Unified Strategic Workforce Development Plan

Economic and Workforce Analysis 2020-2023

IN FULFILLMENT OF THE REQUIREMENTS OF THE
WORKFORCE INNOVATION AND OPPORTUNITY ACT
PUBLIC LAW 113-128

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The COVID-19 Pandemic Disrupted California's Labor Market, But It Is Now Recovering

- With a real Gross Domestic Product (GDP) of over $2.8 trillion in the second quarter of 2021, a labor market with 19 million participants, and a nonfarm economy with 16.6 million jobs in August 2021, California has the largest economy of any state in the nation.

- California's economy and labor markets have experienced recent turbulence due to the COVID-19 pandemic and, more particularly, the associated public health measures implemented to mitigate its spread. The pandemic emphatically ended California's 10-year employment expansion in February 2020 and led to unprecedented job losses and increases in unemployment over just a two-month period through April 2020. However, the pandemic-induced recession was short-lived, and California's labor market is now recovering.

- California's labor market continues to experience a demographic transformation as the predominantly White and native-born baby boomer generation has aged and begun retiring from the labor force in large numbers, leaving the more racially and ethnically diverse millennial generation to take their place.

Pre-Pandemic: California's Employment Expansion

Total Nonfarm Jobs

- In February 2020, the month prior to the COVID-19 pandemic outbreak, California's employment expansion turned 10 years old.[1] This was the state's longest employment expansion in the post-World War II era of record-keeping, eclipsing the 113-month expansion that lasted from July 1960 through December 1969.

- California added 3,473,700 nonfarm jobs from February 2010 through February 2020, which was an increase of 24.5 percent. The state added an average of 28,900 nonfarm jobs per month and grew at an average annual pace of 2.4 percent over the course of the 120-month expansion.

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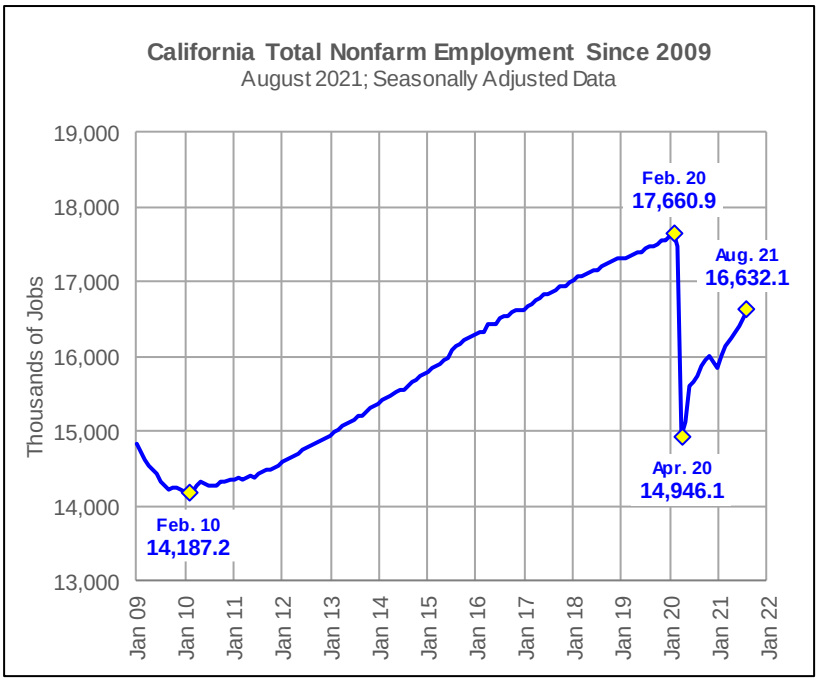
[1] Whereas U.S. economic business cycles are officially arbitrated and dated by the National Bureau of Economic Research (NBER) based on a basket of economic indicators, no such dating of business cycles occurs at the state level. This document uses peaks and troughs in total nonfarm employment to identify California recessions and employment expansions.

Figure 1



Source: Employment Development Department.

Industry Sector Jobs

- California's job gains during the February 2010-February 2020 expansion were broadly distributed across industry sectors, with every sector except mining and logging adding jobs over the period.

- Educational and health services (751,000) added the most jobs, followed by professional and business services (717,600) and leisure and hospitality (577,800). These three industry sectors combined added 2,046,400 jobs over the course of the expansion, accounting for nearly three-fifths (58.9 percent) of the state's overall nonfarm job gains.

- Two additional industry sectors added more than 300,000 jobs over the course of the expansion: trade, transportation, and utilities (473,100) and construction (344,700). Three additional industry sectors added more than 100,000 jobs: government (176,300), information (153,600) and other services (111,800).

- In percentage terms, construction (60.6 percent) grew at the fastest pace over the course of the expansion. Four additional industry sectors had larger percentage job gains than the overall economy's 24.5 percent increase: leisure and hospitality (39.0 percent), information (35.9 percent), educational and health services (35.6 percent), and professional and business services (34.9 percent). As a group, these five industry sectors encompass a range of skill and pay levels, with the information and professional and business services sectors having a comparatively large share of high-skill jobs and high pay levels, educational and health services and construction having middle-skill jobs and middle pay levels, and leisure and hospitality having comparatively low-skill and low pay levels.

- The presence of the high technology-oriented information and professional and business services sectors among California's fastest growing industry sectors signals the important role that the state's high technology played in driving the economic expansion, particularly in the Bay Area.

Table 1
Changes in California Total Nonfarm and Industry Sector Jobs from February 2010 Through February 2020
Seasonally Adjusted Data; Thousands of Jobs
(Industry Sectors ranked by percentage change in jobs.)

	February 2010	February 2020	10-Year Change in Number	10-Year Change in Percent
Total Nonfarm Jobs	**14,187.2**	**17,660.9**	**3,473.7**	**24.5%**
Construction	568.6	913.3	344.7	60.6%
Leisure and Hospitality	1,480.4	2,058.2	577.8	39.0%
Information	427.5	581.1	153.6	35.9%
Educational and Health Services	2,111.5	2,862.5	751.0	35.6%
Professional and Business Services	2,053.7	2,771.3	717.6	34.9%
Other Services	481.5	593.3	111.8	23.2%
Trade, Transportation, and Utilities	2,593.9	3,067.0	473.1	18.2%
Financial Activities	760.8	848.8	88.0	11.6%
Government	2,439.0	2,615.3	176.3	7.2%
Manufacturing	1,246.7	1,327.8	81.1	6.5%
Mining and Logging	23.6	22.3	-1.3	-5.5%

Source: Employment Development Department.

- In contrast, five industry sectors grew at a slower pace than the overall economy over the course of the February 2010-February 2020 expansion. Whereas other services (23.2 percent) added jobs at a pace only slightly below that of the overall economy, the pace of job growth was considerably weaker in four industry sectors: trade, transportation, and utilities (18.2 percent); financial activities (11.6 percent); government (7.2 percent); and manufacturing (6.5 percent). Mining and logging (5.5 percent) had a net job loss even as other industry sectors grew.

- Although the pace of job growth in the trade, transportation, and utilities sector was weaker than that of the overall economy over the course of the expansion, differences in the rate of growth in its three subsectors merit some mention. The number of jobs in the wholesale trade and retail trade subsectors grew by 10.5 percent and 9.4 percent, respectively, from February 2010 through February 2020, lagging behind the pace of the overall economy.

- In contrast, the number of jobs in the transportation, warehousing, and utilities subsector grew by 57.0 percent. This was the second largest percentage increase among all the industry sectors and subsectors that make up California's nonfarm economy. The transportation, warehousing, and utilities subsector added 265,900 jobs from February 2010 through February 2020, accounting for well over half (56.2 percent) of the 473,100 jobs the trade, transportation, and utilities sector gained over the same period. This underscores the important role that international trade and logistics had in driving the state's economic expansion, particularly in southern California.

Regional Jobs (Regional Planning Units)

- In support of the Workforce Innovation and Opportunity Act (WIOA), California is divided into 15 Regional Planning Units (RPUs), or regions, for the purposes of regional economic analysis.[2]

- California's regions vary greatly in size. Total nonfarm employment in Los Angeles Basin Region, the state's largest, totaled 4.2 million nonfarm jobs in August 2021. Seven additional regions—Bay-Peninsula, Orange, Southern Border, Inland Empire, San Joaquin Valley, East Bay, and Capital—had between one million and 2.2 million jobs. In contrast, employment in four regions—Ventura, South Central Coast, North State, and North Central Coast—totaled between 200,000 and 300,000 nonfarm jobs. The state's two smallest regions—North Coast County and Middle Sierra—each had fewer than 50,000 nonfarm jobs.

- It should be noted that regional job totals are not seasonally adjusted, meaning that the regular and recurring seasonal patterns of employment that occur within the labor market are not filtered out of monthly estimates. As such, comparing like months of the calendar year is the only way to control for seasonality when analyzing not seasonally adjusted data. Fortunately, this does not present an obstacle in looking at the February 2010-February 2020 expansion.

- California experienced broad-based regional nonfarm job growth over the course of its employment expansion, with each of the state's 15 regions adding jobs from February 2010 through February 2020. Not surprisingly, the largest job gains were in the state's largest regions. Los Angeles Basin Region (723,500) added the most jobs among regions over the 10-year period. Bay-Peninsula Region, despite being only about half the size of Los Angeles Basin Region, was a close second, adding 653,200 jobs.

- Inland Empire Region (38.8 percent) had the fastest job growth rate among California regions over the course of the expansion, followed closely by Bay-Peninsula Region (38.4 percent). The rapid rate of job growth in these two areas in part reflected the key roles that international trade and logistics and high technology—two of the state's more dynamic segments of the economy during the expansion—play in Inland Empire and Bay-Peninsula, respectively.

- San Joaquin Valley (25.2 percent) was the only other region in which job growth exceeded the overall economy's not seasonally adjusted 24.9 percent job increase from February 2010 through February 2020. However, seven additional regions had job increases of 20.0 percent or more: Capital (24.7 percent), Orange (24.3 percent), East Bay (23.7 percent), South Central Coast (23.7 percent); Southern Border (23.6 percent), North Bay (22.9 percent), and North Central Coast (20.0 percent).

[2] Additional RPU information can be found here: https://www.labormarketinfo.edd.ca.gov

Table 2
Changes in Total Nonfarm Jobs in California Regional Planning Units (Regions)
Over the Course of the February 2010-February 2020 Expansion
Not Seasonally Adjusted Data; Thousands of Jobs.
(Regions ranked by percentage change in jobs.)

	February 2010	February 2020	10-Year Change in Number	10-Year Change in Percent
California (Not Seasonally Adjusted)	14,089.5	17,604.1	3,514.6	24.9%
LARGEST REGIONS				
Inland Empire	1,143.4	1,587.1	443.7	38.8%
Bay-Peninsula	1,699.1	2,352.3	653.2	38.4%
San Joaquin Valley	1,101.2	1,378.9	277.7	25.2%
Capital	877.8	1,094.3	216.5	24.7%
Orange	1,354.1	1,683.5	329.4	24.3%
East Bay	965.0	1,193.8	228.8	23.7%
Southern Border	1,269.6	1,569.4	299.8	23.6%
North Bay	479.2	589.1	109.8	22.9%
Los Angeles Basin	3,896.0	4,619.5	723.5	18.6%
SMALLEST REGIONS				
South Central Coast	256.4	317.1	60.7	23.7%
North Central Coast	206.8	248.2	41.4	20.0%
Ventura	272.2	315.4	43.2	15.9%
Middle Sierra	39.2	45.3	6.1	15.6%
North State	211.2	240.8	29.6	14.0%
North Coast County	45.9	50.6	4.7	10.2%

Source: Employment Development Department.

- Job growth over the course of the expansion tended to be faster in the state's largest, more urbanized regions than in its smaller, more sparsely populated, rural regions. Eight of the state's largest regions had job gains of 20.0 percent or more. The lone exception was Los Angeles Basin, which had an 18.6 percent job gain.

- In contrast, only two of the state's six smallest regions—South Central Coast (23.7 percent) and North Central Coast (20.0 percent)—had a gain of at least 20.0 percent. Each of the state's four remaining smallest regions had job gains less than 16.0 percent from February 2010 through February 2020: Ventura (15.9 percent), Middle Sierra (15.6 percent), North State (14.0 percent), and North Coast County (10.2 percent).

- Table 3 shows the industry sectors that added the most jobs and grew at a faster pace than the overall regional economy over the course of the February 2010 through February 2020 expansion. The industries with the largest gains in number provided the most opportunities for employment. The industries with the largest percentage job gains were the growth industries in each region's economy.

Table 3

Industry Sectors That Added the Most Jobs and Grew at the Fastest Rate by California Region (Regional Planning Unit) Over the Course of the February 2010-February 2020 Expansion

Not Seasonally Adjusted Data

	Industry Sectors That Gained the Most Jobs During the Expansion	Industry Sectors That Grew Faster than the Overall Regional Economy During the Expansion
LARGEST REGIONS (RPUs)		
Los Angeles Basin	Educational and health services (192,200); leisure and hospitality (174,900); professional and business services (136,200); trade, transportation, and utilities (110,000).	Construction (48.6%); leisure and hospitality (46.9%); educational and health services (28.6%); information (27.6%); professional and business services (26.7%); other services (20.8%).
Bay-Peninsula	Professional and business services (202,000); information (128,300); educational and health services (93,200); leisure and hospitality (75,100).	Information (159.4%); construction (75.0%); professional and business services (60.3%); leisure and hospitality (42.4%).
Orange	Professional and business services (83,000); educational and health services (69,800); leisure and hospitality (64,200); construction (40,600).	Construction (61.5%); educational and health services (41.2%); leisure and hospitality (39.7%); professional and business services (33.8%); other services (33.3%).
Inland Empire	Trade, transportation, and utilities (137,000); educational and health services (97,900); leisure and hospitality (56,200); construction (50,400).	Construction (86.2%); educational and health services (60.5%); trade, transportation, and utilities (51.5%); leisure and hospitality (45.7%).
Southern Border	Professional and business services (60,900); educational and health services (60,900); leisure and hospitality (51,900); construction (30,000).	Construction (53.6%); educational and health services (35.4%); leisure and hospitality (34.5%); professional and business services (30.1%); other services (24.1%).
San Joaquin Valley	Trade, transportation, and utilities (70,200); educational and health services (61,200); leisure and hospitality (37,000); government (35,700).	Construction (62.8%); leisure and hospitality (37.3%); educational and health services (35.0%); trade, transportation, and utilities (32.4%); professional and business services (28.0%).
East Bay	Educational and health services (43,800); professional and business services (43,500); leisure and hospitality (37,600); construction (29,800); trade, transportation, and utilities (27,000).	Construction (65.4%); leisure and hospitality (45.9%); professional and business services (28.6%); educational and health services (27.6%); manufacturing (25.0%).
Capital	Educational and health services (52,700); professional and business services (39,400); construction (35,200); trade, transportation, and utilities (33,300); leisure and hospitality (31,900).	Construction (91.0%); mining and logging (66.7%); educational and health services (40.9%); professional and business services (38.3%); leisure and hospitality (37.6%); other services (30.9%).
North Bay	Educational and health services (27,300); construction (19,700); leisure and hospitality (19,100); manufacturing (13,800); trade, transportation, and utilities (12,400).	Construction (85.8%); leisure and hospitality (34.3%); educational and health services (33.8%); manufacturing (31.6%); mining and logging (27.8%); other services (26.7%).
SMALLEST REGIONS (RPUs)		

	Industry Sectors That Gained the Most Jobs During the Expansion	Industry Sectors That Grew Faster than the Overall Regional Economy During the Expansion
Ventura	Educational and health services (16,000); leisure and hospitality (9,000); construction (6,000); trade, transportation, and utilities (5,300).	Construction (53.6%); educational and health services (45.3%); leisure and hospitality (30.4%).
South Central Coast (Excl. San Benito County)	Professional and business services (14,200); leisure and hospitality (12,500); educational and health services (11,300); construction (6,100); government (5,000).	Construction (53.0%); professional and business services (49.5%); leisure and hospitality (35.4%); other services (31.0%); educational and health services (30.8%).
North State	Educational and health services (8,400); construction (6,400); leisure and hospitality (5,000); trade, transportation, and utilities (4,500).	Construction (90.9%); mining and logging (25.9%); other services (23.9%); leisure and hospitality (22.4%); educational and health services (20.5%); professional and business services (19.7%).
North Central Coast	Leisure and hospitality (10,300); educational and health services (7,900); government (5,900); professional and business services (5,400); construction (4,400).	Construction (64.7%); mining and logging (50.0%); leisure and hospitality (34.2%); other services (29.3%); professional and business services (26.7%); educational and health services (25.3%); manufacturing (22.9%).
North Coast County	Educational and health services (1,400); government (1,000); construction (600); professional and business services (600); leisure and hospitality (600).	Mining and logging (50.0%); construction (40.0%); professional and business services (21.4%); educational and health services (18.4%); leisure and hospitality (12.0%); other services (10.5%).
Middle Sierra	Educational and health services (1,200); leisure and hospitality (1,100); trade, transportation, and utilities (1,000); construction (1,000); professional and business services (700).	Construction (76.2%); mining and logging (48.0%); other services (43.6%); professional and business services (37.9%); manufacturing (26.2%); educational and health services (23.0%); leisure and hospitality (19.3%); trade, transportation, and utilities (18.4%).

Source: Employment Development Department.

California's Pandemic-Induced Recession

Total Nonfarm Jobs

- The outbreak of the COVID-19 pandemic brought California's 10-year employment expansion to an abrupt end in February 2020. In response to the threat that the COVID-19 virus posed to the public's health and safety, California, the nation, and much of the world, adopted strict public health mitigation measures that shut down all but essential services and activities within the economy, established strict social distancing guidelines, and limited the public's movement by means of shelter-in-place orders. Over just the two-month period from February 2020 through April 2020, California's economy lost 2.7 million nonfarm jobs. California's unemployment rate shot up from a near-record low of 4.3 percent in February 2020 to 16.0 percent in April 2020, shattering the previous record-high of 12.6 percent that occurred at the height of the Great Recession in January-March 2010.

- To help cushion this disruption within the labor market, state and federal governments launched unprecedented investments in social safety nets and strong economic stimuli totaling several

trillions of dollars. This assistance included, but was not limited to: enhanced unemployment benefits, new pandemic unemployment assistance for self-employed workers, child tax credits, the Paycheck Protection Program, student loan forbearance, mortgage relief, protection against evictions for renters, utility protections, and an expansion of the Supplemental Nutrition Assistance Program.

- California lost 2,714,800 nonfarm jobs over just a two-month period from February 2020 through April 2020. Over 2.5 million of these job losses occurred in April 2020 after public health restrictions were imposed. To put the magnitude and suddenness of this job loss into perspective, California lost a total of 1,318,400 jobs over the course of the Great Recession from July 2007 through February 2010, which was a period of 31 months. California lost over twice that many jobs in just two months following the outbreak of the COVID-19 pandemic. Total nonfarm employment fell 8.5 percent over the course of the 31-month Great Recession. It fell by 15.4 percent in the two months following the pandemic outbreak. In effect, the pandemic wiped out nearly four-fifths (78.2 percent) of 3,473,700 nonfarm jobs California gained over the course of its 10-year employment expansion in just two months.

Industry Sector Jobs

- California's job losses during the pandemic-induced recession were distributed across all industry sectors, but concentrated in those sectors in which people congregate or interact in close proximity with others. The state's travel and tourism industry ground to a near halt in the immediate aftermath of the pandemic outbreak.

Table 4

Changes in California Industry Sector Jobs Over the Course of the Pandemic-Induced Recession From February 2020 Through April 2020

Seasonally Adjusted Data; Thousands of Jobs

(Industry sectors ranked according to percentage job change.)

	February 2020	April 2020	Change in Number	Change in Percent
Total Nonfarm Jobs	**17,660.9**	**14,946.1**	**-2,714.8**	**-15.4%**
Government	2,615.3	2,520.5	-94.8	-3.6%
Financial Activities	848.8	800.2	-48.6	-5.7%
Mining and Logging	22.3	20.4	-1.9	-8.5%
Manufacturing	1,327.8	1,206.4	-121.4	-9.1%
Educational and Health Services	2,862.5	2,578.1	-284.4	-9.9%
Professional and Business Services	2,771.3	2,473.7	-297.6	-10.7%
Information	581.1	510.0	-71.1	-12.2%
Trade, Transportation, and Utilities	3,067.0	2,630.2	-436.8	-14.2%
Construction	913.3	738.6	-174.7	-19.1%
Other Services	593.3	395.3	-198.0	-33.4%
Leisure and Hospitality	2,058.2	1,072.7	-985.5	-47.9%

Source: Employment Development Department.

