Economic Outlook

Just over a year after the unprecedented economic losses induced by the COVID-19 Pandemic in March and April 2020, the nation and California have both started on the path to recovery. However, there still is a long way to go to reach pre-pandemic levels. Since the height of the COVID-19 Recession in April 2020, and a full year into the recovery through April 2021, the nation has added back 14.1 million jobs—63.3 percent of the 22.4 million jobs lost in March and April 2020. Similarly, as of March 2021, California has added back 1.2 million jobs—43.7 percent of the 2.7 million jobs lost in March and April 2020. Despite these strides, U.S. and California nonfarm employment were still around 6 percent and 9 percent lower than pre-pandemic levels, respectively, in March 2021, roughly equal to the respective peak-to-trough drop during the Great Recession.

With low COVID-19 positivity rates, one-third of Americans and Californians fully vaccinated as of early May, and additional federal and state actions taken to support the recovery in the six months since the Governor's Budget forecast was finalized, the nation and the state are expected to recover to pre-pandemic levels of nonfarm employment by the end of 2022 and by mid-2023, respectively. This is significantly faster than the more than six years it took to recover during the Great Recession. Recovery of low-wage sectors, however, is expected to lag as these sectors bore the brunt of the recession, accounting for nearly three out of four jobs lost in March and April 2020. While the overall outlook has been significantly upgraded since the Governor's Budget was published in January 2021, downside risks to the forecast remain, including potentially

worsening public health conditions due to COVID-19 variants and vaccine hesitancy and the possibility of a stock market correction.

REGAINING GROUND AFTER AN UNPRECEDENTED CONTRACTION

The pandemic caused a one-of-a-kind recession with both demand and supply side impacts and a sudden drop in economic activity in March and April 2020. U.S. real GDP contracted by 31.4 percent in the second quarter of 2020—the largest recorded drop in history on a seasonally-adjusted annualized rate basis (SAAR)—and both the U.S. and California lost a record number of nonfarm payroll jobs. The federal government responded with various measures to mitigate the impacts of the pandemic, including the $2.2 trillion CARES Act in March 2020, followed by the $900 billion Consolidated Appropriations Act in December 2020, and the $1.9 trillion American Rescue Plan Act in March 2021. Extensions to unemployment insurance benefits and emergency unemployment insurance programs were enacted, including the first ever Pandemic Unemployment Assistance program (PUA) for individuals who do not qualify for traditional unemployment insurance benefits, including self-employed and independent contractors. The PUA program and extended benefits are scheduled to expire in early September 2021. State and federal eviction and foreclosure moratoria are instated through the end of June 2021 to protect renters and property owners who have been unable to stay current on their payments due to pandemic-related hardships. Finally, California also took several actions to support impacted Californians, including the $7.6 billion Golden State Stimulus package which incorporated more than $2 billion for the California Small Business COVID-19 Relief Grant Program.

These actions helped support recovery from the historically deep economic contraction. After the record 31.4 percent-drop in the second quarter of 2020, U.S. real GDP rebounded by a record 33.4 percent SAAR in the third quarter and continued to grow in the subsequent two quarters, albeit at slower rates. As of the first quarter of 2021, U.S. real GDP recovered to just above the 2019 second quarter level but remained lower than the pre-recession peak in fourth quarter of 2019.

As is often the case during economic contractions, government expenditures increased and were up one percent over the fourth quarter of 2019 level by the first quarter of 2021. Exports decreased and remained 11.2 percent below pre-recession levels in the first quarter of 2021 as countries across the globe were impacted by the recession and international trade was restricted. Exports have been declining since various tariffs were introduced in 2018, a trend that was exacerbated by

the recession. As of the first quarter of 2021, exports were at around 2013 levels. Private investment was 2.4 percent higher than its pre-recession level in the first quarter of 2021.

