

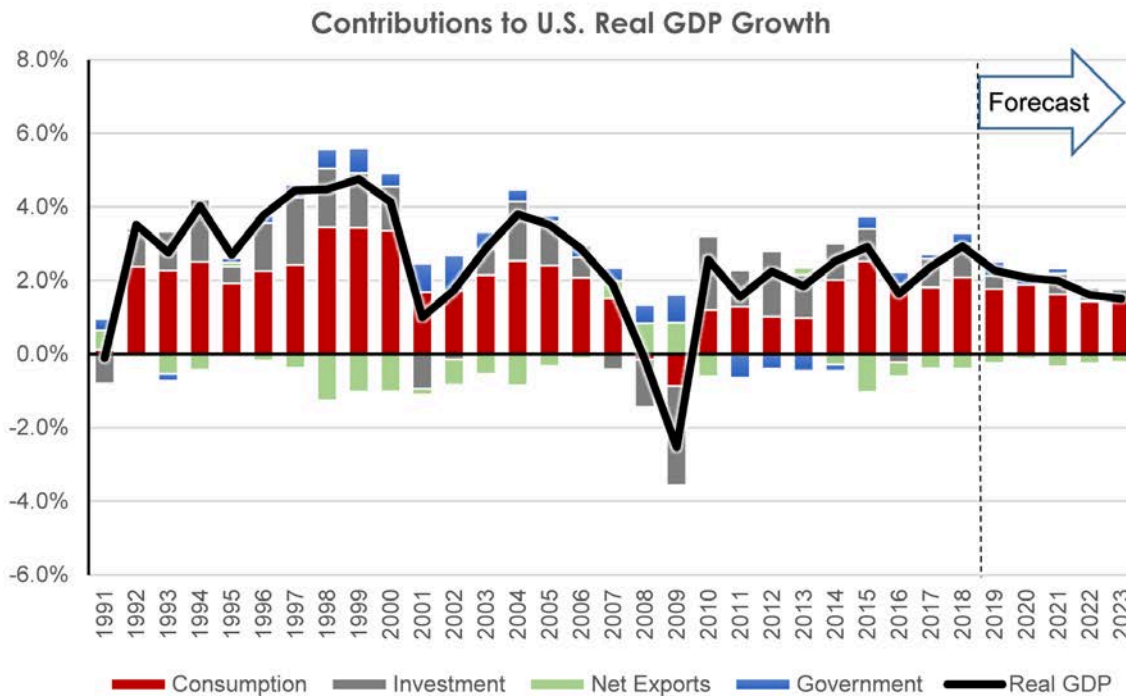
ECONOMIC OUTLOOK

The current economic expansion that began in 2009 is the longest the United States has experienced. Unemployment rates for the U.S. and California are now at historic low rates of 3.5 percent and 3.9 percent, respectively, as of November 2019. Growth is assumed to continue at a slowing pace through 2023-24. Risks that might affect national and state growth include trade disputes, stock market volatility, and a global economic slowdown, among others.

THE NATION—SLOWING GROWTH

For the U.S., real GDP growth is expected to continue at around 2 percent through 2021 before gradually falling to around 1.5 percent in 2022 and 2023 due to increased pressure from tariffs, slowing global economic growth, slower investments and other risks. The federal deficit is now almost \$1 trillion, limiting fiscal policy instruments in case of a potential downturn. Consumption will continue to be the main driver of economic growth as record low unemployment puts upward pressure on wages and consumer sentiment remains strong. (See figure on Contributions to U.S. Real GDP Growth.)

