for about one-eighth of U.S. nonfarm employment.

Low-wage sectors bore the brunt of job losses at the outset of the pandemic, and are further from pre-pandemic levels than their high-wage counterparts. As of November 2021, low-wage sectors in the U.S. and California were 3.2 percent and 6 percent below February 2020 levels, respectively, while high-wage sectors were 2 percent and 3.4 percent lower, respectively. This is despite low-wage sectors accounting for nearly three out of every four jobs added back since May 2020. Low-wage sectors are defined as sectors with average wages below the 2019 average wage for all industries and include leisure and hospitality, other services, educational and health services, and trade, transportation and utilities. (See figure on California and U.S. Jobs Relative to February 2020 by Wage Group.)

California and U.S. Jobs Relative to February 2020 by Wage Group

(Shaded bars correspond to April 2020; Solid bars correspond to November 2021)



Source: CA Employment Development Department, Labor Market Information Division, U.S. Bureau of Labor Statistics.

As employment losses were concentrated in lower-wage jobs, U.S. and California average wages skewed higher and grew by historically-high annual rates of 7.5 percent and 10.5 percent, respectively, in 2020. (California average wage growth was 4.4 percent in 2019, and averaged just over 3 percent during the post-Great Recession expansionary period.) Average wage growth remained strong in the first three quarters of 2021, exceeding 8 percent in California, despite a return of many low-wage jobs. Without underlying wage growth, the re-insertion of low-wage jobs would be expected to bring average wages down, reversing some of the composition effect in 2020. However, average wages continued to grow off of the higher 2020 levels, reflecting current labor market frictions with the low labor force participation rate prompting employers to increase wages. Workers have remained out of the workforce due to pandemic fears, taking care of children or other dependents, and due to a search for jobs that offer higher pay as well as better and more flexible working conditions.

California's total wages continued to grow in 2020, by 2.9 percent, despite total wages in leisure and hospitality falling by more than 20 percent and four other sectors experiencing declines in total wages. Wages account for roughly half of California's personal income. With most personal income components continuing to grow in 2020, including record-high growth in transfer payments, California's personal income grew by a historic 8.6 percent in 2020, and averaged 7.7 percent year-over-year growth in the first three quarters of 2021. In contrast, personal income fell by 3.4 percent in 2009 during the Great Recession. Transfer payments, which are payments from governments to individuals usually through social assistance programs such as unemployment insurance and Social Security, rose by a record 47.3 percent in 2020, compared to 13.1 percent in 2008 and around 11 percent in 2009 and 2010, during the Great Recession. Excluding transfer payments, all other personal income components combined grew by 1.9 percent in 2020, compared to a decrease of 5.6 percent in 2009 during the Great Recession. The non-transfer components of personal income have averaged a year-over-year growth of nearly 8 percent in the first three quarters of 2021.

As high-income earners were largely insulated from the negative impacts of the COVID-19 Recession and mortgage rates remained low, California's housing demand remained strong in 2020 and the median price for existing home sales rose to $717,930 in December 2020, 16.3 percent above the pre-pandemic record high of $617,410 set in August 2019. The median home price continued to rise in 2021, and was at $782,480 as of November 2021, following seven months above or near the $800,000 mark. On the construction side, following declines in permits in 2019 and 2020, total housing units authorized by permits rebounded in 2021, averaging 121,000 units through November

2021, 17.1 percent higher than the comparable period in 2020, and 10.6 percent higher than in the same period in 2019.

U.S. and California consumer inflation slowed to their lowest rates in five years in 2020, at 1.2 percent and 1.7 percent, respectively, as economic activity and movement were limited during the pandemic, driving inflation in gasoline, apparel, and rents down. Inflation in rents slowed in part due to rental protections put in place to support those who were negatively impacted by the pandemic, but also as a result of households being able to move away from more expensive urban areas to cheaper areas due to telework or hybrid arrangements.

As the economy reopened and vaccines became available, demand for goods and services rebounded sharply and inflation recovered to pre-pandemic rates in early 2021. Increasing home prices also started to contribute to faster overall inflation as there historically is a one-year lag before the value of homes is reflected in rental inflation. U.S. inflation exceeded 5 percent for seven consecutive months from May to November 2021, reaching 6.8 percent in November 2021—its fastest pace in nearly four decades. Similarly, California's inflation has been running above 4 percent since April 2021, but remained lower than the national rate due to a higher base rate in 2020. Elevated inflation in 2021 was driven by pandemic-induced factors (the prices of gasoline, air travel, and hotels skyrocketed due to strong demand) and supply chain disruptions (the global semi-conductor chip shortage reduced inventory for new cars, causing elevated inflation for new and used vehicles, and various shortages have driven up the prices of durable goods).