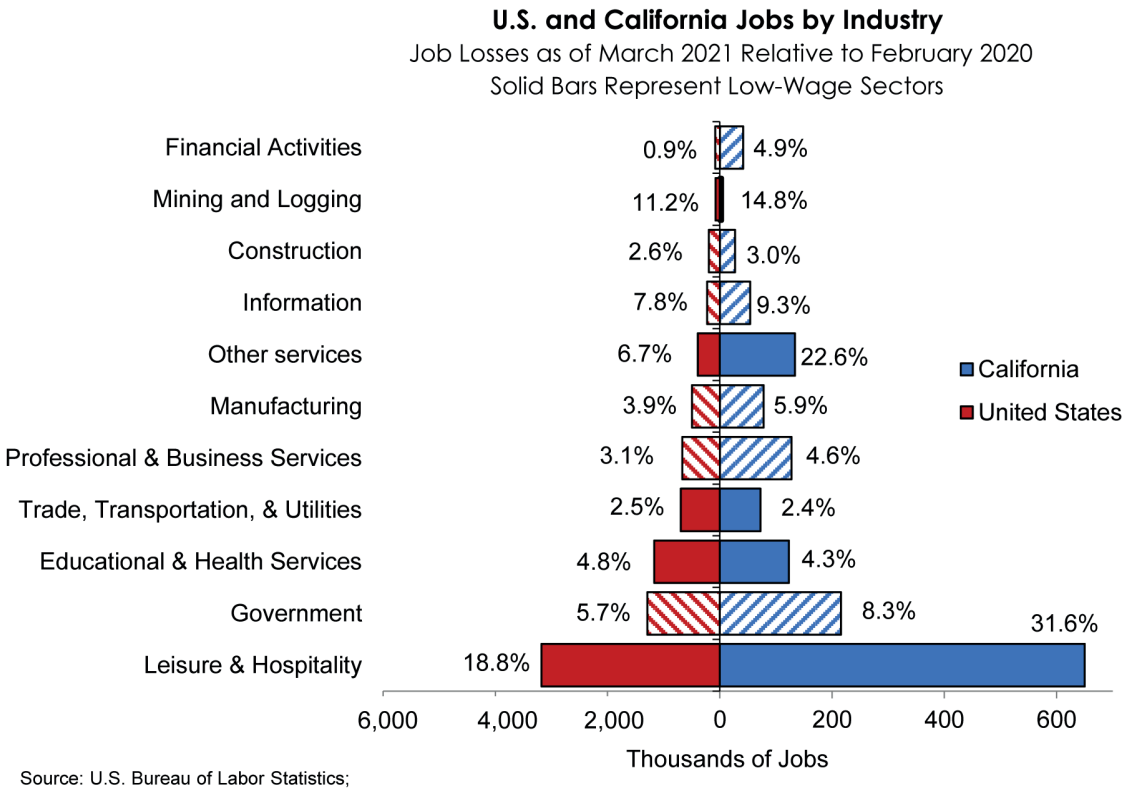
The recovery story for GDP revolves around personal consumption expenditures, which account for over two-thirds of GDP. In particular, consumption of goods surpassed pre-recession levels in the third quarter of 2020, and continued to steadily grow to 12.5 percent above pre-recession peak by the first quarter of 2021. With consumption of services remaining at 5.7 percent below the pre-recession level, overall consumption was 0.1 percent below the fourth quarter of 2019 level in the first quarter of 2021. These patterns illustrate the uneven impacts of the recession, with high-income households fueling economic activity through purchases of goods such as motor vehicles and parts, furnishings and household durable equipment, and recreational goods, while millions of Americans who worked in low-wage sectors remained unemployed.

Two months after marking a record low unemployment rate of 3.5 percent, the U.S. unemployment rate peaked at a historic high of 14.8 percent in April 2020. The U.S. unemployment rate decreased to 6.1 percent in April 2021, 2.6 percentage points higher than the pre-pandemic level in February 2020. Despite twelve months of improvement, there were 7.6 million fewer employed individuals and around 3.5 million fewer Americans in the labor force in April 2021 than in February 2020.

California trends broadly mirrored the nation, however, the state historically experiences a larger economic contraction than the nation during recessions. As with the nation, from a low of 4.3 percent in February 2020, the California unemployment rate reached a record-high of 16 percent in April 2020 before decreasing to 8.3 percent through March 2021. There were 1.2 million fewer employed Californians and more than half a million fewer people in the labor force in March 2021 than in February 2020.

For both the state and the nation, the nonfarm employment contraction during the recession was much larger and more sudden than during the Great Recession. The large labor force decreases in 2020 were unique to the recession. Many were forced to drop out of the labor market in order to care for children and relatives as schools and childcare facilities closed. Historically, labor force participation is fairly stable and people tend to stay in and enter the labor force even as employment decreases in order to meet their economic needs. The U.S. lost a whopping total of 22.4 million nonfarm jobs in March and April 2020, and as of April 2021, national nonfarm jobs were still at around 2016 levels. Similarly, after a record two-month loss of 2.7 million jobs in March and April 2020, California added 1.2 million jobs through March 2021, bringing nonfarm jobs back to August 2015 levels.