- Each of California's 11 industry sectors lost jobs over the two-month period from February 2020 through April 2020. Leisure and hospitality (985,500) had far and away the largest loss among sectors. This loss was more than double the 436,800-job loss in the trade, transportation, and utilities sector, which had the second largest loss among sectors. Losses in professional and business services (297,600) and educational and health services (284,400) approached 300,000 jobs. Three additional industry sectors lost between 100,000 and 200,000 jobs: other services (198,000), construction (174,700), and manufacturing (121,400). Government (94,800), information (71,100), financial activities (48,600), and mining and logging (1,900) were the remaining sectors that lost jobs.

- With restaurants closed to all but curbside pickups, international travel restrictions in effect, and stay-at-home orders in effect, leisure and hospitality (47.9 percent) had the largest percentage job loss among sectors, losing nearly half of its jobs over the two-month period. Other services (33.4 percent) lost one-third of its jobs, with the losses concentrated in the personal care services industry that includes establishments such as barber shops and nail salons that offer services that involve close interpersonal contact.

- Six additional industry sectors had job losses of more than 9.0 percent: construction (19.1 percent); trade, transportation, and utilities (14.2 percent); information (12.2 percent); professional and business services (10.7 percent); educational and health series (9.9 percent); and manufacturing (9.1 percent). Mining and logging (8.5 percent), financial activities (5.7 percent), and government (3.6 percent) also experienced substantial job losses.

Regional Jobs (Regional Planning Units)

- Any analysis of how the pandemic affected regional jobs is complicated by the fact that the regional data are not seasonally adjusted. As such, it is impossible to filter normally occurring seasonal patterns of employment from those related to the pandemic for the February 2020 through April 2020 period. This analysis instead uses year-over job changes in April 2020, the month which captures the pandemic's maximum year-over employment effects, to analyze the effects that the pandemic had on regional jobs.

- Each of California's 15 regions experienced a year-over job loss in April 2020. North Central Coast (18.7 percent) had the largest job loss among regions and San Joaquin Valley (9.4 percent) had the smallest, but for the most part, differences among regions were largely a matter of degree. Every region experienced large job losses.

- Nine regions had year-over job losses of more than 15.0 percent in April 2020: North Central Coast (18.7 percent), North Bay (17.5 percent), Middle Sierra (16.6 percent), South Central Coast (16.1 percent), North Coast County (15.7 percent), Orange (15.4 percent), Los Angeles Basin (15.3 percent), East Bay (15.2 percent), and Southern Border (15.2 percent). Five additional regions had job losses of 11.2 percent or more: Ventura (14.5 percent), North State (12.9 percent), Bay-Peninsula (12.5 percent), Inland Empire (11.2 percent), and Capital (11.2 percent). San Joaquin Valley (9.4 percent) was the only region with a year-over job loss of less than 10.0 percent.

- Unlike during the expansion, there did not appear to be any discernable difference between the pattern of job losses amongst the state's largest and smallest regions. This was presumably because pandemic-related public health restrictions applied to all regions of the state. If anything, job losses may have been greatest in those regions in which travel and tourism play a disproportionately large role in a region's economy.

Table 5
Year-Over Changes in Total Nonfarm Jobs in California Regional Planning Units (Regions)
At the Height of the Pandemic-Induced Recession in April 2020
Not Seasonally Adjusted Data; Thousands of Jobs.
(Regions ranked by percentage change in jobs.)

	April 2019	April 2020	Year-Over Change in Number	Year-Over Change in Percent
California (Not Seasonally Adjusted)	17,343.0	14,943.1	-2,399.9	-13.8%
LARGEST REGIONS				
San Joaquin Valley	1,354.0	1,227.2	-126.8	-9.4%
Capital	1,075.8	954.9	-120.9	-11.2%
Inland Empire	1,541.2	1,367.9	-173.3	-11.2%
Bay-Peninsula	2,307.3	2,019.2	-288.1	-12.5%
Southern Border	1,550.9	1,315.8	-235.1	-15.2%
East Bay	1,184.0	1,003.9	-180.1	-15.2%
Los Angeles Basin	4,541.5	3,847.1	-694.4	-15.3%
Orange	1,670.0	1,412.6	-257.4	-15.4%
North Bay	587.7	484.9	-102.8	-17.5%
SMALLEST REGIONS				
North State	240.8	209.7	-31.1	-12.9%
Ventura	311.9	266.6	-45.3	-14.5%
North Coast County	51.0	43.0	-8.0	-15.7%
South Central Coast	314.6	264.0	-50.6	-16.1%
Middle Sierra	45.3	37.8	-7.5	-16.6%
North Central Coast	249.1	202.5	-46.6	-18.7%

Source: Employment Development Department.

- Table 6 shows the industry sectors that had the largest year-over job losses in both number and percent in April 2020. Job losses were widely distributed across all industry sectors, with the only occasional exception being no change in employment in mining and logging, a sector that has tiny employment totals in many regions. The information sector in Bay-Peninsula was the only industry sector in any region that had a year-over job gain in April 2020. Every other industry sector in every other region had a year-over job loss or no change in jobs.

- Year-over job losses in April 2020 were heavily concentrated in leisure and hospitality and other services in every region of the state. These were the two sectors most directly affected by public health measures to mitigate the spread of the COVID-19 pandemic.

Table 6

Industry Sectors with the Largest Year-Over Job Losses in Number and Percent by California Region (Regional Planning Unit) in April 2020

Not Seasonally Adjusted Data

	Summary	Industry Sectors With Largest Year-Over Job Losses in Number	Industry Sectors With Largest Year-Over Job Losses in Percent
LARGEST REGIONS (RPUs)			
Los Angeles Basin	All 11 industry sectors lost jobs.	Leisure and hospitality (247,400); trade, transportation, and utilities (141,200); professional and business services (75,700); educational and health services (51,500).	Leisure and hospitality (45.5%); other services (30.9%); information (17.7%); trade, transportation, and utilities (16.8%).
Bay-Peninsula	9 of 11 industry sectors lost jobs; one (information) added jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (138,000); trade, transportation, and utilities (50,500); construction (28,300); educational and health services (25,400); other services (24,100).	Leisure and hospitality (54.2%); other services (34.1%); construction (29.6%); trade, transportation, and utilities (18.0%); educational and health services (7.8%).
Orange	All 11 industry sectors lost jobs.	Leisure and hospitality (94,000); trade, transportation, and utilities (39,100); professional and business services (37,200); educational and health services (26,400); other services (16,800).	Leisure and hospitality (41.3%); other services (32.6%); mining and logging (20.0%); trade, transportation, and utilities (15.2%); professional and business services (11.4%).
Inland Empire	10 of 11 industry sectors lost jobs, one (mining and logging) had no change in jobs.	Leisure and hospitality (75,400); trade, transportation, and utilities (22,600); professional and business services (16,600); other services (14,100); construction (13,000).	Leisure and hospitality (42.1%); other services (30.4%); information (23.1%); construction (12.3%); manufacturing (10.7%).
Southern Border	10 of 11 industry sectors lost jobs, one (mining and logging) had no change in jobs.	Leisure and hospitality (106,300); trade, transportation, and utilities (40,300); other services (21,100); educational and health services (18,600); professional and business services (16,400).	Leisure and hospitality (51.8%); other services (37.0%); trade, transportation, and utilities (17.3%); construction (12.7%); educational and health services (8.3%).
San Joaquin Valley	All 11 industry sectors lost jobs.	Leisure and hospitality (50,800); trade, transportation, and utilities (20,800); educational and health services (12,700); professional and business services (9,500); other services (8,800).	Leisure and hospitality (37.1%); information (22.1%); other services (21.4%); mining and logging (10.1%); construction (10.0%).
East Bay	10 of 11 industry sectors lost jobs, one (mining and logging) had no change in jobs.	Leisure and hospitality (59,400); trade, transportation, and utilities (30,600); construction (20,500); educational and health services (19,900); professional and business services (14,400).	Leisure and hospitality (49.7%); other services (32.4%); construction (27.6%); trade, transportation, and utilities (15.4%); educational and health services (10.0%).

	Summary	Industry Sectors With Largest Year-Over Job Losses in Number	Industry Sectors With Largest Year-Over Job Losses in Percent
Capital	10 of 11 industry sectors lost jobs, one (mining and logging) had no change in jobs.	Leisure and hospitality (56,000); trade, transportation, and utilities (19,700); educational and health services (11,500); other services (10,000).	Leisure and hospitality (48.3%); other services (27.4%); information (17.9%); trade, transportation, and utilities (11.5%).
North Bay	All 11 industry sectors lost jobs.	Leisure and hospitality (40,900); trade, transportation, and utilities (14,400); construction (10,400); educational and health services (9,900); other services (6,500).	Leisure and hospitality (53.5%); other services (30.8%); construction (24.2%); mining and logging (16.3%); information (15.4%).
SMALLEST REGIONS			
Ventura	10 of 11 industry sectors lost jobs, one (mining and logging) had no change in jobs.	Leisure and hospitality (17,000); trade, transportation, and utilities (9,600); educational and health services (4,600); professional and business services (3,800); other services (3,000).	Leisure and hospitality (44.2%); other services (30.9%); information (28.3%); trade, transportation, and utilities (16.8%); construction (9.6%).
South Central Coast (Excl. San Benito County)	All 11 industry sectors lost jobs.	Leisure and hospitality (24,500); trade, transportation, and utilities (8,100); educational and health services (5,200); other services (3,600); manufacturing (2,900).	Leisure and hospitality (50.1%); other services (33.6%); mining and logging (27.3%); trade, transportation, and utilities (17.2%); manufacturing (14.0%).
North State	All 11 industry sectors lost jobs.	Leisure and hospitality (12,600); trade, transportation, and utilities (5,000); educational and health services (3,700); government (3,500); other services (2,900).	Leisure and hospitality (46.3%); other services (28.2%); trade, transportation, and utilities (11.8%); professional and business services (11.3%); information (9.9%).
North Central Coast	All 11 industry sectors lost jobs.	Leisure and hospitality (22,500); trade, transportation, and utilities (7,600); educational and health services (3,600); professional and business services (3,400); other services (2,800).	Leisure and hospitality (55.1%); mining and logging (33.3%); other services (27.2%); information (25.0%); construction (23.9%); trade, transportation, and utilities (17.7%).
North Coast County	10 of 11 industry sectors lost jobs, one (mining and logging) had no change in jobs.	Leisure and hospitality (2,800); trade, transportation, and utilities (1,400); government (1,100); educational and health services (900); manufacturing (600).	Leisure and hospitality (50.0%); manufacturing (27.3%); information (25.0%); other services (20.0%); trade, transportation, and utilities (15.1%).
Middle Sierra	All 11 industry sectors lost jobs.	Leisure and hospitality (3,500); government (1,400); trade, transportation, and utilities (600); manufacturing (500); educational and health services (400).	Leisure and hospitality (50.1%); manufacturing (25.7%); other services (19.1%); construction (14.8%); financial activities (12.0%).

Source: Employment Development Department.

California's Recovery-To-Date

Total Nonfarm Jobs

- California's pandemic-induced recession proved to be short-lived. In early May, California lifted its shelter in place order and began easing restrictions on economic activity through a county-by-county program of tightening or easing public health restrictions based on data-driven criteria linked to the prevalence of the COVID-19 virus itself. For example, restaurants and gyms were initially allowed to reopen provided they offered their services outdoors, and were later allowed to offer indoor services with capacity limitations if the incidence of COVID-19 cases remained low.

- In December 2020, California tightened pandemic restrictions and issued Regional Stay Home Orders in response to surging numbers of COVID-19 cases across the state. These restrictions were lifted in late January 2021 and the state progressively eased restrictions on economic activities thereafter, culminating with the lifting of all remaining public health restrictions and the full reopening of the economy on June 15, 2021.

- California's labor market began recovering with the easing of public health restrictions. In effect, April 2020 marked the end of the pandemic-induced recession and the beginning of the state's recovery.

- California added a total of 1,686,000 nonfarm jobs from April 2020 through August 2021. This was an 11.3 percent increase. The state added jobs in 14 of 16 months during this period, the exceptions being losses of 75,400 and 89,000 jobs in December 2020 and January 2021, when more restrictive public health measures and the Regional Stay Home Order were in effect.[3]

- California has experienced robust job growth over the course of its recovery from the pandemic-induced recession to-date. The state added an average of 105,400 nonfarm jobs per month over the entire course of its 16-month recovery from April 2020 through August 2021. Prior to the pandemic outbreak in February 2020, the state's largest monthly job gain on record was a 98,500-job increase in April 2016 in the official data series going back to the beginning of 1990.

- Total nonfarm jobs grew at a sustained annualized pace of 8.5 percent from April 2020 through August 2021. In contrast, total nonfarm employment grew at an average pace of 2.4 percent per year over the course of the February 2010-February 2020 expansion. Prior to the pandemic, the state's largest year-over job increase on record was a 4.0 percent increase in November 1998.

- Although California has experienced rapid job growth over the course of its recovery-to-date, as of August 2021 it still wasn't close to recovering all the jobs it lost during the February 2020-April 2020 recession. California's total nonfarm employment in August remained 1,028,800 jobs (5.8 percent) below its pre-pandemic level in February 2020. As of August 2021, California had recovered 62.1 percent of the 2,714,800 nonfarm jobs it lost during the pandemic-induced recession. Even if California were able to sustain the robust 105,400 per month average pace of growth of its

[3] As was the case during the recession, the job losses in these two months were heavily concentrated in leisure and hospitality and, to a lesser extent, other services.

recovery-to-date, full recovery of the remaining pandemic job losses would not occur until the middle of 2022.

Industry Sector Jobs

- California's job gains during the recovery-to-date have been well distributed across most industry sectors, with nine out of 11 major industry sectors adding jobs from April 2020 through August 2021. However, two sectors—government and mining and logging—lost jobs even as other sectors of the economy were recovering.

- Leisure and hospitality (587,800) had far and away the largest job gain of any sector from April 2020 through August 2021, accounting for over one-third (34.8 percent) of the overall economy's 1,686,000-job gain during the recovery-to-date. Even with this gain, employment in leisure and hospitality in August 2021 remained 397,700 jobs below its pre-pandemic level in February 2020.

- Three additional industry sectors added over 200,000 jobs over the course of the recovery: trade, transportation, and utilities (360,300); professional and business services (220,900); and educational and health services (208,900). Two additional industry sectors added more than 100,000 jobs: construction (139,800) and other services (105,000). Manufacturing (52,200), information (37,200), and financial activities (9,600) were the remaining industry sectors that added jobs.

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Table 7
Changes in California Total Nonfarm and Industry Sector Jobs from April 2020 Through August 2021
Seasonally Adjusted Data; Thousands of Jobs
Industries ranked by share of lost jobs recovered.

	April 2020	August 2021	Change in Number	Change in Percent	Share of Lost Jobs Lost During Recession Recovered (As of Aug. 2021)
Total Nonfarm Jobs	**14,946.1**	**16,632.1**	**1,686.0**	**11.3%**	**62.1%**
Trade, Transportation, and Utilities	2,630.2	2,990.5	360.3	13.7%	82.5%
Construction	738.6	878.4	139.8	18.9%	80.0%
Professional and Business Services	2,473.7	2,694.6	220.9	8.9%	74.2%
Educational and Health Services	2,578.1	2,787.0	208.9	8.1%	73.5%
Leisure and Hospitality	1,072.7	1,660.5	587.8	54.8%	59.6%
Other Services	395.3	500.3	105.0	26.6%	53.0%
Information	510.0	547.2	37.2	7.3%	52.3%
Manufacturing	1,206.4	1,258.6	52.2	4.3%	43.0%
Financial Activities	800.2	809.8	9.6	1.2%	19.8%
Mining and Logging	20.4	18.9	-1.5	-7.4%	N/A
Government	2,520.5	2,486.3	-34.2	-1.4%	N/A

Source: Employment Development Department.
Note: N/A indicates that an industry sector has not yet begun to recover recession job losses.

- In contrast to other sectors, government (34,200) and mining and logging (1,500) lost jobs from April 2020 through August 2021. Losses in government in large part reflected the fact that the campuses of many public K-12 schools and colleges and universities remained closed over much of the recovery period, leading to job losses among educational support staff.

- Leisure and hospitality (54.8 percent) had the largest percentage job gain over the course of the April 2020-August 2021 recovery, adding jobs at nearly five times the 11.3 percent rate of the overall economy. Other services (26.6 percent) had the second largest percentage job gain among sectors. Construction (18.9 percent), and trade, transportation, and utilities (13.7 percent) were the other industry sectors that added jobs at a faster rate than the overall economy.

- Two California industry sectors had recovered four-fifths or more of their February 2020-April 2020 job losses as of August 2021: trade, transportation, and utilities (82.5 percent recovery) and construction (80.0 percent). Professional and business services (74.2 percent) and educational and health services (73.5 percent) were the other industry sectors that had recovered a larger share of lost jobs than the 62.1 percent share of the overall economy.

- Three additional California industry sectors had recovered more than half of their pandemic-induced job losses as of August 2021: leisure and hospitality (59.6 percent), other services (53.0 percent), and information (52.3 percent). In contrast, the recovery in manufacturing (43.0 percent) and financial activities (19.8 percent) lagged behind other industry sectors, and mining and logging and government showed net job losses.

- Although no California industry sector had recovered their pandemic job losses as of August 2021, two industry subsectors had achieved full recovery. Transportation, warehousing, and utilities payrolls were 35,800 jobs higher than they were in February 2020, reflecting a rise in online shopping and home delivery during the pandemic and strength in the international trade and logistics fueled by consumer spending. Payrolls in professional, scientific, and technical services were 1,900 jobs higher in August 2021 than in February 2020, suggesting that California's high technology sector continues to be a bright spot in the state's post-COVID economy.

Regional Jobs (Regional Planning Units)

- Unfortunately, the fact that regional jobs data are not seasonally adjusted means they are not suitable for analyzing regional job growth trends over the entire 16-month recovery from April 2020 through August 2021. This analysis instead relies on year-over changes in jobs in August 2021 to compare regional job performance during the ongoing recovery.[4]

- Every California region was recovering from the pandemic-induced recession in August 2021, with each of the 15 regions having positive year-over job gains. Los Angeles Basin (275,300) had the largest year-over job gain among regions, followed by Orange (119,500) and Bay-Peninsula (104,500). Two additional regions had year-over gains of more than 60,000 jobs: Inland Empire (65,700) and Southern Border (62,000). San Joaquin Valley (46,500), Capital (43,700), and East Bay (37,000) were the other regions with year-over job gains of more than 35,000 jobs in August 2021.

- Orange (8.1 percent) had the fastest pace of year-over job growth among regions in August 2021. Los Angeles Basin (6.9 percent) and North Coast County (6.0 percent) were the only other California regions with year-over percentage job gains greater than the overall economy's not seasonally adjusted 5.7 percent job gain.

- Two additional California regions—North Bay (5.1 percent) and Bay-Peninsula (5.0 percent)—had year-over job gains of at least 5.0 percent. Five additional regions had year-over job gains larger than 4.0 percent: Inland Empire (4.5 percent), Middle Sierra (4.5 percent), Southern Border (4.4 percent), Capital (4.3 percent) and Ventura (4.3 percent). Each of the state's five remaining regions had year-over job gains of less than 4.0 percent: North State (3.9 percent), North Central Coast (3.7 percent), San Joaquin Valley (3.6 percent), East Bay (3.5 percent), and South Central Coast (2.8 percent).

[4] Comparing like months of the calendar year is the only effective way to filter seasonal patterns of employment from not seasonally adjusted data. As such, two-year and year-over changes in jobs in August 2021 are the only time frames available that capture the effects of the pandemic impacts on regional employment. Because pandemic-related job losses overwhelm the job gains of the recovery-to-date in August 2019-August 2021 comparisons, year-over changes in jobs in August 2021 provide the best and only option for comparing regional job performance in the ongoing recovery. Unfortunately, this comparison omits a large portion of the jobs that have been gained over the course of the 16-month recovery to-date.