The U.S. unemployment rate fell to 3.5 percent in September 2019 and has stayed at around that level through November 2019—its lowest rate since December 1969. Through the first eleven months of the year, the U.S. has added 180,000 nonfarm jobs per month, on average, compared to 223,000 jobs per month during the same period in 2018. Since December 2007, just prior to the start of the Great Recession through November 2019, the U.S. has added almost 14.0 million nonfarm jobs. While the

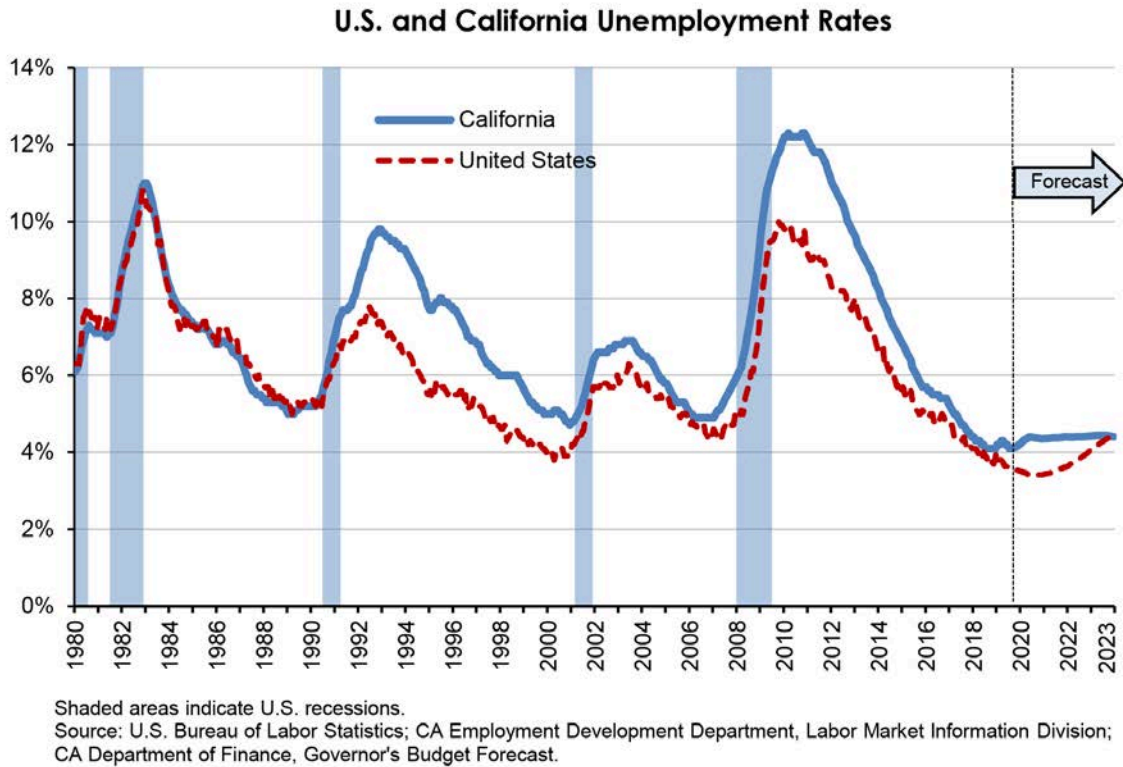


Source: U.S. Bureau of Economic Analysis; CA Department of Finance, Governor's Budget Forecast.

nation has surpassed job counts from prior to the recession, the sectoral composition has seen marked changes. Goods-producing industries, including mining and logging, construction, and manufacturing, currently have almost 900,000 fewer jobs than the pre-recession peak. In contrast, service sector jobs have grown by almost 14.5 million during the same period. While wholesale trade has declined by around 13,000 jobs and information has declined by over 200,000 jobs, all other sectors have surpassed their pre-recession levels. Educational and health services did not experience any job loss during the recession and have now gained over 5.5 million jobs from the pre-recession period. Other sectors that have seen significant job increases include leisure and hospitality, which added 3.3 million jobs, and professional and business services, which have added almost 3.5 million jobs.

Continued GDP and labor force growth will result in a further decline of the unemployment rate to 3.4 percent by the second half of 2020, where it will remain for four consecutive quarters before gradually rising to above 4 percent by 2023. (See figure on U.S. and California Unemployment.)