Assuming a gradual but steady improvement of the public health situation nationally and globally, which will allow for easing of supply chain and inflation challenges, the forecast projects continued steady growth for both the nation and the state.

U.S. FORECAST

The U.S. forecast incorporates developments in public health conditions, including higher vaccination rates and continued reopening of businesses, but also higher COVID-19 cases relative to April 2021 due to the Delta variant, as well as enacted federal stimulus packages as of mid-November 2021. This includes the $1.2 trillion Infrastructure Investment and Jobs Act (IIJA), signed into law in early November 2021. IIJA is assumed to add jobs incrementally starting in 2022, with a peak effect of raising national GDP and employment levels by around 0.5 percent in 2025, or by an estimated additional 750,000 jobs in that year.

Supply chain bottlenecks slowed GDP growth in the third quarter of 2021 through negative impacts on global production, shipping, and sales of goods, which have led to lower consumption even as private inventory was being depleted. The global supply chain bottlenecks are complex and their resolution depends on several factors, including national and global economic and public health conditions, and it will likely take several quarters until supply chain operations are back to normal. The economic forecast assumes that as pent-up demand and accumulated savings during the pandemic wane and as the public health situation improves nationally and globally, supply chain issues will be gradually resolved by early 2023.

After contracting by 3.4 percent in 2020, U.S. real GDP is projected to grow by 5.5 percent in 2021 and to gradually slow to 2.6 percent by 2025. Real GDP growth is assumed to remain largely driven by consumption (contributing over 70 percent of total GDP growth on average through 2025), followed by investment (contributing one-fourth). Consumption expenditures surpassed pre-pandemic levels in the first quarter of 2021, driven by early recovery of goods consumption in the third quarter of 2020 and continued strength throughout the pandemic. Services consumption is projected to recover to pre-pandemic levels in the first quarter of 2022. Inventory building, which is included in investment, is projected to contribute around one-fifth of GDP growth in 2022, as firms rebuild their inventories depleted in 2021 due to stronger than expected demand, as well as due to various supply shortages.

While U.S. real GDP had recovered by the second quarter of 2021, the return to full employment is expected to take longer. The U.S. unemployment rate is projected to decrease from an annual average of 8.1 percent in 2020 to 5.4 percent in 2021 and to continue to gradually fall to 3.5 percent by 2023 before slowly increasing to 3.8 percent by 2025. (See figure on Select Economic Indicators.)

This assumes the U.S. labor force recovers to its pre-pandemic level in the third quarter of 2022 and that the U.S. labor force participation rate recovers to 63.2 percent in mid-2024. U.S. nonfarm jobs are projected to recover to pre-pandemic levels by the third quarter of 2022 with high-wage sectors assumed to recover two quarters earlier than low-wage sectors. In terms of individual sectors, manufacturing and retail trade, two sectors that have been experiencing a long-term structural decline since before the pandemic, are not projected to recover within the forecast window, or through the end of 2025.

High inflation in 2021 was driven by high food and energy prices, supply chain issues impacting transportation and durable goods prices, and rising housing prices. The assumption of supply chain operations normalizing by early 2023 will allow for