Table 8

Year-Over Changes in Total Nonfarm Jobs in California Regional Planning Units (Regions) During the Last Year of Recovery in August 2021

Not Seasonally Adjusted Data; Thousands of Jobs; August 2021 Data Are Preliminary.

(Regions ranked by percentage change in jobs.)

	August 2020	August 2021	Year-Over Change in Number	Year-Over Change in Percent
California (Not Seasonally Adjusted)	15,691.7	16,580.9	889.2	5.7%
LARGEST REGIONS				
Orange	1,471.5	1,590.9	119.4	8.1%
Los Angeles Basin	3,972.7	4,248.0	275.3	6.9%
North Bay	529.2	556.4	27.2	5.1%
Bay-Peninsula	2,095.2	2,199.7	104.5	5.0%
Inland Empire	1,459.1	1,524.8	65.7	4.5%
Southern Border	1,396.1	1,458.1	62.0	4.4%
Capital	1,012.0	1,055.7	43.7	4.3%
San Joaquin Valley	1,289.5	1,336.0	46.5	3.6%
East Bay	1,062.5	1,099.5	37.0	3.5%
SMALLEST REGIONS				
North Coast County	44.8	47.5	2.7	6.0%
Middle Sierra	42.5	44.4	1.9	4.5%
Ventura	284.1	296.2	12.1	4.3%
North State	227.9	236.7	8.8	3.9%
North Central Coast	221.6	229.8	8.2	3.7%
South Central Coast	282.4	290.4	8.0	2.8%

Source: Employment Development Department.

- Table 9 shows the industry sectors that had the largest year-over job gains in both number and percent in August 2021. Year-over job gains were widely distributed across most industry sectors in every region of the state, but concentrated in leisure and hospitality and other services; the two sectors most directly affected by public health restrictions to mitigate the spread of the COVID-19 pandemic are now leading California's recovery now that these restrictions have been eased.

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Table 9

Industry Sectors With the Largest Year-Over Job Gains in Number and Percent by California Region (Regional Planning Unit) in August 2021

Not Seasonally Adjusted Data

	Summary	Industry Sectors With Largest Year-Over Job Gains in Number	Industry Sectors With Largest Year-Over Job Gains in Percent
LARGEST REGIONS (RPUs)			
Los Angeles Basin	9 industry sectors added jobs; one (manufacturing) lost jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (108,800); trade, transportation, and utilities (35,100); educational and health services (34,400); professional and business services (32,000); government (27,500).	Leisure and hospitality (31.3%); other services (15.3%); information (11.3%); professional and business services (5.5%); government (5.2%).
Bay-Peninsula	8 industry sectors added jobs; two lost jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (47,300); professional and business services (25,000); other services (14,200); educational and health services (10,900); information (8,800).	Leisure and hospitality (35.2%); other services (29.7%); professional and business services (4.9%); information (4.1%); educational and health services (3.6%).
Orange	9 industry sectors added jobs; one (financial activities) lost jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (66,000); professional and business services (20,400); trade, transportation, and utilities (11,200); other services (8,000); government (6,700).	Leisure and hospitality (47.8%); other services (20.4%); professional and business services (6.8%); trade, transportation, and utilities (4.7%); government (4.6%).
Inland Empire	7 industry sectors added jobs; three lost jobs and one (mining and logging) had no change in jobs.	Trade, transportation, and utilities (25,400); leisure and hospitality (20,100); educational and health services (13,900); professional and business services (7,700); other services (5,000).	Leisure and hospitality (15.7%); other services (13.8%); trade, transportation, and utilities (6.2%); educational and health services (5.7%); professional and business services (5.1%); information (4.7%).
Southern Border	8 industry sectors added jobs; two lost jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (31,600); other services (9,800); construction (8,900); professional and business services (6,100); educational and health services (5,500).	Other services (24.4%); leisure and hospitality (23.2%); construction (10.7%); information (5.6%); educational and health services (2.6%).
San Joaquin Valley	8 industry sectors added jobs; three lost jobs.	Leisure and hospitality (23,500); trade, transportation, and utilities (8,400); professional and business services (5,700); manufacturing (4,300); other services (4,000).	Leisure and hospitality (22.3%); other services (11.7%); professional and business services (5.0%); construction (4.9%) information (4.2%).
East Bay	8 industry sectors added jobs; two lost jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (14,100); professional and business services (12,500); educational and health services (7,000); other services (5,100).	Leisure and hospitality (18.8%); other services (17.1%); professional and business services (6.9%); educational and health services (3.8%).

	Summary	Industry Sectors With Largest Year-Over Job Gains in Number	Industry Sectors With Largest Year-Over Job Gains in Percent
Capital	10 industry sectors added jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (11,800); construction (8,700); other services (5,700); professional and business services (5,600); trade, transportation, and utilities (4,600).	Other services (19.7%); leisure and hospitality (14.3%); construction (11.7%); professional and business services (4.1%); information (4.1%).
North Bay	10 industry sectors added jobs; One (government) lost jobs.	Leisure and hospitality (13,100); educational and health services (4,500); professional and business services (3,600); other services (2,500); construction (2,400); trade, transportation, and utilities (2,000).	Leisure and hospitality (25.1%); other services (15.6%); information (8.9%); professional and business services (6.3%); construction (5.8%); mining and logging (5.7%).
SMALLER REGIONS (RPUs)			
Ventura	10 industry sectors added jobs; one (mining and logging) had no change in jobs.	Leisure and hospitality (5,100); professional and business services (1,700); manufacturing (1,100); trade, transportation, and utilities (1,000); other services (1,000).	Leisure and hospitality (17.8%); other services (13.5%); information (5.6%); financial activities (4.5%); manufacturing (4.3%).
South Central Coast (Excl. San Benito County)	8 industry sectors added jobs; two lost jobs; one (mining and logging) had no change in jobs.	Professional and business services (3,600); leisure and hospitality (3,200); other services (1,200); manufacturing (800); trade, transportation, and utilities (800).	Other services (15.0%); leisure and hospitality (9.0%); professional and business services (8.4%); information (6.1%); manufacturing (4.2%).
North State	All 11 industry sectors added jobs.	Leisure and hospitality (2,300); educational and health services (2,300); government (1,200); trade, transportation, and utilities (800); construction (600).	Information (17.2%); leisure and hospitality (10.6%); mining and logging (8.3%); other services (5.9%); educational and health services (4.8%).
North Central Coast	8 industry sectors added jobs; three lost jobs.	Leisure and hospitality (7,100); other services (900); construction (700); professional and business services (700); educational and health services (600).	Mining and logging (50.0%); leisure and hospitality (26.0%); information (16.7%); other services (10.6%); construction (6.4%).
North Coast County	9 industry sectors added jobs, two had no change in jobs.	Leisure and hospitality (600); government (600); professional and business services (300); educational and health services (300).	Mining and logging (25.0%); leisure and hospitality (14.6%); other services (10.5%); manufacturing (9.5%); professional and business services (8.8%); construction (8.7%).
Middle Sierra	10 industry sectors added jobs; one (information) had no change in jobs.	Leisure and hospitality (900); construction (300); manufacturing (300); trade, transportation, and utilities (200).	Mining and logging (15.6%); leisure and hospitality (15.3%); manufacturing (13.6%); construction (10.9%); other services (8.3%).

Source: Employment Development Department.

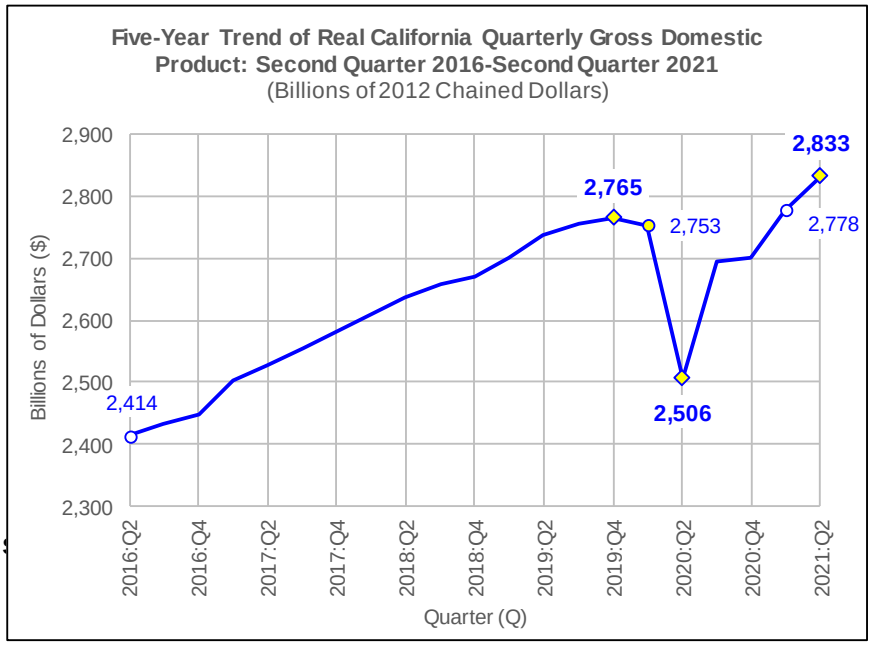
California Gross Domestic Product

- According to the U.S. Bureau of Economic Analysis, California's real GDP, as measured in chained 2012 dollars, totaled $2.8 trillion in the second quarter of 2021. California had by far the largest economy of any state in the country. Texas's $1.8 trillion real GDP ranked a distant second among states. California alone accounted for nearly one-seventh (14.6 percent) of the U.S. GDP, which totaled $19.4 trillion in the second quarter of 2021.

- Financial activities contributed the most to California's real GDP in the second quarter of 2021, with a 16.6 percent share of total GDP. The real estate and rental and leasing subsector alone accounted for 11.9 percent of total GDP. Professional and business services share of total GDP was 15.5 percent, with the professional, scientific, and technical services subsector alone contributing a 10.4 percent share to total GDP. Information (14.3 percent); trade, transportation, and utilities (14.0 percent); manufacturing (13.4 percent); and government (10.3 percent) were the other major industry sectors that contributed more than 10 percent shares to California's total real GDP in the second quarter of 2021.

- The pandemic had a large negative impact on real GDP in California, but the economy has since recovered. From the second quarter of 2016 through the first quarter of 2020, California's real GDP grew by $330 billion in value and grew at a steady annualized rate of 4.0 percent per year.

Figure 2



Source: Employment Development Department.

- Real GDP fell by $247 billion in the second quarter of 2020 following the outbreak of the pandemic and the partial closure of the economy to mitigate its spread. This was a 9.0 percent loss of real GDP in a single quarter. In effect, in a single quarter the pandemic erased three-quarters of the GDP gain that had accumulated over the previous 15 quarters. However, real GDP rose sharply in the

third quarter of 2020 after pandemic restrictions in the state were eased, growing by $188 billion, and increased by an additional $139 billion dollars from the third quarter of 2020 through the second quarter of 2021. California's real GDP in the second quarter of 2021 was $68 billion higher than it was in the fourth quarter of 2019, and it appeared to have returned to its longer run growth trajectory.

- California's real GDP grew by $419 billion over the five-year period from the second quarter of 2016 through the second quarter of 2021. Information was the leading contributor to this increase, growing by $152.3 billion. Professional and business services increased by $108.0 billion, with two-thirds of this increase coming from the professional, scientific, and technical services subsector. Manufacturing's contribution to overall GDP increased by $93.8 billion over this five-year period, with durable goods manufacturing accounting for over three-fifths (62.2 percent) of this gain. Financial activities ($53.2 billion) was the only other California industry sector to grow by more than $50 billion.

- In percentage terms, California's real GDP grew by 17.3 percent from the second quarter of 2016 through the second quarter of 2021. Information (60.4 percent) had the largest increase among industry sectors and subsectors over this period, followed by management of companies and enterprises (50.8 percent). The contributions of three additional industry subsectors increased by more than 30 percent: durable goods manufacturing (33.7 percent); professional, technical, and scientific services (31.8 percent); and nondurable goods manufacturing (31.2 percent). Administrative and support and waste management and remediation services (26.1 percent), finance and insurance (25.6 percent), utilities (19.6 percent), and health care and social assistance (17.9 percent) were the other industry subsectors that grew at a faster rate than overall real GDP.

- At the opposite end of the spectrum, the contributions of seven industry subsectors to overall real GDP decreased from the second quarter of 2016 through the second quarter of 2021. Five subsectors had decreases of more than 10.0 percent: mining, quarrying, and oil and gas extraction (down 21.6 percent); arts, entertainment, and recreation (18.4 percent); accommodation and food services (17.8 percent); military (12.7 percent); and agriculture, forestry, fishing, and hunting (11.8 percent). Other services (9.0 percent) and educational services (5.5 percent) also had decreases. The decreases in most of these subsectors appear to reflect lingering effects from the COVID-19 pandemic. Prior to the pandemic, five of these seven subsectors had positive contributions to California's real GDP over the five year period ending on the fourth quarter of 2020. Military and mining, quarrying, and oil and gas extraction were the two exceptions.

Unemployment in California

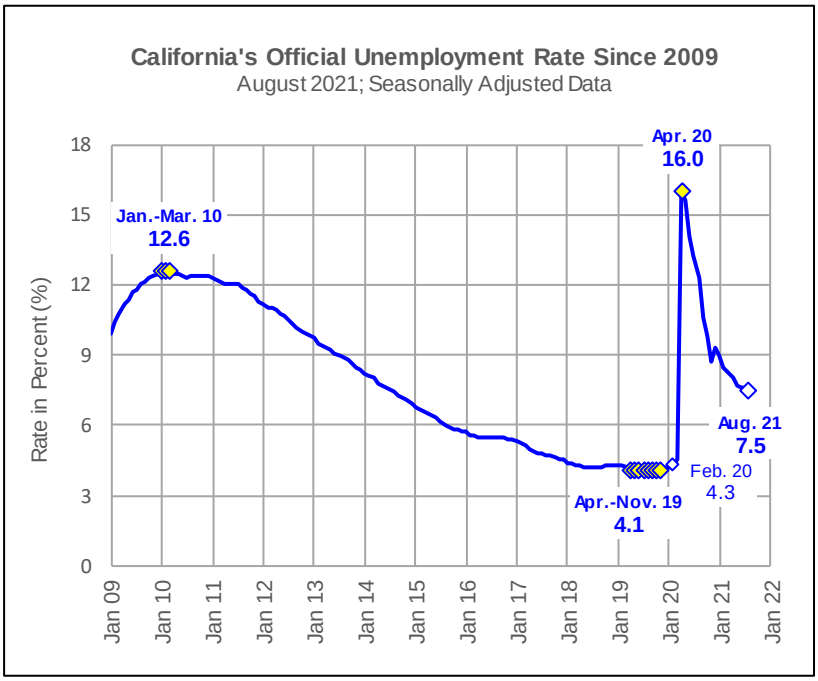
Statewide

- At the beginning of California's 10-year employment expansion in February 2010, California's unemployment rate stood at 12.6 percent, tying January 2010 and March 2010 for what was then California's highest unemployment rate on record in the official data series that dates back to the beginning of 1976. California's unemployment rate fell steadily over the course of its 10-year

expansion. By June 2017, California's 4.8 percent unemployment rate equaled what was then a record low, and in August 2017, the state's 4.7 percent unemployment entered record low territory. The rate continued to fall thereafter as the expansion progressed and bottomed out at a record low of 4.1 percent in April-November 2019 before inching up to 4.3 percent in February 2020.

- California experienced an unprecedented spike in unemployment after the outbreak of the COVID-19 pandemic. Although California's unemployment rate rose by a modest 0.2 percentage point to 4.5 percent in March 2020, this was the state's largest rate increase since October 2009, when the economy was still in a recession. The unemployment rate rose precipitously to a record shattering 16.0 percent in April 2020. In just a two-month period following the outbreak of the pandemic, California's unemployment rose by 11.7 percentage points from a near record low to a record high. To put the magnitude of this increase into perspective, during the Great Recession, California experienced a trough-to-peak unemployment rate increase of 7.7 percentage points from January 2007 through January 2010.

Figure 3



Source: Employment Development Department.

- California's unemployment rate began to fall sharply and swiftly from its April 2020 peak after the state began easing pandemic restrictions and re-opening its economy. From April 2020 through August 2021, the rate fell in 14 out of 16 months, decreasing by 8.5 percentage points over the period. The only exceptions were a 0.6 percentage point increase in December 2020 when stricter public health restrictions were in place and no change in July 2021. Despite this improvement, California's 7.5 percent unemployment rate in August 2021 was 3.2 percentage points higher than its pre-pandemic level in February 2020.

- During the Great Recession, the number of unemployed Californians peaked at 2,286,000 persons in October 2010 and fell steadily over the course of the February 2010-February 2020 expansion. By June 2019, civilian unemployment had fallen to 785,000 persons, which was a 27-year low. Although unemployment inched up to 845,000 persons by February 2020, it was still at a level the state had not experienced since the latter stages of its May 1993-January 2001 economic expansion.

- The pandemic changed everything. Following its outbreak and the imposition of strict public health restrictions to mitigate its spread, the number of unemployed Californians surged from 845,000 persons in February 2020 to 2,966,000 persons in April 2020. This was a 2,121,000-person increase over two months. All but 19,000 persons of this increase occurred in month of April 2020 alone. To put this increase into perspective, over the course of the Great Recession, the number of unemployed Californians increased by 1,425,000 persons over a four-year period from October 2006 through October 2010.

- The number of unemployed fell sharply from its April 2020 peak after the state began easing pandemic restrictions and re-opening its economy. Civilian unemployment fell from 2,966,000 persons in April 2020 to 1,432,000 persons in August 2021, which was a 1,534,000-person decrease. Despite this improvement, there were 587,000 more unemployed Californians in August 2021 than there were before the pandemic in February 2020.

Regional Unemployment Rates

- Because regional unemployment rates are not seasonally adjusted, the only way to effectively control for seasonality to compare changes in the data over time is to compare like months of the calendar year. Although this is no obstacle in analyzing unemployment trends over the course of the February 2010-February 2020 expansion, it does present a problem when looking at regional unemployment rates during the pandemic-induced recession and subsequent recovery.

- At the beginning of the expansion in February 2010, the not seasonally adjusted unemployment rates of California's 15 regions ranged from a low of 10.2 percent in Orange to a high of 18.6 percent in San Joaquin Valley.

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Table 10
Unemployment Rates in California Regional Planning Units (Regions) During the February 2010-February 2020 Expansion
Not Seasonally Adjusted Data
(Regions ranked by percentage change in unemployment rates.)

	February 2010	February 2020	10-Year Change
CALIFORNIA			
(Not Seasonally Adjusted)	13.0%	4.3%	-8.7%
LARGEST REGIONS			
Orange	10.2%	2.8%	-7.4%
Bay-Peninsula	10.4%	2.4%	-8.0%
Los Angeles Basin	12.7%	4.7%	-8.0%
Southern Border	12.0%	3.8%	-8.2%
East Bay	11.4%	3.0%	-8.4%
North Bay	11.9%	3.3%	-8.6%
Capital	13.8%	4.2%	-9.6%
San Joaquin Valley	18.6%	8.4%	-10.2%
Inland Empire	14.3%	3.9%	-10.4%
SMALLEST REGIONS			
South Central Coast	10.7%	3.9%	-6.8%
Ventura	11.4%	3.7%	-7.7%
North Coast County	11.6%	3.8%	-7.8%
North Central Coast	17.5%	8.7%	-8.8%
North State	16.7%	5.6%	-11.1%
Middle Sierra	16.2%	4.7%	-11.5%

Source: Employment Development Department.

- Six regions had unemployment rates that were higher than California's not seasonally adjusted rate of 13.0 percent in February 2010: San Joaquin Valley (18.6 percent), North Central Coast (17.5 percent), North State (16.7 percent), Middle Sierra (16.2 percent), Inland Empire (14.3 percent), and Capital (13.8 percent). Only three regions had unemployment rates below 11.0 percent: South Central Coast (10.7 percent), Bay-Peninsula (10.4 percent), and Orange (10.2 percent).