In November 2019, U.S. inflation was 2.1 percent and is expected to remain around 2 percent throughout the forecast period. Housing and energy prices are forecast



to contribute around 60 percent towards overall inflation in the country. (See Figure on Contributions to U.S. and California Inflation.)

The Federal Reserve cut its benchmark rates by 25 basis points three consecutive times between July 2019 and October 2019, bringing the target range to between 1.50 percent and 1.75 percent. This is the first time that the Fed has cut interest rates since December 2008, when it lowered its benchmark setting to a range of 0.00 to 0.25 percent. December 2008 was the last cut in a series of downgrades that started in August 2007 when interest rates were over 5 percent. Lower interest rates can encourage increased business investment and consumer spending; however, as interest rates approach zero, there is limited room for further rate reductions.

CALIFORNIA—CONSTRAINED GROWTH

As with the rest of the nation, California's unemployment rate has continued to fall, averaging 3.9 percent in November 2019. Generally, such low levels of unemployment correspond to higher nominal wage growth due to the impact of the tight labor market as employers seek to attract and retain productive workers. Real per capita personal income in California has increased from around \$55,000 in 2007 to over \$63,500 in 2018.

Selected Economic Indicators

	2017	2018	Forecast				
			2019	2020	2021	2022	2023
United States							
Nominal gross domestic product, \$ billions	\$ 19,519	\$ 20,580	\$ 21,424	\$ 22,333	\$ 23,298	\$ 24,253	\$ 25,217
Real gross domestic product, percent change	2.4%	2.9%	2.3%	2.1%	2.0%	1.6%	1.5%
<i>Contributions to real GDP growth</i>							
Personal consumption expenditures	1.8%	2.1%	1.8%	1.9%	1.6%	1.4%	1.5%
Gross private domestic investment	0.8%	0.9%	0.4%	0.0%	0.6%	0.4%	0.3%
Net exports	-0.3%	-0.3%	-0.2%	-0.1%	-0.3%	-0.3%	-0.2%
Government purchases of goods and services	0.1%	0.3%	0.4%	0.3%	0.1%	0.1%	0.0%
Personal income, \$ billions	\$ 16,879	\$ 17,819	\$ 18,668	\$ 19,389	\$ 20,185	\$ 21,042	\$ 21,932
Corporate profits, percent change	-0.9%	0.7%	-3.3%	-1.0%	2.1%	5.3%	4.9%
Housing permits, thousands	1,282	1,318	--	--	--	--	--
Housing starts, thousands	1,209	1,250	1,255	1,268	1,256	1,279	1,259
Median sales price of existing homes	\$ 248,800	\$ 261,600	--	--	--	--	--
Federal funds rate, percent	1.0%	1.8%	2.2%	1.6%	2.0%	2.4%	2.6%
Consumer price index, percent change	2.1%	2.4%	1.8%	2.0%	1.8%	2.3%	2.3%
Unemployment rate, percent	4.4%	3.9%	3.7%	3.4%	3.5%	3.8%	4.3%
Civilian labor force, millions	160.3	162.1	163.5	165.3	166.6	167.8	168.6
Nonfarm employment, millions	146.6	149.1	151.4	153.3	154.4	155.0	155.2
California							
Personal income, \$ billions	\$ 2,370	\$ 2,514	\$ 2,634	\$ 2,757	\$ 2,874	\$ 2,995	\$ 3,120
California exports, percent change	5.2%	3.7%	--	--	--	--	--
Housing permits, thousands	114	117	115	128	142	155	167
Housing unit net change, thousands	85	77	--	--	--	--	--
Median sales price of existing homes	\$ 537,860	\$ 570,010	--	--	--	--	--
Consumer price index, percent change	2.9%	3.7%	3.0%	3.2%	3.1%	3.1%	3.1%
Unemployment rate, percent	4.8%	4.2%	4.2%	4.4%	4.4%	4.4%	4.4%
Civilian labor force, millions	19.2	19.4	19.5	19.6	19.7	19.8	19.9
Nonfarm employment, millions	16.8	17.2	17.5	17.9	18.0	18.1	18.2
<i>Percent of total nonfarm employment</i>							
Mining and logging	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Construction	4.8%	5.0%	5.1%	5.3%	5.4%	5.7%	5.9%
Manufacturing	7.8%	7.7%	7.7%	7.6%	7.5%	7.5%	7.4%
Trade, transportation, and utilities	17.9%	17.7%	17.5%	17.7%	17.8%	17.7%	17.7%
Information	3.1%	3.2%	3.2%	3.2%	3.1%	3.1%	3.1%
Financial activities	4.9%	4.9%	4.8%	4.8%	4.8%	4.8%	4.8%
Professional and business services	15.4%	15.5%	15.7%	15.7%	15.7%	15.6%	15.6%
Educational and health services	15.7%	15.8%	15.9%	15.9%	15.9%	16.0%	16.0%
Leisure and hospitality	11.6%	11.6%	11.6%	11.6%	11.6%	11.5%	11.5%
Other services	3.4%	3.3%	3.3%	3.5%	3.5%	3.5%	3.5%
Government	15.2%	15.1%	15.0%	14.8%	14.6%	14.5%	14.4%
<i>Forecast based on data available as of November 2019.</i>							
<i>Percent changes calculated from unrounded data.</i>							