Select Economic Indicators

	2018	2019	2020	Forecast 2021	2022	2023	2024	2025
United States								
Nominal gross domestic product, $ billions	$ 20,527	$ 21,373	$ 20,894	$ 22,904	$ 24,706	$ 25,978	$ 27,341	$ 28,742
Real gross domestic product, percent change	2.9%	2.3%	-3.4%	5.5%	4.3%	2.9%	2.7%	2.6%
Contributions to real GDP growth								
Personal consumption expenditures	2.0%	1.5%	-2.6%	5.4%	2.3%	1.6%	2.0%	2.1%
Gross private domestic investment	1.0%	0.6%	-1.0%	1.1%	1.6%	0.8%	0.6%	0.5%
Net exports	-0.3%	-0.2%	-0.3%	-1.3%	0.0%	0.2%	0.0%	-0.2%
Government purchases of goods and services	0.2%	0.4%	0.4%	0.1%	0.4%	0.2%	0.2%	0.2%
Personal income, $ billions	$ 17,706	$ 18,424	$ 19,628	$ 20,905	$ 21,106	$ 22,158	$ 23,323	$ 24,569
Corporate profits, percent change	2.9%	-0.2%	-3.1%	31.0%	-2.9%	3.4%	7.3%	6.4%
Housing permits, thousands [1/]	1,329	1,386	1,471	--	--	--	--	--
Housing starts, thousands	1,247	1,292	1,397	1,571	1,435	1,333	1,327	1,329
Median sales price of existing homes [2/]	$ 261,600	$ 274,600	$ 300,200	--	--	--	--	--
Federal funds rate, percent	1.8%	2.2%	0.4%	0.1%	0.1%	0.4%	1.0%	1.7%
Consumer price index, percent change	2.4%	1.8%	1.2%	4.6%	3.5%	2.1%	2.2%	2.2%
Unemployment rate, percent	3.9%	3.7%	8.1%	5.4%	3.8%	3.5%	3.6%	3.8%
Civilian labor force, millions	162.1	163.5	160.7	161.1	164.0	166.9	168.9	170.3
Nonfarm employment, millions	148.9	150.9	142.3	146.1	151.9	154.7	156.1	157.1
California								
Personal income, $ billions	$ 2,432	$ 2,544	$ 2,763	$ 2,949	$ 2,987	$ 3,139	$ 3,308	$ 3,489
Exports of goods, percent change [1/]	3.6%	-2.5%	-10.3%	--	--	--	--	--
Housing permits, thousands	116	110	105	120	126	132	140	149
Housing unit net change, thousands	85	78	95	--	--	--	--	--
Median sales price of existing homes [2/]	$ 569,480	$ 592,230	$ 659,380	--	--	--	--	--
Consumer price index, percent change	3.7%	3.0%	1.7%	4.2%	3.8%	3.0%	3.1%	3.3%
Unemployment rate, percent	4.3%	4.2%	10.2%	7.7%	5.6%	4.6%	4.2%	4.2%
Civilian labor force, millions	19.3	19.4	18.8	19.0	19.4	19.8	20.0	20.2
Nonfarm employment, millions	17.2	17.4	16.2	16.7	17.4	17.9	18.2	18.4
Percent of total nonfarm employment								
Mining and logging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Construction	5.0%	5.1%	5.3%	5.3%	5.2%	5.2%	5.3%	5.3%
Manufacturing	7.7%	7.6%	7.8%	7.7%	7.4%	7.3%	7.2%	7.1%
Trade, transportation, and utilities	17.7%	17.5%	18.0%	18.2%	17.6%	17.3%	17.2%	17.1%
Information	3.2%	3.2%	3.4%	3.4%	3.4%	3.3%	3.3%	3.3%
Financial activities	4.9%	4.8%	5.0%	4.9%	4.8%	4.7%	4.7%	4.6%
Professional and business services	15.5%	15.6%	16.1%	16.2%	16.1%	16.1%	16.2%	16.2%
Educational and health services	15.9%	16.1%	16.8%	16.6%	16.4%	16.5%	16.6%	16.9%
Leisure and hospitality	11.6%	11.7%	9.2%	9.7%	11.0%	11.5%	11.7%	11.7%
Other services	3.3%	3.3%	3.0%	3.1%	3.2%	3.2%	3.3%	3.3%
Government	15.0%	14.9%	15.3%	14.6%	14.8%	14.7%	14.5%	14.4%

Forecast based on data available as of November 2021.

Percent changes calculated from unrounded data.

Source: 1/ U.S. Census Bureau; 2/ California Association of Realtors ; CA Department of Finance, Governor's Budget Forecast.