- Regional unemployment rates fell substantially in all regions of the state over the course of the expansion. By its end in February 2020, regional unemployment rates ranged from a low of 2.4 percent in Bay-Peninsula to a high of 8.7 percent in North Central Coast. Two regions—Bay-Peninsula (2.4 percent) and Orange (2.8 percent)—had unemployment rates below 3.0 percent. Seven additional regions had unemployment rates below 4.0 percent: East Bay (3.0 percent), North Bay (3.3 percent), Ventura (3.7 percent), Southern Border (3.8 percent), North Coast County (3.8 percent), Inland Empire (3.9 percent), and South Central Coast (3.9 percent).

- Every California region had an unemployment rate decrease of at least 6.8 percentage points from February 2010 through February 2020. Four regions had 10-year unemployment rate decreases of 10.0 percentage points or more: Middle Sierra (11.5 percent), North State (11.1 percent), Inland

Empire (10.4 percent), and San Joaquin Valley (10.2 percent). Two additional regions—Capital (9.6 percent) and North Central Coast (8.8 percent) —had 10-year unemployment rate decreases greater than the state's 8.7 percentage point decrease. Only four regions had 10-year unemployment rate decreases of less than 8.0 percentage points: North Coast County (7.8 percent), Ventura (7.7 percent), Orange (7.4 percent), and South Central Coast (6.8 percent).

- Because not seasonally adjusted regional unemployment data, which require comparing like months of the calendar year to control for seasonality, are not well suited for analyzing the time frames of the February 2020-April 2020 pandemic-induced recession or the April 2020-August 2021 recovery-to-date, year-over unemployment rate changes in April 2020 and August 2021 are the most effective way to compare regional unemployment rate trends during the pandemic-induced recession and recovery, respectively.

- All regions of California experienced a sharp spike in unemployment as a result of the COVID-19 pandemic. At the peak of the pandemic-induced recession in April 2020, the not seasonally adjusted unemployment rates among California's regions ranged from a low of 12.4 percent in Bay-Peninsula to a high of 18.5 percent in North Central Coast. The April 2020 unemployment rate in each region of the state was the highest ever recorded for the month of April in a data series extending back to the beginning of 1990.

- Five California regions had higher unemployment rates than the state's not seasonally adjusted rate of 16.0 percent in April 2020: North Central Coast (18.5 percent), Los Angeles Basin (18.2 percent), San Joaquin Valley (17.9 percent), Middle Sierra (16.8 percent), and Southern Border (16.5 percent). Four additional regions had unemployment rates above 15.0 percent: North State (15.5 percent), Inland Empire (15.2 percent), North Bay (15.2 percent), and North Coast County (15.2 percent). Only six of California's 15 regions had unemployment rates of less than 15.0 percent: East Bay (14.8 percent), Capital (14.7 percent), Ventura (14.5 percent), Orange (14.4 percent), South Central Coast (14.3 percent), and Bay-Peninsula (12.4 percent).

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Table 11

Year-over Unemployment Rates in California Regional Planning Units (Regions) at the Height of the Pandemic-Induced Recession in April 2020 and During the Recovery in August 2021

Not Seasonally Adjusted Data

(Regions ranked by year-over percentage change in unemployment rates.)

	Pandemic-Induced Recession				Recovery		
	April 2019	**April 2020**	**Year-Over Change**		**August 2020**	**August 2021**	**Year-Over Change**
CALIFORNIA (Not Seasonally Adjusted)	3.9%	16.0%	12.1%	CALIFORNIA (Not Seasonally Adjusted)	12.3%	7.5%	-4.8%
LARGEST REGIONS				LARGEST REGIONS			
Los Angeles Basin	4.1%	18.2%	14.1%	San Joaquin Valley	12.0%	9.1%	-2.9%
Southern Border	3.5%	16.5%	13.0%	Capital	10.0%	6.6%	-3.4%
North Bay	2.9%	15.2%	12.3%	North Bay	9.3%	5.8%	-3.5%
East Bay	2.7%	14.8%	12.1%	Bay-Peninsula	8.6%	4.8%	-3.8%
Orange	2.5%	14.4%	11.9%	Inland Empire	11.5%	7.6%	-3.9%
Inland Empire	3.6%	15.2%	11.6%	East Bay	10.5%	6.3%	-4.2%
Capital	3.8%	14.7%	10.9%	Southern Border	11.4%	7.2%	-4.2%
San Joaquin Valley	7.5%	17.9%	10.4%	Orange	10.7%	6.0%	-4.7%
Bay-Peninsula	2.2%	12.4%	10.2%	Los Angeles Basin	17.5%	9.7%	-7.8%
SMALLEST REGIONS				SMALLEST REGIONS			
Middle Sierra	4.1%	16.8%	12.7%	North Central Coast	9.0%	6.5%	-2.5%
North Central Coast	6.5%	18.5%	12.0%	North State	9.0%	6.5%	-2.5%
North Coast County	3.5%	15.2%	11.7%	South Central Coast	8.4%	5.5%	-2.9%
North State	5.0%	15.5%	10.5%	Middle Sierra	9.4%	6.4%	-3.0%
South Central Coast	3.1%	14.3%	11.2%	North Coast County	9.4%	6.1%	-3.3%
Ventura	3.2%	14.5%	11.3%	Ventura	9.8%	6.2%	-3.6%

Source: Employment Development Department.

- Each of the state's 15 regions had a year-over unemployment rate increase of at least 10.0 percentage points in April 2020. Los Angeles Basin (14.1 percent) had the largest year-over rate increase and Bay-Peninsula (10.2 percent) had the smallest. Five regions had year-over rate increases equal to or higher than the state's 12.1 percentage point increase: Los Angeles Basin (14.1 percent), Southern Border (13.0 percent), Middle Sierra (12.7 percent), North Bay (12.3 percent), and East Bay (12.1 percent). Only four California regions had year-over unemployment rate increases of less than 11.0 percentage points: Capital (10.9 percent), North State (10.5 percent), San Joaquin Valley (10.4 percent), and Bay-Peninsula (10.2 percent).

- The pandemic caused a large spike in unemployment across regions despite their differences in size, industry mix, and urban or rural orientation. This suggests that the pandemic, or perhaps more accurately the public health measures that were adopted to slow its spread, was the primary driver of the spike in unemployment. In a normal labor market, economic factors would underlie increases in unemployment and regions would exhibit different patterns of unemployment.

- Every California region has seen a substantial improvement in their unemployment rates over the course of the recovery-to-date. In August 2021, regional unemployment rates ranged from a low of

4.8 percent in Bay-Peninsula to a high of 9.7 percent in Los Angeles Basin. Only two regions—Los Angeles Basin (9.7 percent) and San Joaquin Valley (9.1 percent) had not seasonally adjusted unemployment rates above 9.0 percent. Only two additional regions—Inland Empire (7.6 percent) and Southern Border (7.2 percent)—had rates above 7.0 percent. California's 11 remaining regions each had unemployment rates below 7.0 percent, including three with rates below 6.0 percent—North Bay (5.8 percent), South Central Coast (5.5 percent), and Bay-Peninsula (4.8 percent).

- Every California region experienced a substantial year-over decrease in their unemployment rate in August 2021. Los Angeles Basin (7.8 percentage points) had the largest year-over decrease and was the only region to have a larger decrease than the state's overall not seasonally adjusted year-over decrease of 4.8 percentage points. Three additional regions had year-over rate decreases of between 4.0 and 5.0 percentage points: Orange (4.7 percent), Southern Border (4.2 percent), and East Bay (4.2 percent). Only four regions had year-over rate decreases of less than 3.0 percentage points: San Joaquin Valley (2.9 percent), South Central Coast (2.9 percent), North State (2.5 percent), and North Central Coast (2.5 percent).

- Although the state's smallest regions tended to have smaller year-over rate decreases than most of the state's largest regions, each of the state's six smallest regions had not seasonally adjusted unemployment rates of 6.5 percentage points or less in August 2021, compared to just four of the state's nine largest regions.

<u>Effects of the COVID-19 Pandemic on California's Labor Market</u>

- The COVID-19 pandemic and the public health restrictions that were necessary to mitigate its spread abruptly ended California's 10-year employment expansion in February 2020 and disrupted labor markets throughout the state, resulting in unprecedented job losses that spanned all industry sectors and spikes in unemployment that spanned all regions. California's labor markets began to recover quickly from April 2020 forward as these restrictions were eased and eventually lifted. However, California still had a long way to go to achieve full recovery as of August 2021.

- Although pandemic-related job losses were widespread across industry sectors, they were concentrated in the leisure and hospitality and other services sectors and in industries in other sectors that involve a large degree of interpersonal contact, in which people congregate, or which have a strong travel and tourism orientation. In addition to public wariness about these sorts of interactions in the midst of a pandemic, these same industry sectors and industries were most directly targeted by public health measures that initially shutdown all but nonessential services, which also established longer duration limitations and social distancing requirements on indoor activities. Travel and tourism ground to a near halt in the immediate aftermath of the pandemic outbreak as a result of the general public's trepidation about the coronavirus and the imposition of travel restrictions and other limitations on people's movement.

- In contrast, industries that provide essential goods and services to the general public remained open throughout the pandemic. Employment in these industries, as well as those most amenable to remote work, or telework, were less directly impacted by the pandemic.

- The end of the pandemic-induced recession and subsequent recovery corresponds in time to when the shutdown of nonessential services was lifted, and public health restrictions on interpersonal interactions and public movement were eased and eventually lifted. Job gains over the course of the April 2020-August 2021 recovery were also widespread across all industry sectors except government and mining and logging, but concentrated in those industry sectors that fared the worst during the pandemic-induced recession.

- At the regional level, pandemic-related job losses were widespread across all industry sectors in every region. Job gains during the recovery were widespread across most industry sectors across regions. Similarly, every region of the state experienced a sharp spike in their unemployment rate during the pandemic-induced recession followed by substantial rate decreases over the course of the recovery. Differences among regions were largely a matter of degree. Generally speaking, the pattern of regional employment and unemployment have mirrored those in the state as a whole during the pandemic.

- In summary, the COVID-19 pandemic has driven California's cycle of recession and recovery since February 2020, not basic fundamentals within the economy and labor market. The current business cycle is unique in this respect. In the absence of evidence to the contrary, the pre-pandemic situation remains the best depiction of the "normal" labor market.

- It is not as yet clear whether or not the COVID-19 pandemic will have lasting impacts on the labor market itself. This is in large part due to the fact that the pandemic itself is not yet over or under control, as evidenced by the late summer of 2021 surge in the number of COVID-19 cases in some parts of the United States that were fueled by the Delta variant. Moreover, any lasting effects of the pandemic will only be revealed in hindsight. Nevertheless, it seems reasonable to assume that the longer the pandemic persists, the more lasting its impacts will be.

- There does not as yet appear to be conclusive evidence that the pandemic has changed the dynamics of the labor market in any fundamental sense. However, it does appear to have accelerated some trends that were already developing and caused segments of the labor market to fall out of alignment. Common themes about the effect in any fundamental sense of the pandemic on the labor market, distilled from numerous media reports and economic forums over the course of the pandemic, yields the following observations about the pandemic's impacts on the labor market to-date:

    - The share of online shopping and home delivery in consumer spending, already increasing over time, has surged over the course of the pandemic and shows little sign of abating.

    - The number and share of remote workers, or teleworkers, in the workforce has expanded substantially over the course of the pandemic. This has had beneficial follow-on implications for traffic congestion and emissions. Looking forward, it is not clear how much of this movement towards remote work will be permanent or how much will be transitory. Many observers believe that hybrid remote work/in-office work arrangements will become the

norm in many industries.

- The expansion of remote work has weakened the traditional bonds between where people live and work, fueling an outmigration of many remote workers, particularly those with young families, from the urban core to more remote suburbs and exurbs where more spacious and plentiful housing options are available. This trend has in turn led to rising rents and home prices in more outlying urban areas as well as increased demand for goods and services in these areas. However, there is no consensus as to how long this trend will continue. Many expect a counter trend back to the urban core will develop over time.

- Nationally, there has been an increase in the number of baby boomers who have retired during the pandemic. This surge in part reflects that older individuals are the most at-risk segment of the population to the COVID-19 virus. Rising home equity values may have also contributed to this surge in retirement by providing many older workers greater financial security in retirement.

- Consumer spending, in part fueled by transfer payments from the federal government, has shifted away from services—many of the providers of which were shuttered or had to limit operations during the pandemic—to durable goods over the course the pandemic. This trend is expected to reverse now that the economy has reopened and federal assistance is waning.

- Strong consumer spending and demand for durable goods, combined with temporary closures of production facilities and ports either home or abroad, have contributed to persistent supply chain bottle necks within the economy, creating delays in goods procurement and production and contributing to inflation within the general economy. Rather than proving to be transitory, supply chain difficulties appear to have grown and worsened over the course of the recovery. The apparent cracks that the pandemic has revealed in the global just-in-time goods production and delivery model have led some observers to believe that global supply chains will be re-organized over time. This may involve some re-shoring of activities that are currently performed abroad over the long term.

- Widespread worker shortages have been reported in many industries during the recovery, including the hard hit restaurant industry. These shortages have persisted even as wages have risen and unemployment remains elevated with respect to pre-pandemic levels. Among the more prominently cited contributing factors to labor shortages were: a continued reluctance among some workers to take jobs in which they are at higher risk of contracting COVID-19 and child and dependent care constraints, particularly for women in low income households, that were exacerbated by school campus closures. Some observers contend that federal pandemic assistance created disincentives for unemployed workers to seek work, particularly in low wage industries. However, the counter-argument to this claim is that this assistance provided many low-wage workers the opportunity to seek out jobs with better pay and working conditions rather than take the first job made available to

them. Whatever the myriad causes, the pandemic appears to have caused a misalignment between labor demand and supply in parts of the labor market that will only be resolved over time.

- Although the pandemic does not appear to have changed fundamental inequalities within the labor market, it has exacerbated existing ones. For example, leisure and hospitality and other services, the two sectors hardest hit by the pandemic, are low wage industries with workforces that tend to be less well educated and skilled and disproportionately young and female. In contrast, the remote workers who escaped the pandemic-induced recession comparatively unscathed tend to work in high wage industries that have workforces that are more educated and skilled, and disproportionately older and male.

Unemployment Rates of Demographic Groups in California

- According to the United States (U.S.) Bureau of Labor Statistics (BLS), labor market differences among the race and ethnicity groups are associated with many factors, not all of which are measurable. These factors include variations in educational attainment across the groups; the occupations and industries in which the groups work; the geographic areas of the country in which the groups are concentrated, including whether they tend to reside in urban or rural settings; and the degree of discrimination encountered in the workplace.

- Across all of California's demographic groups, the unemployment rates have decreased over the past year. The unemployment rates of demographic groups are calculated differently from the official unemployment rate in that they are derived solely from the U.S. Census Bureau's Current Population Survey (CPS) data and calculated on a 12-month average basis in order to minimize the statistical variability associated with California's comparatively small CPS sample size.

- According to these 12-month average CPS data, over the nine years ending in August 2021, California's unemployment rate decreased by 2.4 percentage points. The largest unemployment rate decrease of any demographic group was among youths aged 16 to 19 years old, whose unemployment rate fell 17.7 percentage points from August 2012 through August 2021, or from 35.4 percent to 17.7 percent. In contrast, among Californians who had a bachelor's degree or higher, this group had a far lower unemployment rate over the nine years ending in August 2021. This demographic group fell by 0.4 percentage point, or from 6.2 percent to 5.8 percent. A summary of unemployment rate trends among key demographic groups follows.

- The unemployment rate for men fell 2.6 percentage points between August 2012 and August 2021. The rate for women fell 2.2 percentage points over the same period. Whereas the unemployment rate for men ticked up 0.5 percentage point between August 2020 and August 2021, it fell by 0.3 percentage point among women.

- Over the time periods examined, younger workers tended to have substantially higher unemployment rates than older workers. The 17.7 percentage point unemployment rate decrease among teens aged 16 to 19 years old from August 2012 to August 2021 was the largest among age

cohorts, followed by the 3.1 percentage point decrease among younger workers between the ages of 20 and 24 years old. In contrast, the unemployment rate for Californians between the ages of 55 and 64; and 65 and over fell by 1.3 percentage points over the same period of time.

- The unemployment rate among native-born workers tended to be higher than that of foreign-born workers over the August 2012 through August 2021 period. Among foreign-born workers, the unemployment rate of naturalized U.S. citizens was consistently lower than that of foreign-born workers that were not U.S. citizens. The unemployment rates across national origin groups fell substantially between August 2012 and August 2021 with percentage point declines ranging from 1.1 (foreign-born, naturalized U.S. citizen) to 4.1 (foreign-born, not a U.S. citizen) over the period.

- The unemployment rates of Black and Hispanic/Latino workers tended to be higher than those of White and Asian workers over the August 2012 through August 2021 period. However, Black and Hispanic/Latino workers experienced larger decreases in their respective unemployment rates than White and Asian workers over that period of time. Between August 2020 and August 2021, the unemployment rates among Black and Hispanic/Latino workers increased by 2.7 and 0.4, respectively. This differs from the nominal gain in the unemployment rate experienced by White workers (0.1 percentage point) and the decline among Asian workers (0.4 percentage point).

- The BLS found that the unemployment rates for people at each level of educational attainment have, in general, moved in tandem with the business cycle. Between August 2012 and August 2021, the largest unemployment rate decrease occurred among Californians with less than a high school diploma (6.6 percentage points), followed by high school graduates, with no college experience (2.2 percentage points), and those who had some college experience, but no degree (2.0 percentage points). In contrasts, the unemployment rate among Californians with an associate degree fell by 0.9 percentage point and Californians with a bachelor's degree or higher fell by 0.4 percentage point over the nine years ending in August 2021.

- The unemployment rate among Californians with disabilities fell by 4.6 percentage points between August 2012 and August 2021. However, the unemployment rate for this demographic group of workers increased by 5.4 percentage points, the largest percentage point gain of any of the demographic groups between August 2020 and August 2021.

- The unemployment rate among California's veterans fell from 9.1 percent in August 2012 to 6.6 percent in August 2021; a decrease of 2.5 percentage points. A larger decrease over the period than the one experienced by non-veterans (2.4 percentage points). Between August 2020 and August 2021, the unemployment rate for the State's veterans declined by 0.8 percentage point, while the unemployment rate increased for non-veterans (0.1 percentage point) over that period of time.

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Table 12

Unemployment Rates by Demographic Group in California

(Unemployed as a Percent of the Labor Force, 12-Month Average of Current Population Survey Data)

	August 2012	August 2020	August 2021	Net Percentage Point Change August 2012 to August 2021	Year-Over Percentage Point Change August 2020 to August 2021
All Groups, Age 16 and Over	10.9%	8.3%	8.5%	-2.4	0.2
Gender					
Male	10.9%	7.8%	8.3%	-2.6	0.5
Female	10.8%	8.9%	8.6%	-2.2	-0.3
Age					
16 to 24	20.8%	15.7%	14.5%	-6.3	-1.2
16 to 19	35.4%	21.5%	17.7%	-17.7	-3.8
20 to 24	16.4%	13.8%	13.3%	-3.1	-0.4
25 to 34	10.6%	8.7%	8.8%	-1.7	0.2
35 to 44	8.8%	6.6%	7.0%	-1.8	0.4
45 to 54	8.6%	6.8%	6.8%	-1.8	0.0
55 to 64	8.9%	6.9%	7.7%	-1.3	0.8
65 and over	9.6%	8.1%	8.3%	-1.3	0.2
National Origin					
Native-Born	10.9%	8.3%	8.6%	-2.3	0.3
Foreign-Born	10.8%	8.3%	8.1%	-2.7	-0.3
Foreign Born, Naturalized U.S. Citizen	8.9%	7.1%	7.8%	-1.1	0.7
Foreign Born, Not a U.S. Citizen	12.5%	9.6%	8.3%	-4.1	-1.3
Race					
White	10.6%	8.0%	8.2%	-2.4	0.1
Black	18.5%	10.0%	12.7%	-5.8	2.7
American Indian, Alaskan Native	14.3%	12.3%	7.5%	-6.8	-4.8
Asian	8.2%	7.9%	7.6%	-0.6	-0.4
Hawaiian/Pacific Islander	12.4%	7.2%	10.8%	-1.5	3.7
One or more races	14.9%	12.3%	11.8%	-3.1	-0.5
Ethnicity					
Latino/Hispanic	13.2%	9.3%	9.7%	-3.5	0.4
Non-Hispanic	9.5%	7.8%	7.7%	-1.8	-0.1
Educational Attainment					
Less than a high school diploma	17.7%	13.1%	11.1%	-6.6	-2.0

	August 2012	August 2020	August 2021	Net Percentage Point Change August 2012 to August 2021	Year-Over Percentage Point Change August 2020 to August 2021
High school graduates , no college	13.0%	9.8%	10.9%	-2.2	1.1
Some college, no degree	11.7%	9.7%	9.7%	-2.0	0.0
Associate degree	9.6%	8.6%	8.8%	-0.9	0.2
Bachelor's degree or higher	6.2%	5.7%	5.8%	-0.4	0.1
Disability					
Has a Disability	18.5%	8.5%	13.9%	-4.6	5.4
Doesn't Have a Disability	10.7%	4.0%	8.3%	-2.4	4.3
Served in Armed Forces					
Yes	9.1%	7.4%	6.6%	-2.5	-0.8
No	10.8%	8.4%	8.5%	-2.4	0.1

Source: U.S. Census Bureau; Employment Development Department.