At the same time, real median household income, or the mid-point of household income, has barely changed in over ten years—\$75,200 in 2007 and \$75,500 in 2018.

California is expected to continue to add payroll jobs through the forecast period, slowing to match labor force growth. (See figure on Selected Economic Indicators.) The forecast assumes a slight increase in payroll job growth in 2020 and 2021 as businesses

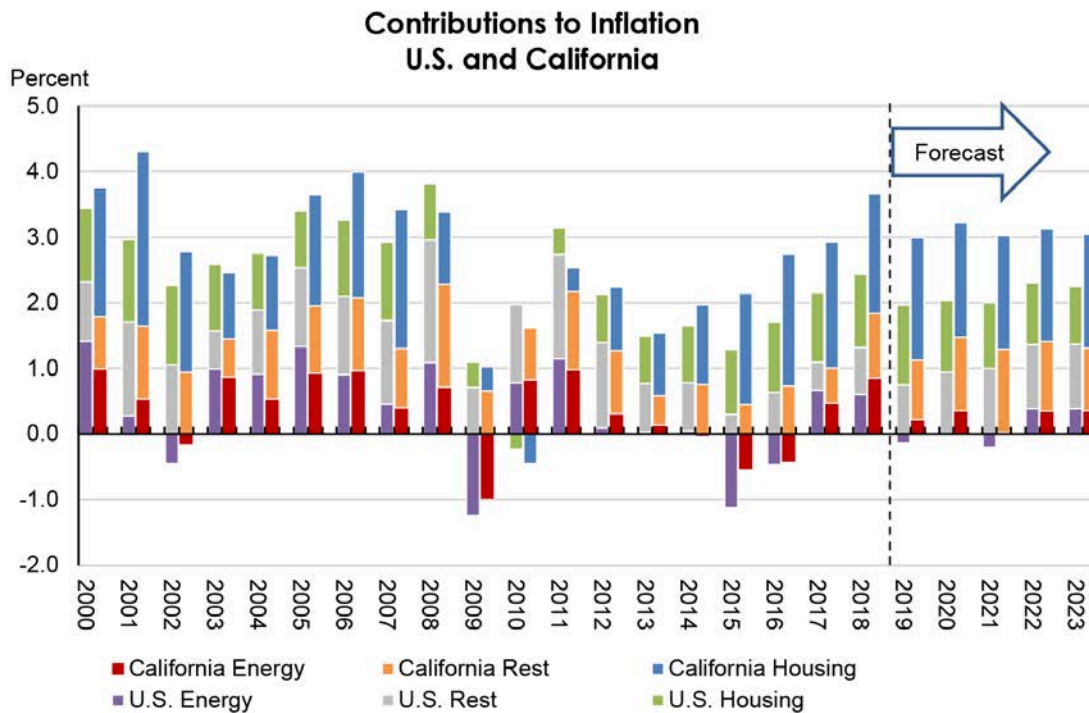
adjust to the new rules on independent contractors. The sectors that are projected to have the largest numbers of reclassifications include lower-wage service sectors including retail, education, hospitality, other services, wholesale trade and utilities, as well as transportation and warehousing.