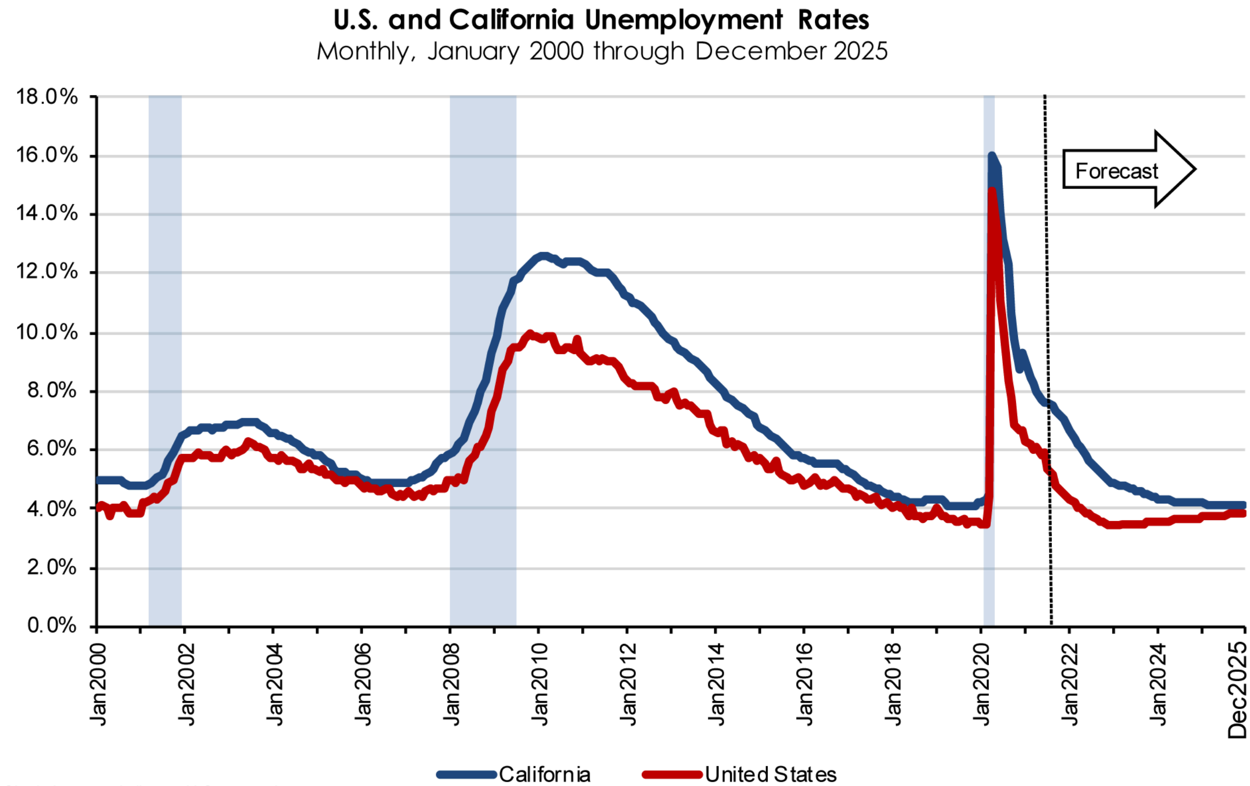
pandemic-related inflation to unwind and for national inflation to revert to pre-pandemic rates of slightly above 2 percent by the first quarter of 2023, after averaging 4.6 percent and 3.5 percent in 2021 and 2022, respectively. Inflation is then projected to average 2.2 percent from 2023 to 2025. Transportation and energy inflation is assumed to decelerate starting in 2022 and housing inflation, which slowed in 2020, is expected to continue to accelerate to catch up with rising home prices, reaching pre-pandemic rates by 2025.

Interest rates have remained near zero since March 2020 and based on information available through early November, the economic forecast assumed the Federal Reserve will begin raising rates in early 2023. This is more than a year earlier than what was expected in early 2021, and is in response to elevated inflation in the second half of 2021 as well as stronger-than-expected recovery of the labor market. However, the Federal Reserve signaled at its final meeting of 2021 in mid-December that there could be three interest rate hikes in 2022. Earlier and more frequent interest rate hikes could negatively impact investment and consumption due to higher borrowing and debt servicing costs. On the other hand, slower economic activity could contribute to lower inflation. The May Revision economic forecast will incorporate the updated timeline for when the Federal Reserve is expected to increase interest rates along with any future changes in federal policy.

CALIFORNIA FORECAST

As with the nation, the California forecast assumes that continued public health improvements—higher vaccination rates, availability of vaccines for young children, booster shots, and increased adaptation to public health conditions—will facilitate labor force reentry and continued job growth. The forecast also assumes that the recent reopening of borders to qualifying non-essential travelers will help the recovery of travel and tourism to the state, boosting low-wage sector growth and recovery. Finally, the California forecast incorporates similar assumptions as with the nation regarding IIJA and as it relates to supply chain issues and resolutions.