Labor Underutilization in California

Californians Who Work Part-Time for Economic Reasons

- The unemployment rate, while a valuable and widely understood barometer of labor market conditions, is narrowly defined. According to the BLS, an unemployed person is someone who did not work at least one hour for pay but actively soughtwork in the four-week period leading up to the household survey reference week. If an individual is neither employed nor unemployed, by definition he or she is considered to be not in the labor force. As such, the unemployment rate does not capture underemployment within the labor market. Nor does it track individuals who are marginally attached to the labor market. These are individuals who want to work and are available to work and have sought work in the past year, but had not actively sought work in the last four weeks.

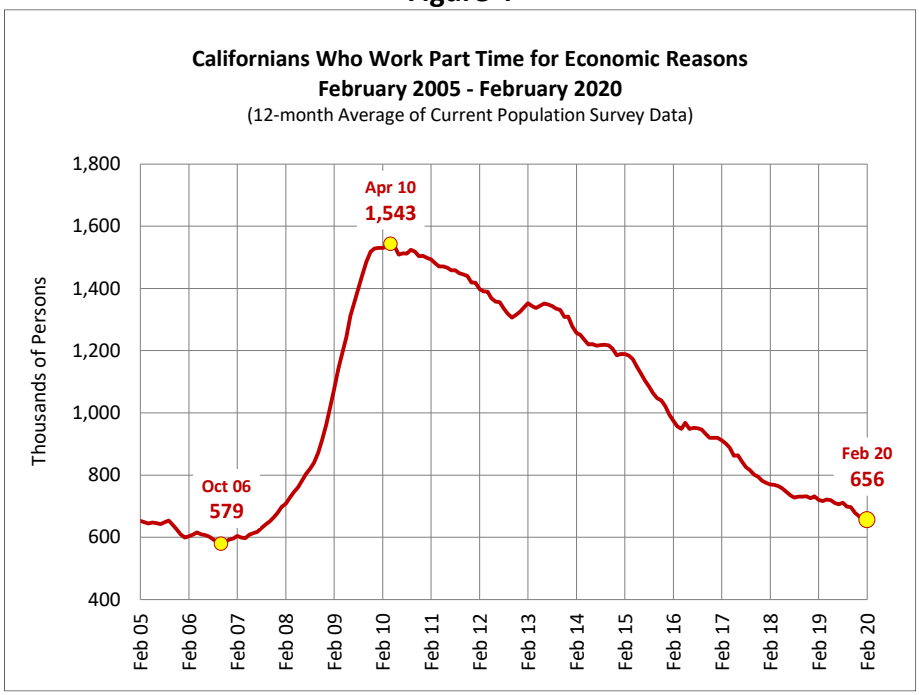
- The concept of underemployment has several aspects. Generally speaking, underemployment refers to workers who work part-time hours but desire to work full-time hours or more hours than they are currently working; workers who are working on a temporary basis but desire permanent employment; and workers doing work for which they are overqualified in terms of education, skills, and experience and who desire work which better matches their qualifications. Unfortunately, it is only possible to track the hours-worked aspect of underemployment over time using established labor market information tools, namely the CPS of households.

- The BLS defines workers who work part-time for economic reasons, or involuntary part-time employment, as those workers who work part-time but desire full-time work. Working 35 hours or more per week is the threshold for full-time work. Working less than 35 hours per week is the threshold for part-time work. Those who work part-time for economic reasons include workers who usually work full-time but have had their hours slashed to part-time status by their

employers, and workers who desire and are available to work full-time work but have had to settle for part-time work because that was the best employment option they could find.

- According to 12-month average data from the CPS, the number of Californians who worked part-time for economic reasons reached a low of 579,000 persons in October 2006 prior to the Great Recession. They accounted for 3.4 percent of all working Californians. The number of persons working part-time for economic reasons shot up during the recession and peaked at 1,543,000 persons in April 2010, when nearly one out of every ten (9.6 percent) employed Californians worked part-time involuntarily.

Figure 4



Source: Employment Development Department.

- The number of persons working part-time for economic reasons fell steadily, if gradually, over the course of the California's long employment expansion. In October 2019, 697,000 Californians worked part-time for economic reasons. They accounted for 3.7 percent of all working Californians, which was more or less on par with the pre-recession low.

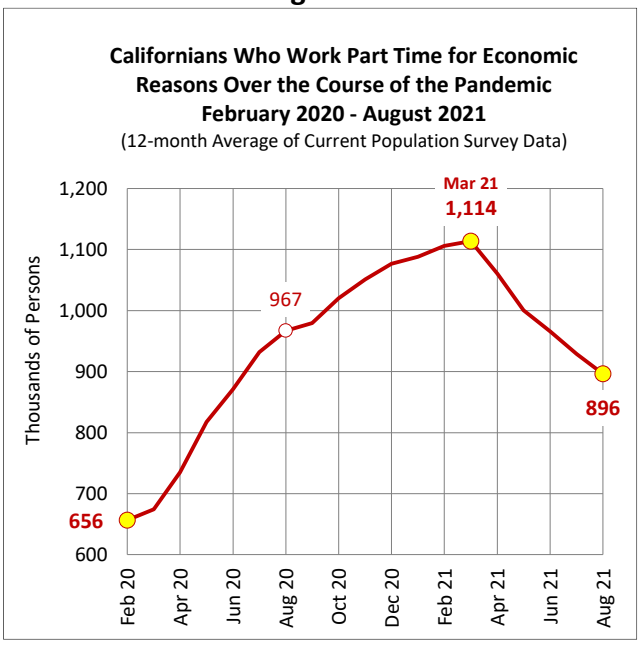
- However, the data also suggest that involuntary part-time employment in California has increasingly become an issue of workers having to settle for part-time work even though they desire full-time work. Prior to the recession in October 2006, nearly two-fifths (37.8 percent) of the Californians who worked part-time for economic reasons usually worked full-time but had their hours cut by their employers. A little over three-fifths (62.2 percent) usually worked part-time but desired full-time hours. In contrast, one-quarter (24.8 percent) of involuntary part-time workers usually worked full-time but had their hours cut and three-quarters (75.2 percent) were those who desired full-time work but had to settle for part-time work in February 2020.

The Pandemic-Induced Business Cycle

- Unfortunately, estimates of the number of Californians who work part-time for economic reasons show only a lagged response to the pandemic because they are calculated as a 12-month average of Current Population Survey data. Nevertheless, the data show a sharp rise in involuntary part-time unemployment in California following outbreak of the pandemic, followed by rapid decreases during the recovery.

- The number of Californians working part-time for economic reasons rose from 656,000 in February 2020 to a peak of 1,114,000 in March 2021. This was an increase of 457,000 persons (69.7 percent) over a 13-month period. Over two-thirds (68.0 percent) of this increase occurred from February 2020 through August 2020, or soon after the pandemic outbreak. In contrast, the number of Californians working part-time for economic reasons fell from its peak of 1,114,000 persons in March 2021 to 896,000 persons in August 2021. This was a decrease of 217,000 persons (19.5 percent) over a six-month period.

Figure 5



Source: Employment Development Department.

- Perhaps more interestingly, the character of involuntary part-time employment changed over the course of the pandemic. Full-time workers who had their hours cut by their employers fueled the February 2020 – August 2020 surge in workers who worked part-time for economic reasons. Their number rose from 163,000 in February 2020 to 466,000 in August 2020, which was an increase of 303,000 persons (186.1 percent) over just six months. In contrast, the number of workers who usually worked part-time but desired full-time hours rose by just 7,000 persons (1.4 percent) over this same period.

- The character of involuntary part-time employment changed from August 2020 through the March

2021 peak. Whereas the number of workers who usually worked part-time but desired full-time work rose by 94,000 persons (18.8 percent) over this period, the number of workers who usually worked full-time but had their hours cut increased by 53,000 persons (11.3 percent).

- An even greater difference between those who had their hours cut by their employers and those who couldn't find full-time work occurred during the recovery period from March 2021 through August 2021. Whereas the number of workers who involuntarily worked part-time because they had their hours cut by their employers fell by 254,000 persons (49.0 percent), the number of workers who wanted full-time hours but had to settle for part-time work increased by 37,000 (6.2 percent).

- The share of workers who usually work full-time but had their hours cut by their employers amongst all involuntarily part-time workers rose from 24.8 percent in February 2020 to a peak of 48.7 percent in December 2020. Their share had fallen to 29.5 percent by August 2021, and was on track to return to its pre-pandemic level.

- California's experience with involuntary part-time employment over the course of the pandemic underscores the fact that underemployment in California is fundamentally an issue of workers being unable to find the number of hours they desire to work. The exception is during times of economic stress, or recession, when many employers cut the hours of their full-time employees in lieu of laying them off in order to reduce costs.

The U-6 and U-3 Measures of Labor Underutilization

- In acknowledgement that the traditional definition of unemployment is limited in that it does not measure underemployment or track marginally attached workers to the labor force, the BLS has devised six alternative measures of labor underutilization, some that are more restrictive than the unemployment rate and some that are more inclusive and broadly defined. The U-3 measure, or official unemployment, is defined as the total number of unemployed as a percentof the civilian labor force (employed and unemployed persons).

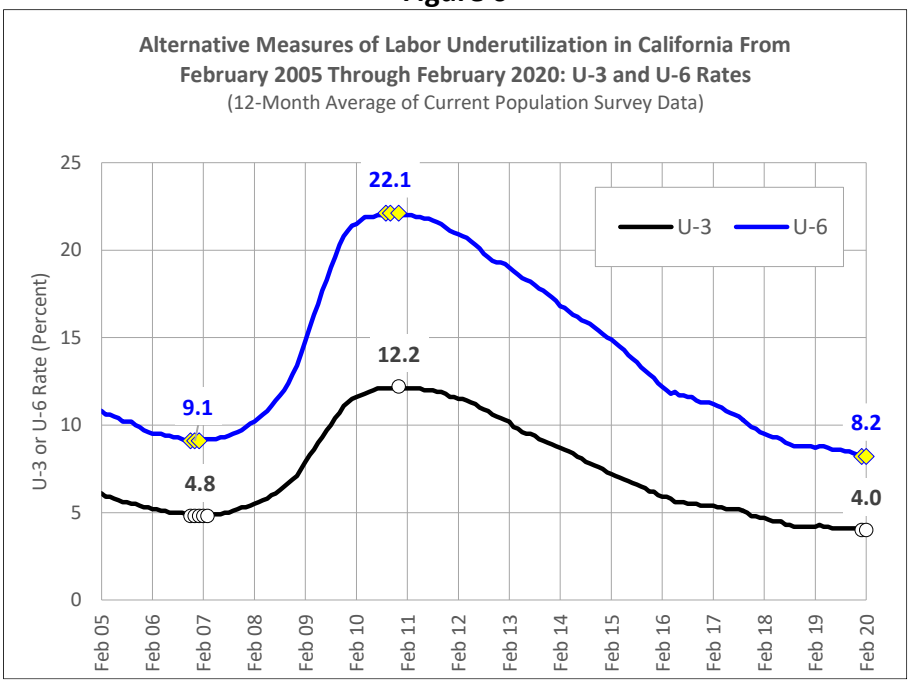
- The U-6 rate is the broadest measure of labor utilization. It is calculated as the number of unemployed, plus the total number of persons who are employed part-time for economic reasons, plus all persons marginally attached to the labor force as a percent of the labor force, plus all persons marginally attached to the labor force.[5] Persons who are marginally attached to the labor force are those who currently are neither working nor looking for work but want to work, are available for a job, and have looked for work sometime in the last year.[6]

[5] Because the U-6 rate includes marginally attached workers who are not currently in the labor force, the labor force denominator must be expanded to include them in calculating the U-6 rate.

[6] Discouraged workers are a specific subset of marginally attached workers who say they are not actively seeking a job because they don't think they will find one. Twelve-month average Current Population Survey data indicated that there were 87,000 discouraged workers in August 2021. They accounted for less than one-third (31.0 percent) of all California's marginally attached workers. This was double their number at the end of the expansion in February 2020, when there were 44,000 discouraged workers who made up a little over one-quarter (26.5 percent) of all marginally attached workers.

- According to 12-month average CPS data, the U-3 rate, which corresponds to the official unemployment rate definition, in California reached a low of 4.8 percent in the months of November 2006 through March 2007. The U-3 rate rose to a recessionary peak of 12.2 percent in December 2010, then fell over the course of California's long employment expansion to a low of 4.0 percent in January and February 2020, which was 0.8 percentage point below the pre-recession low.

Figure 6



Source: U.S. Census Bureau; Employment Development Department.

- The U-6 rate, which is always higher than the U-3 rate because it is more inclusive and broadly defined than the U-3, reached a pre-recession low of 9.1 percent in October 2006 through January 2007. The U-6 rate skyrocketed during the recession, rising 13.0 percentage points and peaking at 22.1 percent in September, October, and December 2010. Expressed differently, the labor of more than one out of every five workers in California was underutilized in the sense that they were either unemployed, underemployed, or not actively participating in the labor market at the height of the recession. The U-6 rate fell steadily over the course of California's employment expansion to a low of 8.2 percent in January and February 2020, which was 0.9 percentage point lower than the pre-recession low. Even though California's official unemployment rate was at a historic low at this time, the labor of about one out of every 12 California workers was underutilized at the end of the expansion in February 2020.

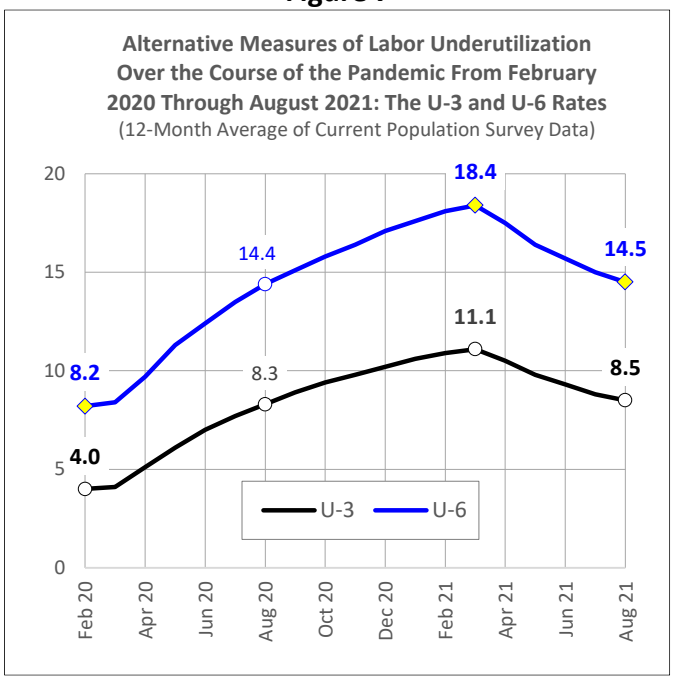
- The comparison of the U-3 and U-6 rates indicates that the two measures of labor underutilization tend to move together with the business cycle, rising when the economy is weak and falling when it is strong. As such, the official unemployment rate is an effective barometer of labor market conditions. However, it is limited in the sense that it does not

capture the full effects of the business cycle. When the unemployment rate rises, underemployment rises with it, and increasing numbers of marginally attached workers exit the labor force. When the unemployment rate falls, underemployment falls with it and marginally attached workers are drawn into the labor force.

The Pandemic-Induced Business Cycle

- California's U-3 rate rose from 4.0 percent in February 2020 to a peak of 11.1 percent in March 2021. This was an increase of 7.1 percentage points. California's U-6 rate increased by even more over the same period, from 8.2 percent in February 2020 to a peak of 18.4 percent in March 2021. This was an increase of 10.2 percentage points.

Figure 7



Source: U.S. Census Bureau; Employment Development Department.

- Both the U-3 and U-6 rates have fallen as the labor market recovers from the pandemic-induced recession. The U-3 rate fell by 2.6 percentage points to 8.5 percent over the five-month period from March 2021 through August 2021. The U-6 rate fell by even more, falling 3.9 percentage points to 14.5 percent over the same period.

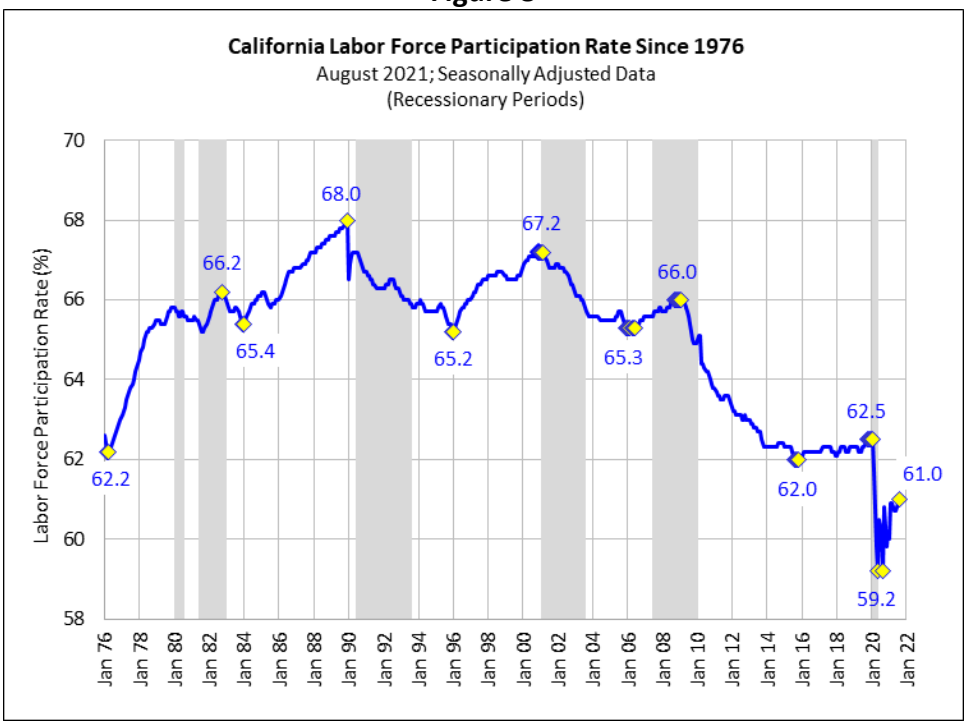
- Although expressing the U-3 and U-6 rates as a 12-month average of CPS data is necessary to control for seasonality and the statistical error associated with monthly CPS estimates as well as seasonality, this averaging blunts the effects of the COVID-19 pandemic. The less statistically reliable monthly CPS data suggest that the U-3 rate may have peaked around 16.6 percent in April 2020 and that the U-6 rate may have peaked around 26.4 percent in May 2020, before falling to around 7.3 percent and 12.5 percent, respectively, in August 2021.

Labor Force Participation in California

- The labor force participation rate (LFPR) is calculated as the number of persons in the labor force (those who are employed or unemployed but actively seeking work) divided by the working age population. Traditionally, labor force participation has tended to increase during times of economic expansion as increasing employment opportunities draw more people into the labor force and decrease during recessions as individuals with limited employment opportunities exit the labor force. However, labor force participation behaved differently over the course of the February 2010 – February 2020 expansion, decreasing long after the turnaround in overall economy and labor market. In fact, the California LFPR fell to what was then a record low of 62.0 in the middle of the expansion from August through November 2015 before stabilizing and remaining flat overall at historically low levels through the end of the expansion. The LFPR was 62.5 from October 2019 through February 2020.