Low-wage sectors, defined as a sector that has an average wage below the overall nonfarm average wage, accounted for nearly three-quarters of all nonfarm job losses despite only making up a little less than half of all nonfarm jobs. Four out of the 11 major sectors are low-wage: leisure and hospitality, other services, educational and health services, and trade, transportation and utilities. As of March 2021, low-wage sector jobs remained significantly lower than February 2020 levels (7.2 percent and 11.4 percent lower for the U.S. and California, respectively) compared to their high-wage counterparts (3.9 percent and 6 percent lower for the U.S. and California, respectively). All major industry sectors remained below their pre-recession levels in March 2021, with leisure and hospitality significantly lagging in recovery due to the sector incurring a disproportionately large shock in the second quarter of 2020. (See figure on U.S. and California Jobs by Industry.)

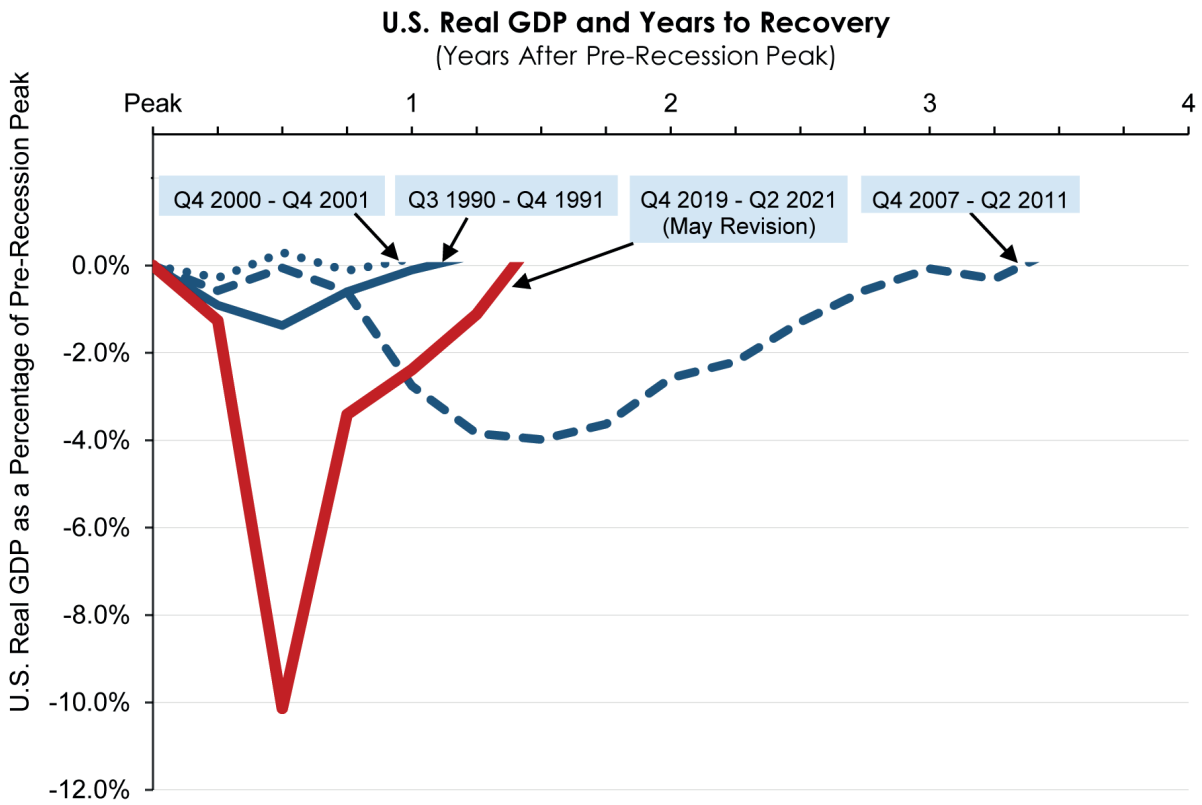


Source: U.S. Bureau of Labor Statistics;
CA Employment Development Department, Labor Market Information Division.

THE NATION

The U.S. forecast incorporates developments and improvements in public health conditions as well as all enacted federal stimulus packages and assistance measures as of April 2021. U.S. real GDP is projected to return to pre-pandemic levels by mid-2021,

just one-and-a half years after its pre-recession peak in the fourth quarter of 2019. This is only slightly longer than the early 1990s and early 2000s recessions, and is much shorter than the nearly four-year recovery of the Great Recession. (See figure on U.S. Real GDP and Years to Recovery.)



Lines start from the quarter of each pre-recession peak.
Source: U.S. Bureau of Economic Analysis; CA Department of Finance, May Revision Forecast.

Following an annual contraction of 3.5 percent in 2020, U.S. real GDP is projected to grow by 6.2 percent in 2021 before slowing to 2.2 percent in 2023 and 2.3 percent in 2024. (See figure on Selected Economic Indicators.) Real GDP growth is expected to remain largely driven by consumption (contributing nearly four-fifths of total GDP growth on average through 2024), followed by investment (contributing over one-fifth). Government expenditures are projected to make a small positive contribution that is offset by a small negative contribution from net exports, as imports are projected to grow faster than exports.