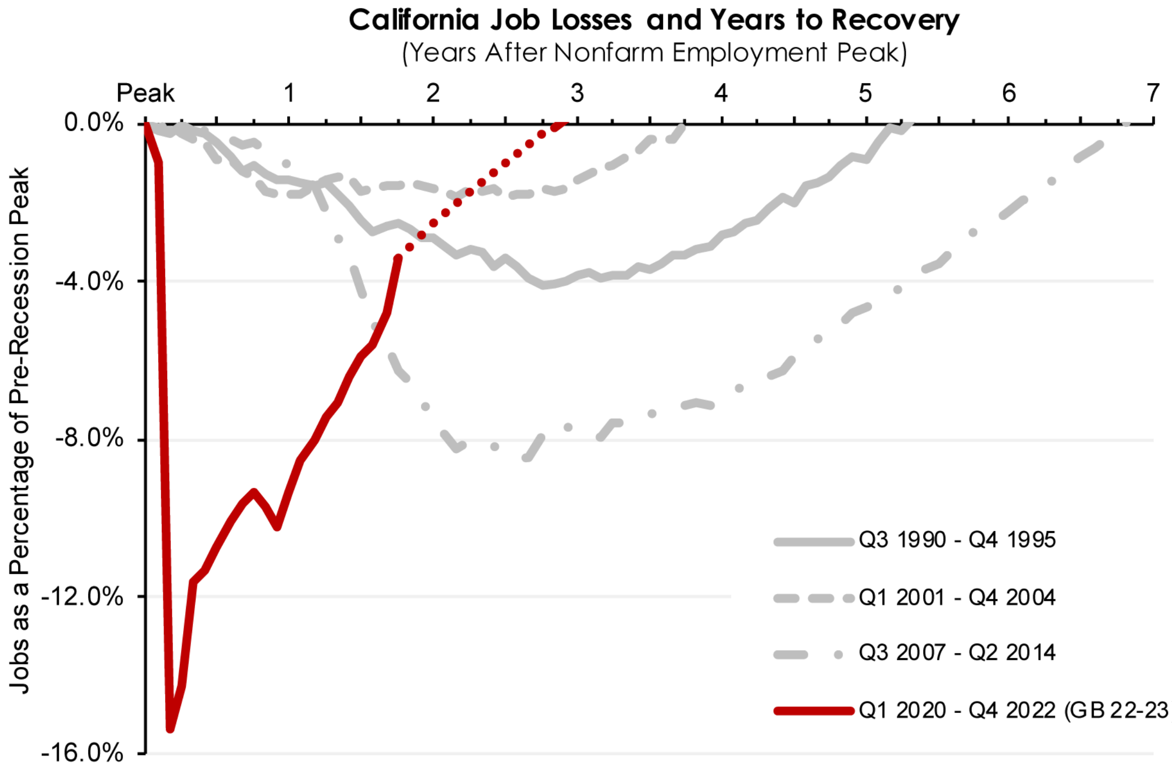
The forecast assumes that Californians will continue to rejoin the labor force as job growth continues, pandemic-related dependent care is resolved, and overall confidence in the recovery and stability of the economy strengthens. California's labor force is projected to recover to its pre-pandemic level by the third quarter of 2022, in line with national trends. California's unemployment rate is projected to steadily decrease to its pre-pandemic record-low of 4.2 percent by 2024. The rate of decline in California's unemployment rate has been fairly slow in the first three quarters of 2021 due to a low growth in labor force and civilian employment. However, it is projected to decrease more rapidly in 2022 and 2023 as labor force growth is projected to increase and employment continues to expand. Historically, California's unemployment rate is higher than, but closely correlated with, the U.S. unemployment rate. This historic gap tends to get smaller during economic expansions, and is projected to decrease to less than 0.5 percentage point by the end of the forecast window, in line with the 2018 pre-pandemic gap. (See figure on U.S. and California Unemployment Rates.)



Shaded areas indicate U.S. recessions.
Source: U.S. Bureau of Labor Statistics; CA Employment Development Department, Labor Market Information Division; CA Department of Finance, Governor's Budget Forecast.

With continued reopening of the economy and businesses, higher vaccination rates, and employers and households adapting to pandemic conditions, California's nonfarm employment is projected to recover to its pre-pandemic level by the fourth quarter of 2022—the fastest post-recession recovery in modern history. (See figure on California Job Losses and Years to Recovery.) The hardest hit low-wage sector group is projected to recover in the first quarter of 2023, one quarter later than the projected recovery of high-wage sectors. Mining and logging, manufacturing, and retail trade are not projected to recover to pre-pandemic levels within the forecast window, consistent with their historical trend of decline due to structural shifts in automation and online retail.