Since prior to the Great Recession, California has added almost 2.1 million nonfarm jobs. As with the rest of the nation, goods-producing industries now have almost 64,000 fewer jobs than during the pre-recession peak. The largest decline was in manufacturing as the state lost about 110,000 jobs. It is not expected that manufacturing will regain jobs to their pre-recession level during this forecast period. The financial activities sector also has around 21,000 fewer jobs than their pre-recession peak. In the same period of economic expansion, service sector jobs have added approximately 2.2 million jobs, primarily in professional and business services (around 470,000), education and health services (around 831,000), and leisure and hospitality (around 461,000). Whereas the rest of the nation lost jobs in information, the state has added about 82,000 jobs during the post-recession period.

As the economy continues to grow at a modest but steady rate in a tight labor market, there will be an upward pressure on wages as employers look to attract and retain high-quality, productive workers. The forecast assumes real average wage gains accruing to lower-wage workers—a necessary condition to support consumption and for economic growth to continue.

California personal income is projected to grow at around 4 percent per year through the forecast period. Although unemployment is expected to remain low, transfer receipts will continue to grow at around 6 percent due to increasing Social Security payments to larger numbers of retirees.

Housing permits are assumed to increase gradually from current levels of around 115,000 to around 165,000 by 2023. (See figure on Number of Permits Issued per Year and Increase in Population.) In November 2019, the median sales price for an existing single family home in California reached almost \$590,000—more than double the national median price of around \$274,000. The continued slow growth in housing constrains job growth and is expected to remain the main driver of inflation in California.



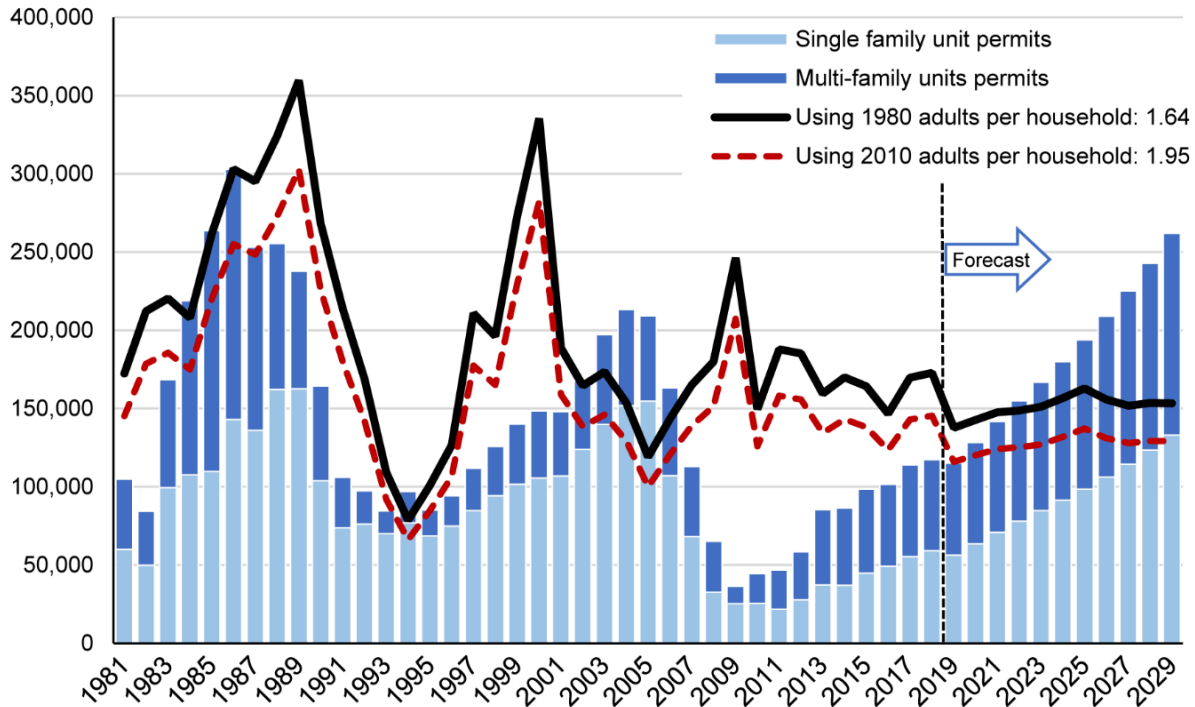
Source: U.S. Bureau of Labor Statistics; CA Department of Finance, Governor's Budget Forecast.