While real GDP is expected to recover by the second quarter of 2021, a return to full employment, which generally takes longer, is projected to occur towards the end of 2022. The U.S. unemployment rate is projected to decrease from an annual average of

Selected Economic Indicators

	2018	2019	2020	Forecast 2021	2022	2023	2024
United States							
Nominal gross domestic product, $ billions	$ 20,612	$ 21,433	$ 20,937	$ 22,742	$ 24,191	$ 25,253	$ 26,420
Real gross domestic product, percent change	3.0%	2.2%	-3.5%	6.2%	4.3%	2.2%	2.3%
Contributions to real GDP growth							
Personal consumption expenditures	1.9%	1.6%	-2.6%	4.7%	3.2%	1.9%	1.9%
Gross private domestic investment	1.1%	0.3%	-0.9%	2.2%	1.0%	0.1%	0.5%
Net exports	-0.3%	-0.2%	-0.1%	-1.2%	0.1%	0.2%	-0.1%
Government purchases of goods and services	0.3%	0.4%	0.2%	0.5%	0.0%	0.0%	0.1%
Personal income, $ billions	$ 17,852	$ 18,552	$ 19,691	$ 20,797	$ 20,944	$ 21,804	$ 22,853
Corporate profits, percent change	0.2%	2.3%	-3.5%	21.3%	1.2%	4.7%	5.3%
Housing permits, thousands *	1,329	1,386	1,452	--	--	--	--
Housing starts, thousands	1,248	1,295	1,395	1,547	1,393	1,274	1,262
Median sales price of existing homes ~	$ 261,600	$ 274,600	$ 300,200	--	--	--	--
Federal funds rate, percent	1.8%	2.2%	0.4%	0.1%	0.1%	0.1%	0.3%
Consumer price index, percent change	2.4%	1.8%	1.2%	2.5%	1.8%	2.0%	2.1%
Unemployment rate, percent	3.9%	3.7%	8.1%	5.2%	3.8%	3.6%	3.5%
Civilian labor force, millions	162.1	163.5	160.7	162.0	164.4	166.2	167.8
Nonfarm employment, millions	148.9	150.9	142.3	146.7	151.3	153.5	155.0
California							
Personal income, $ billions	$ 2,515	$ 2,632	$ 2,814	$ 2,927	$ 2,935	$ 3,070	$ 3,213
Exports of goods, percent change *	3.6%	-2.3%	-10.3%	--	--	--	--
Housing permits, thousands	116	110	105	116	122	128	135
Housing unit net change, thousands	85	78	95	--	--	--	--
Median sales price of existing homes ~	$ 569,480	$ 592,230	$ 659,380	--	--	--	--
Consumer price index, percent change	3.7%	3.0%	1.7%	2.5%	2.2%	2.8%	3.0%
Unemployment rate, percent	4.3%	4.2%	10.2%	7.6%	5.8%	4.8%	4.3%
Civilian labor force, millions	19.3	19.4	18.8	19.0	19.6	19.9	20.1
Nonfarm employment, millions	17.2	17.4	16.2	16.4	17.2	17.7	18.0
Percent of total nonfarm employment							
Mining and logging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Construction	5.0%	5.1%	5.3%	5.4%	5.3%	5.3%	5.3%
Manufacturing	7.7%	7.6%	7.8%	7.8%	7.5%	7.3%	7.2%
Trade, transportation, and utilities	17.7%	17.5%	18.0%	18.3%	17.7%	17.4%	17.2%
Information	3.2%	3.2%	3.4%	3.4%	3.3%	3.3%	3.3%
Financial activities	4.9%	4.8%	5.0%	5.0%	4.9%	4.8%	4.7%
Professional and business services	15.5%	15.6%	16.1%	16.1%	16.0%	16.1%	16.1%
Educational and health services	15.9%	16.1%	16.8%	16.9%	16.7%	16.8%	16.9%
Leisure and hospitality	11.6%	11.7%	9.2%	9.1%	10.3%	10.8%	11.2%
Other services	3.3%	3.3%	3.0%	3.0%	3.2%	3.3%	3.3%
Government	15.0%	14.9%	15.3%	15.0%	15.0%	14.8%	14.6%

Forecast based on data available as of April 2021.

Percent changes calculated from unrounded data.

Source: *U.S. Census Bureau; ~ California Association of Realtors; CA Department of Finance, May Revision Forecast.