The impacts of IIJA on California are assumed to be largely the same as for the nation, but scaled down by the state's projected share of about 10 percent of all funding. This is assumed to lead to a modest boost to California jobs starting in 2022, with a peak effect of an additional 75,000 jobs created in 2025, or about 0.5 percent of all nonfarm jobs in that year. The added jobs are assumed to be allocated across multiple industries with half the gains accounting for jobs directly created by infrastructure investment such as construction and transportation while the remaining half are due to additional job creation and expenditure in supporting industries such as retail trade and leisure and hospitality.



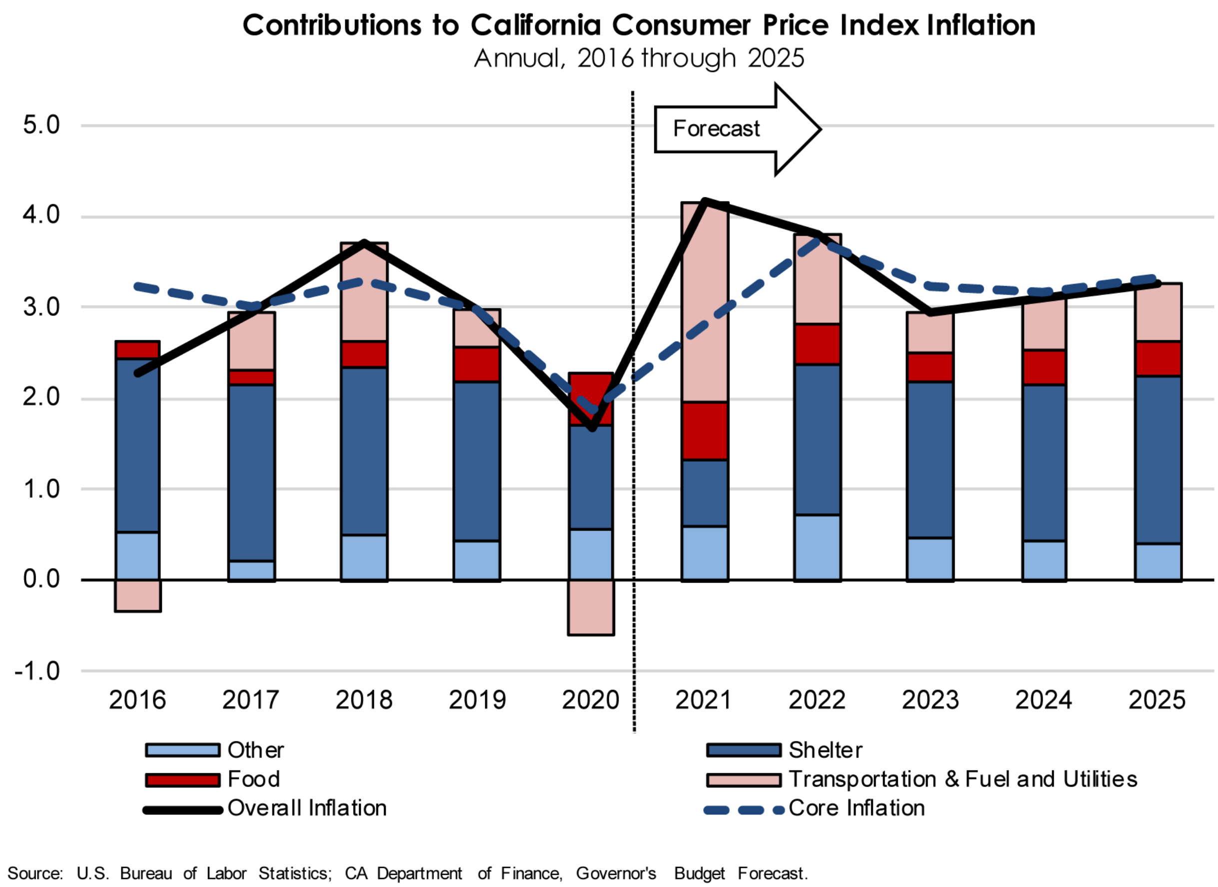
Red dotted line indicates forecast period beginning in the third quarter of 2021.
Lines start from the quarter of each nonfarm employment pre-recession peak.
Source: CA Employment Development Department, Labor Market Information Division; CA Department of Finance, Governor's Budget Forecast.