RISKS ARE RISING

Risks increased throughout 2019, with the additional waves of tariffs imposed between the U.S. and China in the second half of 2019, and due to further global economic slowdown. The three consecutive interest rate cuts by the Federal Reserve between July and October 2019 reflect this perception of increased risks and uncertainty, a significant policy shift from their December 2018 projection of three interest rate increases in 2019. While lower interest rates might have some positive impact on investment in the short run, low interest rates and federal deficits, which almost equal \$1 trillion, leave little room for stabilization during times of downturn. Besides these recent developments, the risks of a U.S. recession, stock market volatility, global economic slowdown, and policy divergences with the federal government remain.

In 2018, the U.S. imposed tariffs on imports from China amounting to a total annual trade value of \$250 billion, or around half of all imports from China, which were met by equivalent retaliatory tariffs from China on \$60 billion worth of U.S. exports to China. These actions precipitated further escalations on both sides. Through October 2019, California's merchandise exports were 3.2 percent lower compared to the same period in 2018 at \$144.5 billion and imports were 7 percent lower at \$341 billion. There have been episodes of stock market volatility associated with statements on both sides, and

Number of Permits Issued Per Year and Yearly Change in Adult Population



Note: 2019 to 2029 permits number are projected by CA Department of Finance.
 Source: California Homebuilding Foundation; CA Department of Finance; Governor's Budget Forecast.

the uncertainty surrounding the escalation or resolution of trade talks can deter businesses from investment.