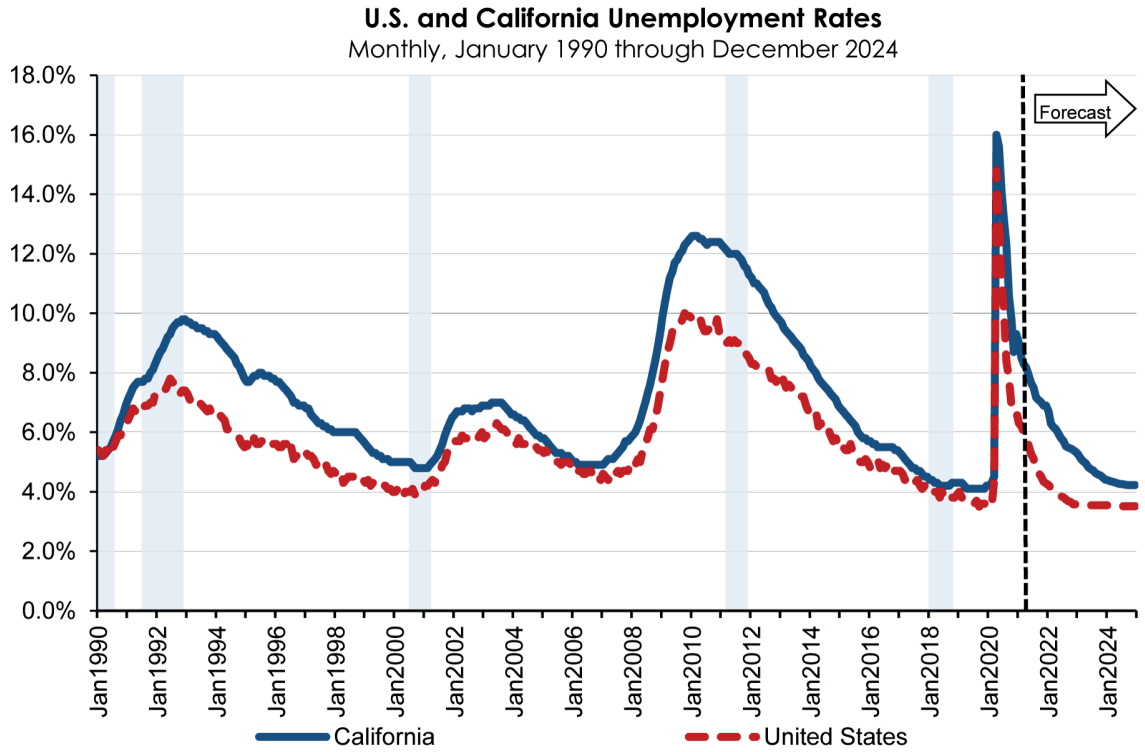
8.1 percent in 2020 to 5.2 percent in 2021 and to continue to gradually fall to 3.5 percent by 2024. The U.S. labor force is expected to reach 2019 levels in 2022. U.S. nonfarm jobs are expected to recover to pre-pandemic levels by the fourth quarter of 2022, led by jobs in high-wage sectors recovering in the first quarter of 2022. Manufacturing, a high-wage sector, and two low-wage sectors, retail trade and leisure and hospitality, are not projected to recover within the forecast window, or through the end of 2024.

U.S. headline inflation as measured by the consumer price index (CPI) slowed to 1.2 percent in 2020, the lowest rate since 2015. With increased economic activity in 2021 and gasoline prices recovering from 2020 lows, U.S. headline inflation is projected to rebound to an average of 2.5 percent in 2021. Inflation is then expected to slow to 1.8 percent in 2022 before gradually increasing to 2.1 percent by 2024. Core CPI, which excludes food and energy, slowed to 1.7 percent in 2020 and is projected to accelerate to 1.9 percent in 2021 and 2.3 percent by 2024. Interest rates have remained near zero since March 2020 and the Federal Reserve is expected to begin raising rates in mid-2024 when inflation surpasses the Federal Reserve's long-run average inflation target of 2 percent, as measured by the core personal consumption expenditures price index (PCE). Inflation as measured by core PCE is historically slightly slower than as measured by core CPI.

CALIFORNIA

In addition to incorporating recent public health developments and enacted federal stimulus, the California forecast reflects additional state assistance and actions enacted through April 2021.

California's unemployment rate is projected to broadly follow U.S. trends of steady decline but at a slightly higher level throughout the forecast window. California's unemployment rate is projected to return to pre-pandemic levels in 2024, substantially faster than during the early 1990s recession and the Great Recession. This is due to the unique nature of the recession and to the unprecedented federal and state assistance allocated to support the recovery. (See figure on U.S. and California Unemployment Rates.)