- Labor force participation plunged from 62.5 in February 2020 to a new record low of 59.2 percent in May 2020, which was a decrease of 3.3 percentage points over just three months. California's LFPR gyrated up and down in the months immediately thereafter and again fell to 59.2 percent in September 2020, but increased thereafter. California's LFPR stood at 61.0 percent in August 2021. This was 1.8 percentage points higher than in September 2020, but still 1.5 percentage points lower than it was in February 2020.

Figure 8



Source: Employment Development Department.

Demographic Characteristics of Labor Force Participation

- The LFPR is calculated as the number of persons in the labor force (those who are employed or unemployed but actively seeking work) divided by the working age population. Traditionally, labor force participation has tended to increase during times of economic expansion as increasing employment opportunities draw more people into the labor force and decrease during recessions as individuals with limited employment opportunities exit the labor force.

- Multiple factors influence an individual's decision to participate in the labor force or not, most notably perceptions of how likely it is that one will find employment, school attendance, having a disability, having to care for house or family (children or elders), personal choice, and being retired. However, demographics, and particularly retirements among the large and aging baby boomer population, have exerted a key influence on overall labor force participation in recent years and will continue to do so over the years to come.

- Men had a higher labor force participation rate than women in August 2021, 67.4 percent to 54.5 percent. The 1.5 percentage point LFPR decrease among women between August 2012 and August 2021 was smaller than the 3.2 percentage point decrease among men.

- Labor force participation among prime working age cohorts, or Californians age 25 through 54, were consistently higher than those of other demographic groups. In August 2021, the 25 to 34, 35 to 44, and 45 to 54 age cohorts all had LFPRs above 78.0 percent. These LFPRs are not out of the ordinary because, generally speaking, economists find that workers within the prime working age cohorts represent the core of a state's workforce and includes its most economically productive demographic.

- Labor force participation among younger workers contrasts the trends seen amongst those of prime working age. The LFPRs of younger workers between the ages of 16 and 24 did not exceed 50.0 percent in August 2020 and August 2021. Upon closer inspection of younger workers, the data suggests that over the past two years, workers between the ages of 16 and 19 had a LFPR that remained below 30.0 percent. The LFPRs for workers between the ages of 20 and 24 were in the low to mid 60's in both August 2020 and August 2021, but were not at rates comparable to that of prime working age workers.

- Labor force participation drops off dramatically as people leave the workforce for a variety of reasons that include age and retirements. In August 2021, nearly one out of every five (19.4 percent) Californians age 65 and over participated in the civilian labor force. Although labor force participation decreases among workers aged 65 and over, this age cohort has had an increase between August 2020 and August 2021; 0.3 percentage point.

- Native-born Californians (60.9 percent) had a slightly higher rate of labor force participation than foreign-born Californians (60.6 percent) in August 2021 and experienced less of a dip in its LFPR between August 2012 and August 2021. Among foreign-born workers, those that were not U.S. citizens (65.1 percent) had a LFPR 8.1 percentage points higher than the foreign-born who were naturalized U.S. citizens (57.0 percent) in August 2021.

- Among the state's racial and ethnic groups, Hispanics (63.7 percent) had the highest LFPR in August 2021, followed by Hawaiian/Pacific Islanders (61.6 percent), Whites (61.0 percent), American Indian/Alaskan Natives (60.7 percent), Blacks (59.6 percent), and Asian (59.4 percent) workers. Between August 2012 and August 2021, Hawaiian/Pacific Islanders experienced the largest decline in their respective LFPR, decreasing from 74.2 percent to 61.6 percent. In terms of racial and ethnic workers that experienced declines in their LFPRs, Hispanics experienced the smallest (2.1 percent) between August 2012 and August 2021. Over this period, the largest increase was experienced by Black workers whose LFPR increased from 57.7 percent in August 2012 to 59.6 percent in August 2021; a 1.9 percentage point increase.

- The U.S. Census Bureau's CPS data suggests that less educated groups participated in the labor force at a lower rate than groups with more education. In August 2021, the LFPR among Californians that held less than a high school diploma was 42.2 percent, 29.6 percentage points lower than the rate for those that held a bachelor's degree or higher (71.8 percent). Between August 2012 and August 2021, labor force participation fell across all of the educational attainment groups; with the largest decline among Californians with an associate degree (7.3). The smallest decrease was experienced by those with a bachelor's degree or higher, moving from 74.7 percent in August 2012 to 71.8 percent in August 2021.

- Less than one out of every five (18.1 percent) Californians with a disability participated in the civilian labor force in August 2021. Between August 2012 and August 2021, the LFPR for persons with a disability decreased from 19.7 percent to 18.1 percent. In both August 2020 and August 2021, the LFPR for persons with a disability has been below 20.0 percent. In addition, their LFPR remained at least 47.0 percentage points lower than that of persons that did not have a disability.

- Between August 2012 and August 2021, the LFPR among California veterans fell from 48.2 percent to 42.3 percent, a 5.9 percentage point drop in the rate. Over that same period of time, the rate for non-veterans declined by 2.8 percentage points; going from 65.3 percent to 62.5 percent. In both August 2020 and August 2021, the LFPR for veterans remained at least 19.0 percentage points lower than that of non-veterans.

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Table 13

Labor Force Participation Rates by Demographic Group in California

(Labor Force as a Percent of Working Age Population, 12-Month Average of Current Population Survey Data)

	August 2012	August 2020	August 2021	Net Percentage Point Change August 2012 to August 2021	Year-Over Percentage Point Change August 2020 to August 2021
All Groups, Age 16 and Over	62.7%	61.2%	60.8%	-1.9	-0.4
Gender					
Male	70.6%	68.3%	67.4%	-3.2	-0.9
Female	56.0%	54.3%	54.5%	-1.5	0.2
Age					
16 to 24	49.5%	49.2%	48.5%	-1.0	-0.7
16 to 19	26.5%	28.1%	29.0%	2.5	0.9
20 to 24	67.1%	65.3%	63.9%	-3.2	-1.4
25 to 34	79.9%	79.2%	78.3%	-1.6	-0.9
35 to 44	80.8%	80.3%	80.1%	-0.7	-0.2
45 to 54	79.5%	78.9%	79.6%	0.1	0.7
55 to 64	64.6%	64.1%	63.9%	-0.7	-0.2
65 and over	18.7%	19.1%	19.4%	0.7	0.3
National Origin					
Native-Born	62.2%	61.3%	60.9%	-1.3	-0.4
Foreign-Born	65.3%	61.2%	60.6%	-4.8	-0.6
Foreign Born, Naturalized U.S. Citizen	64.1%	58.2%	57.0%	-7.1	-1.2
Foreign Born, Not a U.S. Citizen	66.5%	64.6%	65.1%	-1.4	0.5
Race					
White	63.7%	61.4%	61.0%	-2.6	-0.3
Black	57.7%	60.5%	59.6%	1.9	-0.9
American Indian, Alaskan Native	60.2%	60.5%	60.7%	0.5	0.2
Asian	62.2%	60.0%	59.4%	-2.8	-0.5
Hawaiian/Pacific Islander	74.2%	77.0%	61.6%	-12.7	-15.5
One or more races	67.0%	64.3%	65.7%	-1.3	1.4
Ethnicity					
Latino/Hispanic	65.8%	64.2%	63.7%	-2.1	-0.5
Non-Hispanic	61.8%	59.6%	59.1%	-2.7	-0.5
Educational Attainment					

	August 2012	August 2020	August 2021	Net Percentage Point Change August 2012 to August 2021	Year-Over Percentage Point Change August 2020 to August 2021
Less than a high school diploma	45.4%	41.7%	42.2%	-3.2	0.5
High school graduates, no college	61.0%	58.8%	57.1%	-3.9	-1.7
Some college, no degree	64.6%	59.4%	59.9%	-4.7	0.5
Associate degree	70.9%	63.4%	63.6%	-7.3	0.2
Bachelor's degree or higher	74.7%	72.1%	71.8%	-2.8	-0.3
Disability					
Has a Disability	19.7%	17.4%	18.1%	-1.6	0.7
Doesn't Have a Disability	68.0%	66.8%	65.4%	-2.6	-1.4
Served in Armed Forces					
Yes	48.2%	43.6%	42.3%	-5.9	-1.3
No	65.3%	62.9%	62.5%	-2.8	-0.4

Source: U.S. Census Bureau; Employment Development Department.

Aging Baby Boomers

- The baby boom generation refers to the large number of people who were born immediately after the end of World War II in 1946 through 1964. In 2010, the age of baby boomers ranged from 46 to 64. As discussed previously, labor force participation rates in this age range tend to be comparatively high. In contrast, baby boomers ranged in age from 55 to 73 in 2019. As baby boomers age and enter their retirement years, they also enter into those age cohorts in which labor force participation rates plunge. As they age past 70, their labor force participation rates will plunge further.

- Baby boomers leaving the labor force appears to be dampening overall labor force participation in California.

    - According to 12-month average wage data from the CPS, the population of Californians age 65 and older grew by a little over one million from October 2010 through October 2016, or by about 170,000 persons each year. Whereas the number of people age 65 and older in the labor force grew by nearly 350,000, or by 55,000 persons each year, the number of persons age 65 and older who did not participate in the labor force rose by nearly 700,000,or 116,000 per year.

    - Over the three years ending in October 2019, the number of Californians age 65 and older grew by 640,000 persons, or by an average of over 210,000 persons each year. The numberof older workers in the labor force grew by around 125,000, or 42,000 persons a year. In contrast, the ranks of people

age 65 and older who were not in the labor force grew by 513,000, or an average of 171,000 persons a year.

- The CPS tracks the reasons why people do not participate in the labor force, including: whether or not a person was disabled, in school, taking care of house or family, in retirement,ill, or something other. Retirement is typically the most frequent reason for not being in the labor force, followed by taking care of house or family, attending school, and having a disability. Illness and something other are typically much less frequently cited.

    - From October 2010 through October 2016, the number of Californians not in the labor force grew by a little over 1.5 million persons. The number of people in retirement grew by 820,000 persons, the large majority of whom were age 55 and older. The number of persons not in the labor force due to school grew by 289,000 persons, primarily among youths age 16 to 24. The number of persons taking care of house or family grew by 238,000, primarily among prime working age persons, and the number of disabled grew by 190,000, with the increase occurring across age groups.

    - In contrast, the number of Californians not in the labor force grew by 233,000 over the October 2016-October 2019 period. The number of persons not in the labor force fell for every reason except retirement: in school decreased by 178,000, taking care of house or family by 117,000, and having a disability by 111,000. In sharp contrast, the number of persons not in the labor force due to retirement increased by 678,000, of whom nearly 600,000 was age 65 and older.

    - The number of Californians not in the labor force increased by 34,000 persons over the year ending in October 2019. Once again, the number fell across all reason categories except in retirement, which increased by 187,000 persons. The number of those not in the labor force age 65 and older increased by 196,000 persons. A narrower age breakdown revealed that the number of Californians age 65 to 69 who were not in the labor force due to retirement fell by 51,000 persons over the year, but the number of those age 70 and older in retirement grew by 233,000 persons.

- The data for those not in the labor force suggest that California's strong economy did in fact draw more marginally attached workers into the labor force over the three years ending in October 2019, which is what one would expect in a labor market with record low unemployment and an ongoing 116-month employment expansion. However, the gathering wave of retiring baby boomers that averaged about 200,000 persons per year dampened overall labor force participation.

- The wave of retiring baby boomers will continue and possibly strengthen over the years to come. A rough estimate of how many baby boomers will leave the labor force from 2019 through 2024 can be derived by taking the October 2019 population of persons in the age 55 to 59, 60 to 64, 65 to 69, and 70 to 74 age cohorts, the full range of which captures the baby boom population, and multiplying that by the labor force participation rate of the next oldest five-year

age cohort. For example, the population of 55 to 59 age cohort is multiplied by the LFPR of the 60 to 64 age cohort, the 60 to 64 population is multiplied by 65 to 69 LFPR, and so on. Applying this method yields an estimate that 2,666,000 baby boomers will participate in the labor market in five years' time compared to 3,924,000 in October 2019. In other words, around 1,250,000 baby boomers, or 250,000 persons per year, may be expected to leave the California labor force over the next five years due to the normal interaction of aging and retirement on labor force participation alone.

- Although this estimate of how many baby boomers will exit the labor force over the next five years will be lower if the recent trend of increasing labor force participation among older workers continues, the sheer numbers of retiring baby boomers will dampen overall labor force participation in the years to come. At the same time, their departure from the labor force will also mean that establishments will have to replace many of their work functions, creating demand for replacement workers.

Demand and Growth Industries

- Demand industries within the economy are identifiable by determining which industries added the most jobs over a specified time period. However, it is inherently difficult to identify emerging industries under the existing North American Industry Classification System (NAICS). Essentially an industry must already have emerged to receive its own unique NAICS classification. As a result of this limitation, this section identifies the fastest growing industries in California as those industries that added jobs at a rate that was at least 11.4 percent, or twice that of total nonfarm employment, over the three years ending in October 2019. This three-year period was chosen to capture more recent trends within the labor market.

- Individual and family services, which includes in-home health supportive services jobs, was the California industry that added the most jobs from October 2016 through October 2019, followed by limited-service restaurants, or fast food, eating places. Both of these industries are characterized by comparatively low skill and low wage jobs. Although individual and family services was among California's fastest growing industries over the October 2016-October 2019 period, limited-service restaurants was not, but did grow at a faster rate than overall total nonfarm employment.

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Table 14
California's Fastest Growing Industries October 2016 Through October 2019
(Not Seasonally Adjusted Data)

Industries That Gained the Most Jobs (Three-Year Change in Number)	Jobs Gained
Individual and Family Services	98,700
Limited-Service Restaurants	64,000
Other Information Services	38,400
Computer Systems Design and Related Services	37,100
Local Government Education	33,600
Employment Services	31,900
Warehousing and Storage	31,000
Outpatient Care Centers	27,700
Building Equipment Contractors	26,600
Scientific Research and Development Services	23,800
Management of Companies and Enterprises	22,700
Building Foundation and Exterior Contractors	22,300
State Government Education	22,000
Residential Building Construction	20,900
Architectural, Engineering and Related Services	18,400
Investigation and Security Services	17,800
General Medical and Surgical Hospitals	17,200
Accommodation	17,000
General Merchandise Stores	16,900
Software Publishers	15,900
Services to Buildings and Dwellings	15,600
Building Finishing Contractors	14,500
Other Schools and Instruction	13,200
General Freight Trucking	13,100
Data Processing, Hosting and Related Services	13,000
Couriers and Messengers	12,900
Offices of Other Health Practitioners	12,800
Nonresidential Building Construction	12,700
Colleges, Universities and Professional Schools	12,200
State Government Excluding Education	11,700
Electronic Instrument Manufacturing	11,500
County Government	11,100
City Government	11,000
Special Food Services	10,900
Elementary and Secondary Schools (Private)	10,700
Activities Related to Real Estate	10,500
Electronic Computer Manufacturing	10,300
Motor Vehicle Manufacturing	10,200
Accounting, Tax Preparation and Bookkeeping Services	10,100

Industries That Grew the Fastest (Three-Year Change in Percent)	Percent Change
Motor Vehicle Manufacturing	105.2%
Other Information Services	40.9%
Other Heavy and Civil Engineering Construction	32.9%
Data Processing, Hosting and Related Services	32.0%
Warehousing and Storage	25.7%
Software Publishers	23.1%
Industrial Machinery Manufacturing	20.6%
Other Schools and Instruction (Private)	20.0%
Residential Building Construction	20.0%
Building Foundation and Exterior Contractors	19.6%
Highway, Street, and Bridge Construction	19.5%
Scientific Research and Development Services	18.6%
Nonresidential Building Construction	17.3%
Electronic Computer Manufacturing	17.1%
Spectator Sports	16.0%
Couriers and Messengers	16.0%
Individual and Family Services	15.8%
General Freight Trucking	15.8%
Commercial and Industrial Machinery Rental and Leasing	15.4%
Special Food Services	15.0%
Offices of Other Health Practitioners	14.7%
Outpatient Care Centers	14.1%
Electronic Instrument Manufacturing	13.8%
Beverage and Tobacco Product Manufacturing	13.2%
Specialty (not Psychological or Substance Abuse) Hospitals	12.9%
Social Advocacy Organizations	12.9%
Architectural and Structural Metals Manufacturing	12.7%
Computer Systems Design and Related Services	12.4%
Personal and Household Goods Repair	12.2%
Air Transportation	12.2%
Investigation and Security Services	12.2%
Building Equipment Contractors	11.9%
Waste Management and Remediation Services	11.8%
Hardware, Plumb and Heating Merchant Wholesalers	11.5%
Home Health Care Services	11.4%
Elementary and Secondary Schools (Private)	11.4%

Source: Employment Development Department.

- Three of the California industries that added more than 20,000 jobs from October 2016 through October 2019 were high-skill and high-paying sectors with a high technology orientation, including: other information services, computer systems design and related services, and scientific research and development services. Architectural, engineering, and related services; software publishers; data processing, hosting and related services; electronic instrument manufacturing, and electronic computer manufacturing were among the other high technology industries that added more than 10,000 jobs over the period. These same high technology industries were among California's fastest growing industries over the October 2016-October 2019 period with the exception of architectural, engineering, and related services, which nevertheless grew at a faster pace than overall total nonfarm employment but not at over twice its pace.

- Several of California's existing demand industries were in the educational sector, including local government education (public schools); state government education; other schools and instruction; private colleges, universities, and professional schools; and private elementary and secondary schools. Of these industries, only other schools and instruction and elementary and secondary schools, both of which were in the private sector, were among California's fastest growing.

- Several of California's existing demand industries were in the health care sector, including: outpatient care centers; general medical and surgical hospitals; and offices of other health practitioners. Outpatient care centers, offices of health practitioners, specialty (not psychological or substance abuse) hospitals, and home health care services were among California's fastest growing. The job growth rate in general medical and surgical hospitals lagged well below that of total nonfarm employment.

- The construction industry played a key role in California's employment expansion and construction workers were in strong demand over the October 2016-October 2019 period. The construction industries that added the most jobs and grew at the fastest pace included: building equipment contractors, building foundation and exterior contractors, residential building construction, and nonresidential building construction. In addition, other heavy and civil engineering construction grew at the third fastest pace among California industry sectors, and highway, street, and bridge construction was among the fastest growing industries. Building finishing contractors was also a strong demand industry and its 10.9 percent growth rate only narrowly missed the fastest growing list.

- Warehousing and storage, couriers and messengers, and general freight trucking were among the California industries that added the most jobs and grew at the fastest pace. This presumably reflected the continued rapid growth in e-commerce and online shopping.

- Several of the industries that added the most jobs over the October 2016-October 2019 period were in professional and business services' administrative and waste services subsector, which

tends to have lower skill and paying jobs. Employment services, investigationand security services, and services to buildings and dwellings were among the industries that added the most jobs over the period. Investigation and security services, and waste management and remediation services were among California's fastest growing.

Union Affiliation by Industry Sector

- According to the BLS, 2.5 million California workers were members of a union in 2019. They comprised 15.2 percent of California's nearly 16.5 million wage and salary workers. In contrast, just 10.3 percent of wage and salary workers in the nation as a whole were members of a union in 2019[7]. California had the seventh highest rate of union affiliation amongstates in 2019.

- According to 12-month average CPS data, half (50.3 percent) of all unionmembers in California worked in the public sector in October 2019. Government also had the highest rate of union affiliation, with over half (52.4 percent) of all government workers being members of a union. Nearly three-fifths (58.4 percent) of local government workers were members of a union, as were over half (51.3 percent) of state government workers, and three out of every 10 (30.8 percent) federal government workers.

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[7] U.S. Bureau of Labor Statistics Union Member Summary

Table 15
Union Membership By Major Industry Sector in California: October 2019

Industry Sector	Share of Workers
Total, All Industries	**15.2%**
Government, Total	**52.4%**
Local Government	58.4%
State Government	51.3%
Federal Government	30.8%
Private Sector, All Sectors	**8.8%**
Construction	18.2%
Transportation and Utilities	16.3%
Educational and Health Services	16.0%
Information	15.6%
Mining	8.8%
Manufacturing	7.6%
Wholesale and Retail Trade	7.6%
Leisure and Hospitality	4.8%
Other Services	3.9%
Agriculture, Forestry, Fishing, and Hunting	3.9%
Financial Activities	3.6%
Professional and Business Services	2.6%

(12-Month Average Current Population Survey; Percent of Workers in Sector Who Were Members of a Union)
Source: U.S. Census Bureau; Employment Development Department.