California's average wage growth was strong through the third quarter of 2021 and is expected to translate into strong growth of 6.1 percent for the entire year. In 2022, when inflation is projected to average 3.8 percent, average wage growth for low-wage sectors is projected to slightly outpace inflation as employer challenges in filling vacant positions in typically low-wage sectors place upward pressure on wages. Real wage gains are projected for both high-wage and low-wage sectors starting in 2023 as the economic recovery strengthens and inflation abates. As labor market frictions and inflationary pressures resolve, average wages are projected to average 3.6 percent for the rest of the forecast window.

Similar to the nation, California's headline inflation is projected to decelerate to around pre-pandemic trends of slightly above 3 percent by the first quarter of 2023, after averaging 4.2 percent and 3.8 percent in 2021 and 2022, respectively. Inflation is then projected to slowly rise to 3.3 percent by 2025. California inflation is projected to be about 1 percentage point higher than the U.S. rate beginning in 2023, consistent with pre-pandemic trends, as the state's higher housing and energy costs are assumed to continue to keep inflation higher than for the nation.

Shelter inflation slowed from 4.4 percent in 2019 to 2.8 percent in 2020 and is expected to average 1.8 percent in 2021. Recent increases in shelter inflation in the second half of 2021 are assumed to accelerate in order to catch up with rising home prices. This is expected to bring shelter inflation to pre-pandemic rates of around 4.5 percent in 2024 and 2025. In 2025, shelter inflation (dark blue bars in the figure on Contributions to California Consumer Price Index Inflation) is assumed to contribute 1.8 percentage points to the 3.3 percent projected overall inflation in that year. A particular good or service's contribution to overall inflation depends on the item's share of overall consumer expenditures as well as the actual change in prices. Shelter has the largest contribution to overall consumer price index because shelter inflation is usually higher than inflation for all other goods and services and because housing costs account for around 40 percent of consumers' total expenditures.

Core consumer inflation, which excludes the volatile categories of food and energy, slowed to 1.9 percent in 2020 and is projected to accelerate to 3.7 percent in 2022 before averaging 3.2 percent for the rest of the forecast window. While inflation or the rate of price change can decrease, price levels do not usually fall. The exception is for energy prices, which tend to fluctuate more and can have negative contributions to inflation, as was seen in 2016 and 2020. (See figure on Contributions to California Consumer Price Index Inflation).



California's total personal income is projected to decelerate to below pre-pandemic rates in 2022 before accelerating to an average annual growth of 5.3 percent between 2023 and 2025. Strong growth in total wages and salaries supported by robust nonfarm employment and average wage growth is projected to more than offset the decreases in transfer payments through 2022 as various pandemic-related assistance programs phase out. By 2025, most major components of personal income are broadly assumed to trend back toward their pre-pandemic rates and to revert back to their 2019 shares of personal income. (See figure on Major Components of Personal Income.)

California's housing permits are projected to average 120,000 units in 2021 and to increase to 149,000 units by 2025. This outlook assumes continued strong demand from high-income households and that recent housing laws, including Chapter 162, Statutes of 2021 (SB 9) and Chapter 163, Statutes of 2021 (SB 10), will provide more options for zoning and building multi-family units and support additional residential development. The share of multifamily units is projected to increase to around 46 percent by 2025, up from 41.7 percent in 2020 and in line with the 2019 pre-pandemic share. While projected permits in 2025 would be the highest since 2006, job and population growth have consistently outpaced housing growth so California's housing shortage is still expected to persist.

Major Components of Personal Income

Component	Definition	Share of Total Personal Income		
		2019	2020	2025
Total Wages and Salaries	Compensation of employees, in cash and in kind, including commissions, tips, and bonuses.	52%	50%	54%
Property Income	Individuals' income from interest, rent, and dividend payments.	20%	18%	18%
Transfer Payments	Payments of money to individuals from governments usually through social assistance programs.	15%	20%	15%
Proprietors' Income	Income of sole proprietorships, partnerships, and non-profits, excluding dividends and interest.	9%	9%	9%
Supplements to Wages and Salaries	Employer contributions to pension funds and insurance funds, excluding contributions to government social insurance.	4%	4%	3%

Source: U.S. Bureau of Economic Analysis; CA Department of Finance, Governor's Budget Forecast.

RISKS

While the recovery has been fairly robust to date, risks and uncertainties remain. Pandemic-related risks to the forecast include another disruptive surge in cases, persistent labor market frictions, sustained high inflation, and ongoing global supply chain disruptions. Structural vulnerabilities such as large federal deficits and debt, a stock market correction, continued housing constraints, increased risks from climate change and natural disasters, an aging population, and increasing consumer debt levels could slow the recovery and hamper a response to any potential additional adverse shocks.