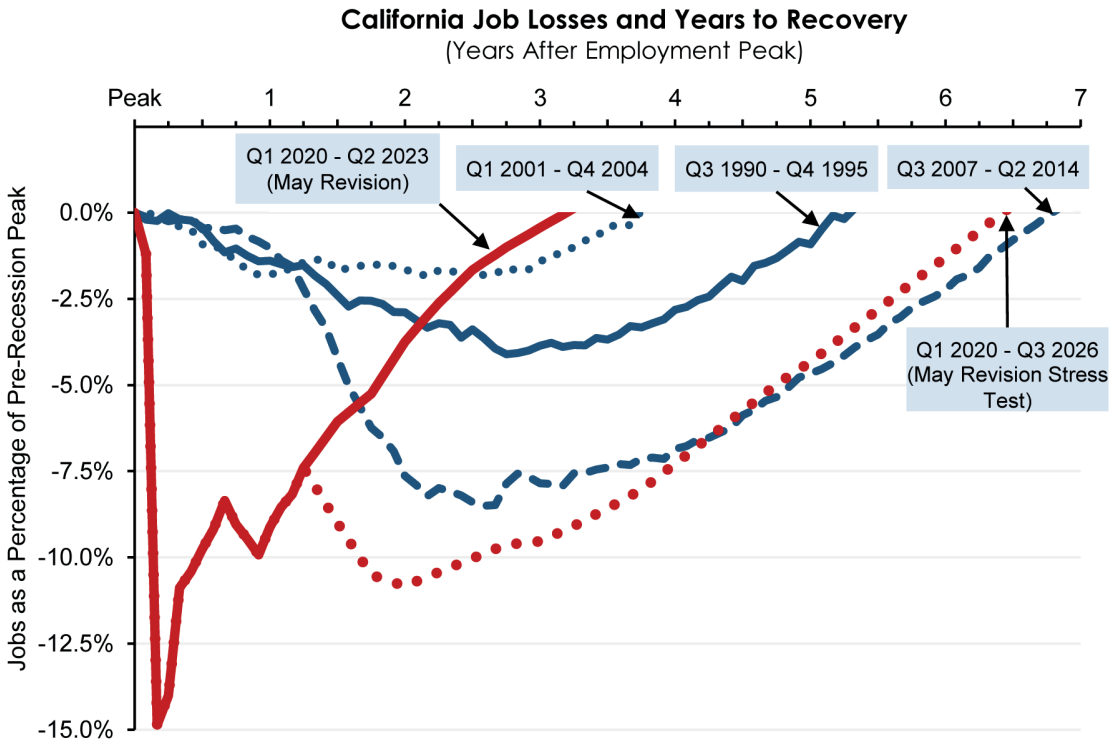


Shaded areas indicate previous U.S. recessions.
Source: U.S. Bureau of Labor Statistics; CA Employment Development Department, Labor Market Information Division; CA Department of Finance, May Revision Forecast.

California's labor force is projected to recover by mid-2022 and civilian employment is expected to grow faster than nonfarm employment in 2021 and 2022 as reopening of the economy allows for the resumption of some self-employment and independent contractor work that saw reduced demand during the pandemic. While re-entry of independent contractors boosts civilian employment and lowers California's unemployment rate, contractor work tends to yield lower wages and offers fewer benefits.

Following an annual job loss of 1.2 million, or 7 percent, in 2020, California nonfarm employment is projected to grow by 2.6 percent on average during the forecast window and recover to the first quarter of 2020 pre-pandemic level in mid-2023. This projected nonfarm employment recovery is faster than after any recession since the early 1990s. (See figure on California Job Losses and Years to Recovery.) Mirroring the nation, high-wage sectors generally recover faster than low-wage sectors as jobs in high-wage sectors were more compatible with telework and less affected by the recession. Manufacturing and retail trade are not projected to recover to their respective pre-recession peaks during the four-year forecast window due to expectations of continued long-term structural change, such as automation. The leisure

and hospitality sector, which lost about half of its jobs in March and April 2020, is projected to inch back to pre-recession levels by the fourth quarter of 2024.