- In contrast, just one out of every 11 (8.8 percent) wage and salary workers in California's private sector was a member of a union. Construction (18.2 percent) was the major industry sector with the highest share of union members in its workforce, followed by transportation and utilities (16.3 percent), educational and health services (16.0 percent), and information (15.6 percent). Professional and business services had the lowest rate of union affiliation at 2.6 percent). A total of five major industry sectors in the private sector had union membership rates below five percent.

- A detailed comparison of the earnings of union and non-union members in major California industry sectors is beyond the scope of this report. That said, the BLS estimated that at the national level, the median weekly earnings of full-time wage and salary union members was $1,095 in 2019, compared to $892 for non-union members. This was a difference of $203 a

week, or 22.7 percent.[8]

Future Job Growth Projections

Industry Employment Projections

- Information about future labor market trends is critical for developing programs that help meet employers' needs and help residents secure a job, obtain a better job, and create an upward career pathway. Industry and occupational employment projections are provided for the nation by the DOL's BLS and translated into projections for the state and metro areas by the Employment Development Department's (EDD) Labor Market Information Division (LMID).

- The 2018-2028 employment projections do not include impacts of the COVID-19 pandemic and response efforts. Employment projections are developed using models based on historical data, which in this set of projections cover the period through 2018; all input data therefore precede the pandemic. Employment projections are long-term projections intended to capture structural change in the economy, not cyclical fluctuations. As such, they are not intended to capture the impacts of the recession that began 2020.

- Total industry employment in California, which includes self-employment, private household workers, farm employment, and nonfarm employment, is expected to reach 20,412,500 by 2028, an increase of 8.4 percent during the 10-year projection period. Total nonfarm employment is projected to add 1,491,500 jobs during the period. Seventy-nine percent of projected nonfarm growth is concentrated in four sectors: educational services (private), health care, and social assistance; professional and business services; leisure and hospitality; and transportation, warehousing, and utilities.

- The major industry sectors projected to have the largest job growth is educational services (private), health care, and social assistance, accounting for 35.1 percent of the projected nonfarm employment growth. The projected growth for the sector is 524,600 jobs during the 2018-2028 projection period (see Figure 9). The greatest concentration of job gains is projected to occur in the following educational services (private), health care, and social assistance subsectors:

    - Social assistance (193,400)
    - Ambulatory health care services (186,700)
    - Educational services (private) (56,000)

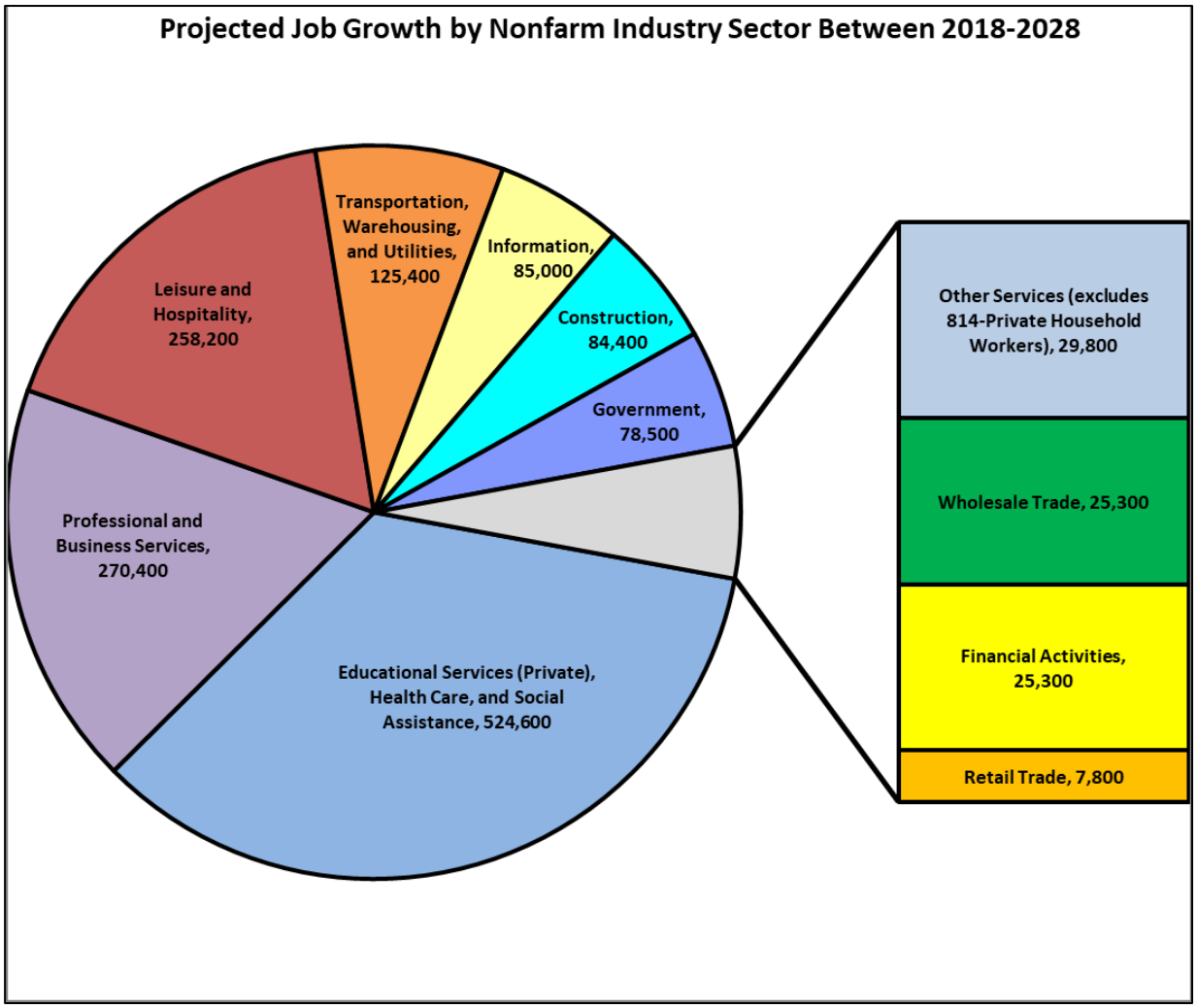
- The educational services (private), health care, and social assistance industry sector is also expected to be the fastest growing industry sector with an expected growth rate of 19.3 percent (see Figure

[8] A more detailed breakdown of median weekly earnings of full-time wage and salary workers by union affiliation in the United States in 2019 by industry and occupation may be found here: https://www.bls.gov/news.release/union2.t04.htm.

10). As the population grows and demographics change, the demand for workers in this sector will remain high.

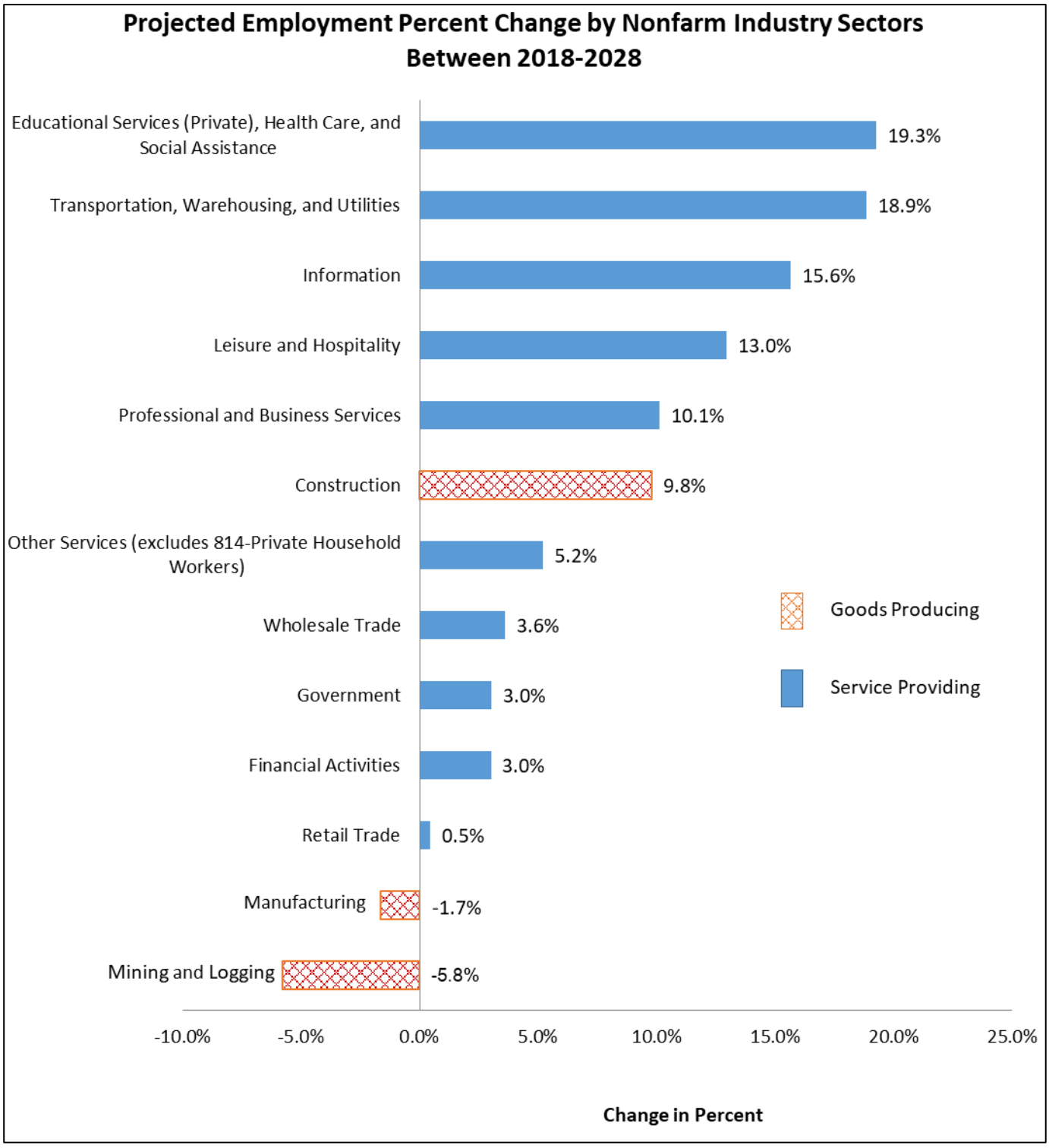
- The top 25 industry groups that are expected to generate the most employment are projected to account for 1,177,600 jobs during the 2018-2028 projection period (see Table 16).
    - Six of the top 25 industry groups generating the most employment are within the health care and social assistance subsector. They are expected to generate 373,700 jobs during the 10-year projection period.
    - Individual and family services tops the list with a projected employment growth of 181,200 jobs during the 10-year projection period.
- The top 25 industry groups by percentage growth are expected to grow a combined 27.9 percent (746,300) during the 2018-2028 projection period (see Table 17).
    - Eight of the top 25 fastest growing industry groups are within the health care and social assistance subsector.
    - Warehousing and storage tops the list with an expected growth rate of 47.5 percent during the 10-year projection period.

Figure 9



Source: Employment Development Department.

Figure 10



Source: Employment Development Department

Table 16

California Nonfarm Industry Groups with the Largest Projected Job Growth (2018-2028)

Industry Title	Projected 2018-2028 Job Growth
Individual and Family Services	181,200
Full-Service Restaurants	113,700
Limited-Service Eating Places	101,500
Outpatient Care Centers	75,700
Warehousing and Storage	69,300
Employment Services	59,300
Computer Systems Design and Related Services	52,500
Management, Scientific, and Technical Consulting Services	46,100
General Medical and Surgical Hospitals	41,200
General Merchandise Stores, including Warehouse Clubs and Supercenters	39,000
Scientific Research and Development Services	32,600
Software Publishers	32,300
Offices of Other Health Practitioners	29,900
Other Information Services	29,600
Couriers and Messengers	29,200
Services to Buildings and Dwellings	27,900
Local Government Education	25,700
Colleges, Universities, and Professional Schools	25,500
Building Equipment Contractors	25,200
Offices of Physicians	24,700
Grocery Stores	24,700
State Government Education	24,200
Electronic Shopping and Mail-Order Houses	22,800
Local Government Excluding Education	22,800
Home Health Care Services	21,000
Total	1,177,600

Source: Employment Development Department

Table 17

California Nonfarm Industry Groups with the Fastest Projected Job Growth (2018-2028)

Industry Title	Projected 2018-2028 Job Growth (Percent)	Projected 2018-2028 Job Growth
Warehousing and Storage	47.5%	69,300
Electronic Shopping and Mail-Order Houses	43.4%	22,800
Data Processing, Hosting, and Related Services	41.9%	19,700
Motor Vehicle Manufacturing	36.5%	6,900
Software Publishers	36.4%	32,300
Specialty (except Psychiatric and Substance Abuse) Hospitals	36.2%	5,500
Outpatient Care Centers	35.5%	75,700
Couriers and Messengers	31.1%	29,200
Offices of Other Health Practitioners	30.5%	29,900
Other Information Services	27.8%	29,600
Individual and Family Services	26.9%	181,200
Medical and Diagnostic Laboratories	26.0%	9,400
Scientific Research and Development Services	23.5%	32,600
Home Health Care Services	23.1%	21,000
Other Schools and Instruction	22.9%	16,400
Management, Scientific, and Technical Consulting Services	22.6%	46,100
General Freight Trucking	22.6%	19,900
General Merchandise Stores, including Warehouse Clubs and Supercenters	21.8%	39,000
Other Ambulatory Health Care Services	21.6%	6,300
Beverage and Tobacco Product Manufacturing	20.8%	13,200
Museums, Historical Sites, and Similar Institutions	20.3%	4,000
Amusement Parks and Arcades	20.3%	9,700
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	18.8%	18,000
Social Advocacy Organizations	18.6%	5,000
Industrial Machinery Manufacturing	17.6%	3,600
Total		746,300

Source: Employment Development Department.

Middle-Skill Occupations Employment Projections

- Middle-skilled occupations are those that require more than a high school education but less than a four-year degree. The top 25 middle-skilled occupations (see Table 18) are expected to generate 1,695,090 total job openings during the 2018-2028 period. These openings include approximately 639,660 due to those exiting the labor force, 921,730 transferring to a different occupation and 133,700 due to job growth.

    - Bookkeeping, accounting, and auditing clerks top the list with 224,870 total job openings during the 2018-2028 period.

    - Seven of the top 25 occupations are in a health care related field and are expected to generate 476,950 total job openings during the ten-year period.

    - Median annual salaries range from $27,750 for manicurists and pedicurists to $84,178 for respiratory therapists.

    - Fourteen out of the top 25 middle-skill occupations are at or above the median hourly and median annual wage for all occupations in California. The median hourly wage for all occupations in California was $21.78 and the median annual wage for all occupations in California was $45,310 for the first quarter of 2020.

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Table 18

California's Top 25 Middle-Skilled Occupations with the Most Job Openings (2018-2028)

For the table below, middle-skilled occupations are defined as occupations that require some college, a postsecondary non-degree award, or an associate's degree as defined by education levels provided by the BLS.

SOC Code *	Occupational Title	Exits [1]	Transfers [2]	Numeric Change [3]	Total Jobs [4]	Median Hourly Wages [5]	Median Annual Wages [5]
43-3031	Bookkeeping, Accounting, and Auditing Clerks	120,140	109,930	-5,200	224,870	$23.24	$48,334
53-3032	Heavy and Tractor-Trailer Truck Drivers	71,210	125,450	24,400	221,060	$23.35	$48,580
31-9092	Medical Assistants	44,540	81,110	24,900	150,550	$18.64	$38,772
25-9041	Teacher Assistants	67,230	66,250	7,000	140,480	N/A	N/A
31-1014	Nursing Assistants	43,790	47,490	10,900	102,180	N/A	N/A
39-5012	Hairdressers, Hairstylists, and Cosmetologists	41,490	43,680	4,400	89,570	$13.75	$28,605
31-9091	Dental Assistants	29,570	41,990	9,100	80,660	$20.46	$42,562
49-3023	Automotive Service Technicians and Mechanics	21,680	56,070	-700	77,050	$23.10	$48,055
29-2061	Licensed Practical and Licensed Vocational Nurses	27,970	34,820	11,600	74,390	$29.08	$60,480
25-2011	Preschool Teachers, Except Special Education	26,450	40,580	6,400	73,430	$17.19	$35,751
15-1151	Computer User Support Specialists	10,740	37,210	7,700	55,650	N/A	N/A
23-2011	Paralegals and Legal Assistants	13,020	28,250	5,000	46,270	$28.54	$59,356
39-5092	Manicurists and Pedicurists	18,360	19,390	2,200	39,950	$13.34	$27,750
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	9,510	24,540	4,100	38,150	$27.87	$57,951
43-4151	Order Clerks	13,690	23,960	100	37,750	$18.43	$38,317
31-9011	Massage Therapists	16,110	13,880	3,900	33,890	$17.37	$36,114
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	8,330	24,600	900	33,830	$29.97	$62,336
27-2011	Actors	10,300	22,080	700	33,080	$23.25	N/A
17-3023	Electrical and Electronics Engineering Technicians	8,620	16,780	1,500	26,900	$33.35	$69,377
33-2011	Firefighters	6,210	17,230	1,300	24,740	$38.29	$79,645
27-4011	Audio and Video Equipment Technicians	5,710	12,750	2,400	20,860	$25.43	$52,901
31-9097	Phlebotomists	5,710	10,480	3,600	19,790	$22.11	$45,982
25-4031	Library Technicians	10,770	7,780	-100	18,450	$22.38	$46,547
15-1134	Web Developers	3,000	10,350	2,700	16,050	N/A	N/A
29-1126	Respiratory Therapists	5,510	5,080	4,900	15,490	$40.47	$84,178
	Total	639,660	921,730	133,700	1,695,090		

Source: Employment Development Department.

Notes:

Excludes "All Other" categories. These are residual codes that do not represent a detailed occupation.

*The Standard Occupational Classification (SOC) system is used by government agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data.

[1] Exits are the projected number of workers leaving an occupation and exiting the labor force entirely. Labor force exits are more common at older ages as workers retire, but can occur at any age. Labor force exits are not necessarily permanent exits from the labor force; for example, some workers exit the labor force to pursue additional education with the intention of returning to the labor force. They do represent permanent separations from an occupation.
[2] Transfers are the projected number of workers leaving an occupation and transferring to a different occupation. Transfers represent permanent separations from an occupation, not temporary movements where the worker is expected to return to the same occupation in the future.
[3] Numeric change measures the projected number of job gains or losses in an occupation for the projection period.
[4] Total job openings are the sum of exits, transfers, and numeric change.
[5] Median hourly and annual wages are the estimated 50th percentile of the distribution of wages; 50 percent of workers in an occupation earn wages below, and 50 percent earn wages above the median wage. The wages are from 2020 first quarter and do not include self-employed or unpaid family workers. An estimate could not be provided for wages listed as N/A.

Economic Inequality[9]

Demographic Inequality

- Unemployment rates by demographic group were discussed previously to demonstrate how labor market conditions in California improved across all demographic groups over the course of the employment expansion. Not only did the unemployment rates of all demographic groups fall substantially, but the gap between demographic groups with the highest and lowest unemployment rates also shrank considerably. At the outset of the expansion in October 2010, teens had the highest unemployment rate at 34.4 percent and persons age 25 and older who had a bachelor's degree or higher had the lowest unemployment rate at 6.2 percent, which was a difference of 28.2 percentage points. In October 2019, after nine years of expansion, the teen unemployment rate was still the highest at 14.7 percent and the 2.6 percent unemployment rate among persons with a bachelor's degree or higher was still the lowest. However, the gap between the two rates had narrowed to 12.1 percentage points.

- Despite this improvement, some demographic groups faced larger obstacles in the labor market than others in October 2019. This is seen in comparing the October 2019 unemployment rates of major demographic groups in California.

    - According to 12-month average data from the CPS, California's overall unemployment rate was 4.1 percent in October 2019.