California lost a total of 150,000 nonfarm jobs in December 2020 and in January 2021 due to a winter surge of COVID-19 cases, after adding 150,000 jobs per month on average between May and November 2020. California's job growth also slowed to around 77,000 jobs added per month between August and November 2021, due to the emergence of the Delta variant. Another surge in COVID-19 cases as new strains emerge, such as the Omicron variant, could trigger a renewed hesitancy among consumers and employers as well as parents of school-aged children, potentially slowing labor force and nonfarm employment growth. A more infectious variant with higher hospitalization and death rates would lead to even more negative economic impacts. A global increase in cases could also lead to continued supply chain disruptions beyond 2023. If, on the other hand, cases, hospitalization, and death rates are significantly lower than were seen in November 2021, economic outcomes may be better than currently projected.

Another key assumption is the projected recovery to pre-pandemic labor force levels in the third quarter of 2022. If current labor market frictions persist longer than projected, then low labor force growth would constrain job growth, which in turn would lead to less consumption and spending. Persistent labor market frictions would also contribute to a slower resolution of supply chain issues as some of the bottlenecks are due to shortage of domestic labor.

Inflation disproportionately impacts low-income households; however, projected real wage gains for low-wage sectors are assumed to help mitigate these impacts. Despite historically high inflation, retail sales and consumer expenditures have remained relatively strong as households have accumulated savings from various stimulus and from limited spending in 2020. However, the longer inflation persists, the larger the negative impact on consumers' budgets, especially for low-income households who spend a larger proportion of their income on necessities such as food, housing, and transportation. Elevated inflation has already led the Federal Reserve to signal earlier and more frequent increases in interest rates than were able to be incorporated in the economic forecast due to timing.

This evolution of the Federal Reserve's interest rate policy since November reflects the vulnerabilities that remain as the nation continues the recovery from the recession. Ongoing and unexpected changes to monetary, fiscal, and foreign policy can affect California's economy. Higher borrowing costs could have negative impacts on various investment projects and on public and private debt-servicing costs. Earlier and more frequent interest rate hikes could discourage borrowing and slow consumption. At the same time, slower economic growth could help curtail inflation as lower demand would ease supply chain pressures. The faster timing of interest rate hikes could also increase stock market volatility, as was seen in previous periods of interest rate hikes following the Great Recession.

The S&P 500 quickly rallied after a short-lived decline in March 2020 and has since increased steadily, ending November 2021 at 4,567, or 35 percent higher than its pre-pandemic peak in February 2020. However, the stock market saw increased volatility in fall 2021, due to such factors as concerns and fears over COVID-19 variants and persistently high inflation and supply chain issues. A correction to the stock market would negatively and significantly reduce state revenues derived from dividend income and capital gains.

Climate change, wildfires, drought, and other extreme weather events continue to pose a risk to California, even as the state navigates the recovery. California recorded its second driest water year in over a century in the twelve months through September 2021. Based on data from the U.S. Drought Monitor, the entire state of California has been experiencing at least some dry conditions since May 2021. By mid-October, all 58 counties had a drought state of emergency in place. As of the end of November 2021, 80 percent of the state experienced extreme or exceptional drought (the two driest categories), the same percentage as in November 2014 during the previous drought emergency, and up from about 20 percent in November 2020. The dry weather also increases wildfire risk. Both factors create challenges for regional growth and housing construction, especially if water is not available and wildfires continue to be destructive.

Structural risks remain, including an aging population, declining migration flows, lower fertility rates, California’s housing shortage, high housing and living costs, and increasing inequality. The combination of early retirements seen during the pandemic, and the general trends of lower migration and fertility rates as referenced in the Demographic Information Chapter, could keep labor force participation rates below pre-pandemic levels. With rising cost of living and an already tight housing market, it could become increasingly difficult for the remaining working-age Californians to support the aging population.

Finally, a potential upside risk to the forecast is the passage of major federal legislation, such as the BBB, which would make investments in a number of social programs, potentially including childcare, universal preschool, and caregiving of older adults and persons with disabilities. This could potentially lead to more labor force and job growth. The legislation could also allocate funds to combat climate change, encourage a transition to clean energy, and expand health care subsidies to middle-class households. Finally, the legislation could increase taxes on corporations and high-income individuals, which could have an offsetting impact on economic growth. Given these factors and the uncertainty around the timing and final content of the legislation, the impacts of any federal bill on California's economic outlook during the forecast window are unclear.