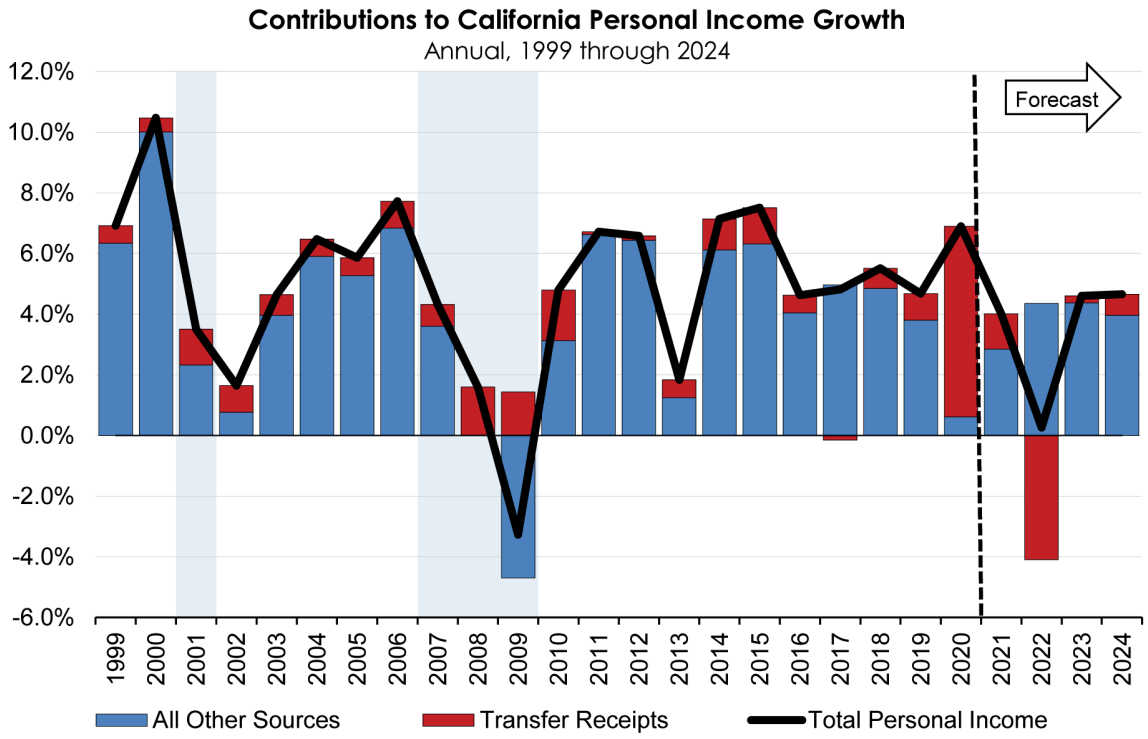
Lines start from the quarter of each nonfarm employment pre-recession peak.
Source: CA Employment Development Department, Labor Market Information Division; CA Department of Finance, May Revision Forecast.

Robust nonfarm employment growth is projected to support growth in wages and salaries, which account for roughly half of total personal income. Growth in California total wages and salaries slowed from 5.9 percent in 2019 to 1.6 percent in 2020, the lowest annual growth since the decrease of 5.2 percent in 2009 during the Great Recession. Despite nonfarm employment decreasing by a record 7 percent in 2020, total wages and salaries continued to grow, albeit at a significantly slower rate, as nearly three out of every four jobs lost were in low-wage sectors. High-wage sectors were relatively insulated from the impact of the pandemic, exacerbating inequality that predated the economic and public health crisis.

In contrast to the decline of 3.3 percent in total personal income in 2009 during the peak of the Great Recession, California personal income accelerated from 4.7 percent in 2019 to 6.9 percent in 2020. This was largely driven by transfer payments which rose by a record 44.4 percent in 2020, compared to an increase of 13.1 percent in 2008, and increases of around 11 percent in 2009 and 2010. Moreover, nearly all other major personal income components continued to grow in 2020, with the exception of

property income, which decreased by 1 percent due to interest income falling by 2.4 percent and dividends declining by 1.3 percent. Interest income is projected to continue decreasing until the Federal Reserve starts to raise interest rates in 2024. The decrease of 1.3 percent in dividends followed a decrease of 1.1 percent in 2019. The S&P 500 Index fell by 33.9 percent from February 2020 to March 2020, compared to a drop of over 50 percent over a period of nearly one-and-a-half years during the Great Recession. Thereafter, the S&P 500 Index recovered within just five months, compared to four years during the Great Recession. The S&P Index has since continued to set new record-highs, closing the month of April at 4,181, or 23.5 percent above the February pre-recession high. Excluding transfer payments, all other personal income components combined grew by 0.7 percent in 2020, compared to a decrease of 5.4 percent in 2009. (See figure on Contributions to California Personal Income Growth.)

California total personal income is projected to increase by 4 percent in 2021, slowing to 0.3 percent in 2022 as many unemployment, direct stimulus, and other assistance programs are scheduled to end in 2021. With transfers boosting personal income growth through the fourth quarter of 2020, and with the majority of those payments ending in 2021, per capita personal income growth is expected to substantially decelerate from the fourth quarter of 2020 to the fourth quarter of 2021. Transfer payments are projected to fall by 21 percent in 2022 before accelerating to 4.7 percent in 2024, with social security benefits, Medicaid, and Medicare benefits returning to their historical share of around one-quarter of transfers each. The remaining 25 percent of transfers includes various historically smaller assistance programs such as unemployment insurance, veterans' benefits, and food assistance. California personal income is then projected to grow at 4.6 percent in 2023 and at 4.7 percent 2024, around the same pace as in 2019.