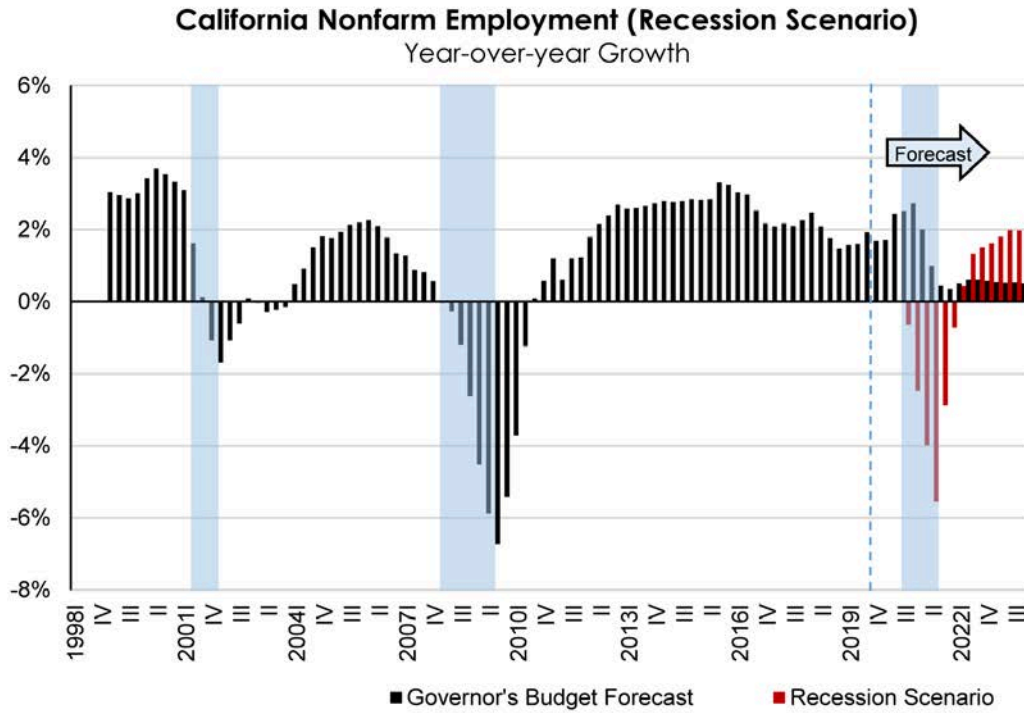
The Standard & Poor's 500 index (S&P 500) reached new record highs above 3,200 in December 2019. However, stock market volatility remains a significant risk to the outlook. Even absent a full recession, a stock market correction would likely have significant impacts on California.

In April 2019, the yield on the 10-year U.S. Treasury bond fell below the 3-month and 2-year U.S. Treasury bonds, before reverting back in the fourth quarter of 2019. Inversion of the yield curve generally means that the returns on long-term investments are perceived to be lower than for the short-term investments. It is also one of the most cited data points for recession worries, as yield curve inversions lasting two months or more have preceded nearly every recession in the post-World War II era, and contribute to increased uncertainty and decreased consumer and business confidence.

RECESSION SCENARIO

While this economic forecast does not include a recession, the Department of Finance has modeled a recession scenario, which assumes that real wage gains do not occur and that businesses overestimate consumers' purchasing power. The realization of the mismatch by businesses could lead to sudden readjustments and a subsequent slowdown, which will lead to a spiral of decreased demand, layoffs, and a generalized loss of business and consumer confidence. The scenario models the impacts of a fiscal year 2020-21 recession. The slowdown is assumed to be larger than the early 2000s recession but smaller than the 2009 recession. The unemployment rate would peak at 9.1 percent in the second quarter of 2021, compared to 6.9 percent and 12.3 percent for the 2001 and 2009 recessions, respectively. Nonfarm jobs would decrease by 5.5 percent, or by 990,000 jobs from peak to trough. This compares with a 8.3 percent or a 1.3 million jobs drop in the Great Recession. (See Figure on California Nonfarm Employment (Recession Scenario).) California personal income would decrease 3.4 percent from the second quarter of 2020 to the second quarter of 2021, versus a 0.9 percent and a 4.6 percent peak-to-trough decline for the 2001 and 2009 recessions, respectively. In the previous post-war recessions, the U.S. headline consumer price index year-over-year inflation rate generally remained above zero. However, in 2008-2009, inflation fell to a negative 1.6 percent in the third quarter of 2009 after peaking at 5.3 percent in the third quarter of 2008, a peak-to-trough decline of 6.9 percentage points. In the 2001 recession, inflation fell to 1.3 percent in the first half of 2002 after peaking at 3.4 percent in the first quarter of 2001, a peak-to-trough decline of 2.1 percentage points.

Beyond these more immediate risks, California faces some longer-term risks due to the state's divergence with federal policy and due to structural tensions. In particular, the state faces risk due to its housing shortage and aging population.



Shaded areas indicate U.S. recessions.
 Source: CA Employment Development Department, Labor Market Information Division; CA Department of Finance.