Shaded areas indicate previous U.S. recessions.
Source: U.S. Bureau of Economic Analysis; CA Department of Finance, May Revision Forecast.

Construction and housing activity remained fairly resilient in California despite California's historically high cost of housing due to the strength of the purchasing power of high-income households. California median home sales price of existing single-family homes exceeded $700,000 for the first time in August 2020 and continued to increase to a record-high of $758,990 in March 2021, 30.9 percent above the February 2020 level. With strong continued demand for housing in California, the number of housing units authorized by permits remained above 100,000 units in 2020, at around 105,000 units. Authorized housing units decreased by 4.7 percent in 2020, a smaller decline than the drop of 4.9 percent in 2019, as long-term issues of permitting and housing supply constraints predate the recession. Permitted housing units are projected to increase by 10.2 percent to 116,000 units in 2021 and to reach 135,000 units by 2024.

Higher housing costs and housing constraints in the state continue to drive California inflation to remain higher than the nation in the long-run. After a deceleration from 3 percent in 2019 to 1.7 percent in 2020, California headline inflation is projected to accelerate to 2.5 percent in 2021, on par with the nation, but from a higher base. Beginning in 2022, headline inflation in California is expected to grow slightly faster than the nation in line with historic trends. Overall California inflation is then projected to slow

to 2.2 percent in 2022 before gradually increasing to 3 percent by 2024, in line with the pre-pandemic pace in 2019.

RISKS TO THE OUTLOOK

Despite significant improvements over the past year, there is a long road to full recovery and risks to the outlook remain. Immediate risks include public health concerns with new virus strains and vaccine hesitancy, higher inflation if disrupted supply chains cannot support increased consumer demand, more frequent and more widespread wildfires, and a stock market correction that would impact higher-income Californians and state revenues.

High-income workers have been largely insulated during the recession, limiting the negative impacts of the public health and economic crisis on California's personal income and revenues. However, public health challenges and complications could lead to reinstated public health restrictions and a loss of business and consumer confidence that could affect the stock market, resulting in a more generalized recession that impacts all sectors. Individuals and businesses could experience a more difficult transition to the new post-COVID-19 normal than anticipated, leading to a slower recovery or even to a new downturn. If more businesses enter bankruptcy due to weak economic activity high-income workers may also lose employment.

To illustrate these economic risks, the Department of Finance has developed a Stress Test scenario. This scenario would more closely resemble the unfolding of the Great Recession, which also began in a few sectors of the economy before becoming widespread. Under the Stress Test scenario, California would lose jobs in both low- and high-wage sectors starting in the third quarter of 2021 and through the first quarter of 2022, undoing economic growth since the second half of 2020. California nonfarm employment would recover to pre-pandemic levels three years later than in the baseline scenario, reaching pre-pandemic levels in 2026 rather than in 2023. The overall nonfarm employment recovery would then take about the same time as during the Great Recession. (See previous figure on California Job Losses and Years to Recovery.)

The stock market has continued to benefit from federal policy to cushion the financial sector, and the large increase in private savings in 2020 also likely led to more investment in stocks. The shift towards telework has supported information and technology companies which also tend to be among the top S&P 500 companies, many of which are headquartered in California. However, risks of a second and potentially worse stock market downturn remain, and would happen from a much

higher base given recent record-highs. Given California's reliance on capital gains, a stock market correction would significantly and adversely impact the state's revenues.

Climate change and more frequent extreme weather events continue to be a risk to California. The year 2020 was California's most widespread wildfire year on record and 2021 is on pace to become one of the driest years on record. The ongoing risk of worsening wildfire seasons will likely affect individuals' and businesses' livelihoods and decisions on where to reside and conduct business, which may impact the growth of regions that are most at risk, as well as cities and towns which are regularly impacted by smoke and pollution. Rising sea levels may also introduce new challenges to some coastal communities in the future. Other environmental risks such as the ongoing threat of droughts remain, with 41 counties in California having a drought-related state of emergency in place as of May 2021.

Finally, other longer-term structural risks that predated the recession remain, and some of these risks have been exacerbated by the pandemic. These risks include California's housing shortage, which continues to put pressure on inflation and prices, limiting Californians' ability to afford a home. Other risks include increased inequality as many households are struggling to provide for essentials, slowing population growth as migration flows and fertility rates decline, and the challenges of an aging population.