    - The unemployment rate among youths age 16 to 24 was more than double the overall rate at 9.1 percent. The unemployment rate among teens (14.7 percent) was higher than that among youths age 20 to 24 (7.4 percent), but the rates of both groups were

[9] The data and analysis in this section of this report have not been updated. Although the COVID-19 pandemic disrupted California's labor market and likely exacerbated inequalities within it, it remains unknown how lasting its effects will be because it is still ongoing. Equally important, the magnitude of the disruptions that followed the pandemic outbreak were so large that they threaten to skew many labor market relationships observed in the pre-pandemic data. Most economists assume that as disruptive as the effects of the pandemic were or have been, they will prove to be temporary and that labor market conditions will return to normal, or at least something more resembling normal, after the pandemic is brought under control or burns itself out. Until more data become available over time, the pre-COVID environment in October 2019 remains an accurate depiction of the fundamental inequalities that exist within California's labor market.

comparatively high.

- The unemployment rate among Californians with disabilities was also more than doublethe overall rate at 8.9 percent.

- Two major demographic groups had unemployment rates that were 1.5 percentage points or higher than the overall rate: Californians 25 and older who had not obtained a high school diploma (6.0 percent) and African Americans (5.6 percent).

- Latinos (4.7 percent) and foreign-born non-citizens (4.7 percent) were the other major demographic groups with rates that were higher than the overall unemployment rate.

- The demographic groups with the highest unemployment rates in October 2019 are the groups who will be most vulnerable should economic conditions in California change and the economy tips into a recession. Based on an analysis of unemployment rates over the October 2010-October 2019 period, younger workers, and particularly youths, would likely fare worse than older workers if a recession were to occur, persons with disabilities would likely fare worse than those without disabilities, less well educated groups would likely fare worse than more educated groups, African Americans and Latinos would likely fare worse than Whites and Asians, and foreign-born noncitizens would likely fare worse than native born Americans and naturalized U.S. citizens.

Long-Term Unemployment

- According to 12-month average CPS data, just over one million of California's 2.2 million unemployed persons had been unemployed for 27 weeks or more in October 2010. The number of long-term unemployed fell by 828,000 persons to 189,000 from October 2010 through October 2019. The share of the long-term unemployed in total unemployment fell from 46.0 percent to 23.9 percent over the same period.

- Although small sample issues complicate any analysis of the long-term unemployed in October 2019, younger workers and less well-educated workers appear to have comprised a disproportionately high share of total long-term unemployment. Over two-fifths (44.6 percent)of long-term unemployed Californians was either under the age 35 or had attained a high school diploma or less (43.3 percent). This suggest that inexperienced persons with low educational attainment and undifferentiated skills face particularly large obstacles in the labor market.

Industry Wages

- Average monthly employment and average weekly pay data for California industries for the first quarter of 2019 are available from the Quarterly Census of Employment and Wages (QCEW). This section compares average weekly pay in major industry sectors and subsectors, or two-digit NAICS industries. The health care and social assistance subsector has been further subdivided

into health care and social assistance components because of their large discrepancy in pay. High, middle, and low paying jobs are loosely defined with respect to the average weekly pay total for all industries and what seem to be natural break points in the data. Subsector data are provided because major industry sectors such as professional and business services and educational and health services have a mix of high, middle, and low paying jobs.

Table 19
Average Weekly Pay in California Industry Sectors and Subsectors: First Quarter of 2019
(Quarterly Census of Employment and Wages Data)

Major Industry Sector	Average Weekly Pay	Industry Subsectors	Average Weekly Pay
Total, all industries	**$1,405**	Highest Pay	
		Management of Companies and Enterprises	$3,066
Highest Pay		Finance and Insurance	$3,062
Information	$3,847	Utilities	$2,943
Mining	$2,606	Professional, Scientific, and Technical Services	$2,512
Financial Activities	$2,496		
Manufacturing	$1,930	Middle Pay	
Professional and Business Services	$1,905	Wholesale Trade	$1,614
		State Government	$1,581
Middle Pay		Federal Government	$1,542
Government	$1,378	Real Estate and Rental and Leasing	$1,473
Construction	$1,346	Transportation and Warehousing	$1,329
Trade, Transportation, and Utilities	$1,094	Health Care	$1,326
Education and Health Services	$1,014	Local Government	$1,304
Lowest Pay		Lowest Pay	
		Educational Services	$1,037
Other Services	$798	Arts, Entertainment, and Recreation	$924
Agriculture, Forestry, Fishing & Hunting	$630	Administrative and Support and Waste Services	$915
Leisure and Hospitality	$565	Retail Trade	$725
		Accommodation and Food Services	$498
		Social Assistance	$396

Source: Employment Development Department.

- Information ($3,847) had the highest average weekly pay among major industry sectors in California in the first quarter of 2019, followed by mining ($2,606), financial activities ($2,496), manufacturing ($1,930), and professional and business services ($1,905).

    - In the professional and business services sector, the management of companies and enterprises and professional, scientific, and technical services subsectors were among California's highestpaying sectors and subsectors. However, the administrative and support and waste services subsector was among the lowest paying sectors and subsectors. This subsector accounted for two-fifths (39.4 percent) of all professional and business services jobs.

- In the financial activities sector, the finance and insurance subsector was among California's highest paying sectors and subsectors, but the real estate and rental and leasing sector was among the middle-paying industry sectors and subsectors.

- The government, construction, trade, transportation, and utilities, and educational and health services sectors were classified as middle pay range industry sectors. However, there were differences in pay in some subsectors.

  - In the trade, transportation, and utilities sector, utilities had high average pay, wholesale trade and transportation and warehousing fell in the middle average pay range, and retail trade fell in the low range.

  - In the educational and health services sector, health care fell within the middle average pay range sectors and subsectors, and educational services and social assistance fell within the low paying sectors. Educational services had the highest average weekly pay of all low paying sectors and subsectors.

- Other services, agriculture, forestry, fishing, and hunting, and leisure and hospitality had the lowest average weekly pay among California sectors in the first quarter of 2019.

- According to first quarter of 2019 employment totals from the QCEW, 4.1 million of California's nearly 17.4 million jobs were in high paying industry sectors and subsectors. These high paying sectors accounted for less than one-quarter (23.4 percent) of all California's jobs. Over three-quarters (76.6 percent) of all California's jobs were in middle and low paying industry sectors and subsectors.

- The number of middle and low paying jobs was roughly equal in the first quarter of 2019. Employment totaled 6.7 million jobs in low average pay sectors and subsectors, and 6.5 million jobs in middle pay ones. Jobs in low-paying and middle-paying industry sectors and subsectors accounted for 38.8 and 37.8 percent, respectively, of total all industry jobs.

<u>Median Wages by Major Occupational Group</u>

- Occupational wage data are available for the first quarter of 2019 from the Occupational Employment Statistics (OES) Survey, as are occupational employment estimates from May 2018. According to the OES, the median hourly wage for all occupations in California was $20.86 in the first quarter of 2019. Thirteen of California's 22 major occupational groupings had median hourly wages above the median and nine had median hourly wages that were below it.

- Employment in those occupational groups with hourly wages above the overall median wage totaled 7.3 million jobs in May 2018, compared to 9.7 million jobs in occupational groups with hourly wages that were below it. Expressed differently, 57.0 percent of Californians were employed in occupational groups that paid less than the overall median wage in the first quarter

of 2019 compared to 43.0 percent who were employed in occupational groups that paid more.

- Differences in occupational wage levels were even more pronounced if one accounts for the seven major occupational groups that had median hourly wages above $36 an hour, or more than $15 an hour above the overall median hourly wage, in the first quarter of 2019. They were: management occupations; computer and mathematical occupations; legal occupations; architecture and engineering occupations; healthcare practitioners and technical occupations; life, physical, and social science occupations; and business and financial operations occupations. Employment in these seven occupational groups totaled 4.1 million jobs in May 2018, accounting for just under one-quarter (24.2 percent) of total employment.

Table 20
Median Hourly Wages By Occupational Group in California:
First Quarter of 2019
(Occupational Employment Statistics Survey Results)

Major Occupational Group	Median Hourly Wage
Total, all occupations	**$20.86**
Wages Above the Median	
Management Occupations	$58.54
Computer and Mathematical Occupations	$50.53
Legal Occupations	$49.59
Architecture and Engineering Occupations	$46.65
Healthcare Practitioners and Technical Occupations	$43.35
Life, Physical, and Social Science Occupations	$38.84
Business and Financial Operations Occupations	$36.31
Arts, Design, Entertainment, Sports, and Media Occupations	$28.88
Education, Training, and Library Occupations	$27.59
Construction and Extraction Occupations	$27.02
Community and Social Services Occupations	$25.20
Installation, Maintenance, and Repair Occupations	$24.51
Protective Service Occupations	$23.22
Wages Below the Median	
Office and Administrative Support Occupations	$19.38
Healthcare Support Occupations	$17.61
Production Occupations	$16.82
Transportation and Material Moving Occupations	$16.32
Sales and Related Occupations	$15.48
Building and Grounds Cleaning and Maintenance Occupations	$15.22
Food Preparation and Serving-Related Occupations	$12.60
Personal Care and Service Occupations	$12.49
Farming, Fishing, and Forestry Occupations	$11.95

Source: Employment Development Department.

- In contrast, eight major occupational groups had median hourly wages of less than $18 an hour[10], including: healthcare support occupations; production occupations; transportation and material moving occupations; sales and related occupations; building and grounds cleaning and maintenance occupations; food preparation and serving-related occupations; personal care and service occupations; and farming, fishing, and forestry occupations. Employment in these eight major occupational groups totaled nearly 7.3 million jobs in May 2018, accountingfor over two-fifths (42.6 percent) of total employment.

Regional Inequalities: Coastal and Inland Areas of California

- California's labor market is characterized by regional inequalities, and more particularly, coastal and inland areas of the state. Coastal areas are narrowly defined as those California counties that border the Pacific Ocean or San Francisco Bay, and inland areas include those counties that do not. As such, coastal areas include large metropolitan areas such as San Diego, Los Angeles, San Jose, San Francisco, and Oakland. The Sacramento and Inland Empire metropolitan areas are included among inland areas even though their economies are interconnected with and share many of the same characteristics of the large, urban coastal areas of the state.

- According to annual average data from the QCEW, 12.4 million, or nearly three-quarters (73.3 percent), of California's nearly 17 millionwage and salary jobs were in coastal areas of California in 2018. Employment in inland areas totaled 3.7 million jobs, of which close to two-fifths were in the Riverside-San Bernardino andSacramento metropolitan areas combined.

- Inland areas experienced slightly faster job growth than coastal areas from 2010 through 2018. Whereas wage and salary jobs in inland areas grew by 21.7 percent over this eight-year period, they grew by 19.5 percent in coastal areas. Inland areas excluding the Riverside-San Bernardino and Sacramento metropolitan areas grew at a slightly slower rate of 20.2 percent.

- Annual average pay levels were much higher in coastal areas than inland areas of the state over the 2010 through 2018 period. The average annual pay in coastal areas was $75,100 in 2018, compared to $48,400 in inland areas. The pay discrepancy was even wider in inland areas if the Riverside-San Bernardino and Sacramento metropolitan areas are omitted from inland areas. Average annual pay in inland areas excluding these two areas was just $33,100 in 2018. That said, the cost of living, and more particularly housing and lodging, tend to be much higher in coastal areas than inland areas of the state.

- Wages and salaries grew at a faster rate in coastal areas than inland areas over the 2010-2018 period. Average annual pay increased by $18,000, or 31.5 percent, in coastal areas from 2010 through 2018, compared to $7,700, or 18.8 percent, in all inland areas, and $4,800, or 17.2 percent, in inland areas excluding the Sacramento and Riverside-San Bernardino metropolitan areas.

[10] The minimum wage in California rose to $12 an hour on January 1, 2019.

Comparative Unemployment by Industry Sector and Occupation

- According to data from the U.S. Census Bureau's CPS, in October 2010, when unemployment was near its peak, unemployment rates ranged from a high of 23.8 percent in construction to a low of 3.8 percent in public administration. This was arange of 20.0 percentage points. Unemployment rates improved across industry sectors over the October 2010-2019 period. In October 2019, unemployment rates ranged from a high of 13.5 percent in agriculture, forestry, and hunting to a low of 2.0 percent in financial activities. This was a range of 11.5 percentage points. The range was even narrower in nonfarm industries, from a high of 5.1 percent in mining to a low of 2.0 percent in financial activities, a difference of just 3.1 percentage points.

- In October 2010, seven industry sectors had unemployment rates higher than 10.0 percent. In contrast, the very seasonal agriculture, forestry, and hunting sector (13.5 percent) was the only industry sector that had an unemployment rate of over 10.0 percent in October 2019. Four nonfarm industry sectors had unemployment rates of 4.0 percent or higher: mining (5.1 percent); wholesale and retail trade (4.4 percent); construction (4.3 percent); and manufacturing (4.0 percent). Five nonfarm sectors had unemployment rates below 3.0 percent: other services (2.8 percent); public administration (2.7 percent); educational and health care services (2.6 percent); information (2.5 percent); and financial activities (2.0 percent).

- A comparison of October 2010 and October 2019 industry sector unemployment rates suggest that workers in goods producing industry sectors such as construction and manufacturing or consumer-spending sensitive industries such as leisure and hospitality and wholesale and retail trade are among the most vulnerable in times of recession.

- In October 2010, occupational unemployment rates ranged from a high of 27.0 percent in construction and extraction occupations to a low of 6.7 percent in professional and related occupations. This was a range of 20.3 percentage points. Unemployment rates improved across occupational groups over the October 2010-2019 period. In October 2019, occupational unemployment rates in the nonfarm economy ranged from a high of 5.6 percent in construction and extraction occupations to a low of 2.0 percent in management and business, and financial operations occupations, which was a difference of 3.6 percentage points.

- In October 2010, eight of the ten major occupational groups had unemployment rates higher than 10.0 percent. In contrast, farming, fishing, and forestry occupations (17.9 percent), which tend to be highly seasonal in nature, was the only occupational group with an unemployment rate over 10.0 percent in October 2019. Four additional occupational groups had unemployment rates of 4.0 percent or more: construction and extraction occupations (5.6 percent); transportation and material moving occupations (5.2 percent); production occupations (4.1 percent); and sales and related occupations (4.0 percent). In contrast, three occupational groups had unemployment rates below 3.0 percent: installation, maintenance, and repair occupations (2.9 percent); professional and related occupations (2.7 percent); and management, business, and financial occupations (2.0 percent). Generally speaking, unemployment rates were higher in

lower-skill occupations and lower in higher-skill ones.

Educational Attainment and the Labor Market

- Educational attainment plays a key role in determining labor market outcomes. Unemployment rates tend to be strongly correlated with educational attainment. As a rule, groups with lower educational attainment are more susceptible to unemployment than are more highly educated groups. Unemployment rates tend to get progressively higher the lower one's educational attainment, and progressively lower the higher one's educational attainment. Those with lower educational attainment tend to cluster in low-wage and low-skill industry sectors and more highly educated persons cluster in higher paying and high-skill industries and occupations.

- In October 2010, when unemployment was near its peak, the highest unemployment rate of Californians age 25 and older[11] was among those who had not completed high school at 15.9 percent, followed by 13.0 percent among high school graduates who did not attend college, and 12.4 percent among those who had attended some college but had not earned a degree. In contrast, the unemployment rate among those with an associate degree was 8.5 percent and 6.2 percent among those who had a bachelor's degree or higher.

- The range between the educational attainment groups with the highest and lowest unemployment rates was 9.7 percentage points in October 2010. The unemployment rates of all educational attainment groups fell substantially over the course of the expansion to the point where just 3.4 percentage points separated the highest and lowest unemployment rates of the major educational attainment groups in October 2019. Nevertheless, those with less educational attainment experienced progressively higher unemployment rates than those with more educational attainment in October 2019. The unemployment rates of those who did not complete high school and those who were high school graduates only were 6.0 and 3.9 percent, respectively, in October 2019. In contrast, the unemployment rates of those with an associate degree and those who had obtained a bachelor's degree or higher were 3.1 and 2.6 percent, respectively.

- About one-third (32.8 percent) of working Californians over the age of 25 had either not completed high school or had a high school diploma only in October 2019. These workers were clustered in six industry sectors. Wholesale and retail trade (14.1 percent) employed the largest share of workers with a high school diploma or less, followed by construction (13.3 percent), educational and health services (11.0 percent), professional and business services (10.9 percent), leisure and hospitality (10.9 percent), and manufacturing (10.8 percent). As a group, these six industry sectors employed 71.0 percent of all workers who had a high school diploma or less.

- Retail trade employed four-fifths of the workers with a high school diploma or less in the wholesale and retail trade sector. In the professional and business services sector, three-

[11] Persons under the age of 25 are excluded from the analysis to filter those who are still attending school from the analysis.

quarters of the workers with a high school diploma or less were employed in the low-wage administrative and support and waste services subsector. Although agricultural, forestry, fishing, and hunting employed just 5.6 percent of those with a high school diploma or less in October 2019, nearly four-fifths (78.3 percent) of the workers in this sector had a high school diploma or less. About half of the workers in this sector over the age of 25 had not completed high school.

- Nearly half (49.2 percent) of California workers age 25 and over with an associate degree or higher worked in either the professional and business services or educational and health care services sectors. The high-wage financial activities and information sectors employed an additional 11.8 percent of all workers with an associate degree or higher. Four-fifths of the workers with an associate degree or higher in the professional and business services sector were employed in the high-wage professional, scientific, and technical services sector. Within educational and health services, 46.2 percent of workers with an associate degree or higher worked in the health care industries, and 44.6 percent worked in educational services.

Outlook

- California's record-long employment turned 10 years old in February 2020 and its economy and labor market were operating at full employment. Almost overnight, the COVID-19 pandemic outbreak upended everything and severely disrupted California's labor market. The state experienced an unprecedented loss of over 2.7 million nonfarm jobs over just a two-month period from February 2020 through April 2020 after all but essential services within the labor market were shut down. California's unemployment rate rose from a near record low to a record shattering high of 16.0 percent, and the number of unemployed more than tripled to near 3 million over the same period.

- By the same token, California's labor market exhibited a remarkable ability to recover and do so rapidly after the pandemic shutdown was lifted and other pandemic restrictions were eased. As of August 2021, California had safely re-opened its economy and was enjoying a robust jobs recovery. Unemployment was well below its pandemic peak and trending downwards. However, the state still had some distance to go to recover the jobs it lost during the pandemic-induced recession and the pandemic itself continued to affect labor market activities and behaviors.

- The outlook for California's labor market, and indeed the nation's, remains cloudy and uncertain and will remain so until the pandemic is brought under control both within the state and globally. Quarterly economic forecasts by the University of California, Los Angeles (UCLA) Anderson School Forecast in 2021-to-date aptly summarize the current situation. In its first and second quarter economic forecasts for 2021, UCLA anticipated a robust recovery from the pandemic-induced recession that began in March 2020. These forecasts, buoyed by the rapid roll out of effective COVID-19 vaccines to the general public, assumed that the COVID-19 pandemic would be brought under control by late summer or fall 2021.

- However, these forecasts also warned that recoveries are not always smooth. In their own words,

this caveat proved to be "prescient." In their third quarter 2021 economic forecast, the UCLA forecast team reported that hopes for blockbuster economic growth had been dampened by the spread of the Delta variant and stagnating vaccination rates in both California and the nation, which in turn led to consumer caution and supply constraints. As such, their third quarter 2021 forecast anticipated only solid but unspectacular growth and recovery through 2023.

Workforce Analysis: Demographics and Target Populations

This section provides an overview of California's population, and more particularly its working age population, and the target populations that the WIOA is intended to serve.

Total Population

- In August 2021, women made up (50.6 percent) of the state's population and men made up 49.4 percent. Women also accounted for 50 percent or more of the population within the following age cohorts: 65 and over (54.8 percent), 55 to 64 (51.3 percent), 45 to 54 (51.0 percent), and 35 to 44 (50.0 percent).

- Whites were the largest racial group within the Golden State, accounting for 72.1 percent or 28.0 million members of the State's population in August 2021. Asians (15.6 percent) were the second largest racial group, followed by Blacks (6.3 percent), and persons that identify with one or more races (3.6 percent). American Indian and Alaskan Native persons made up 1.6 percent of the State's population and Hawaiian/Pacific Islanders made up less than 1 percent (0.6 percent).

- In terms of sheer numbers, among White residents, over 4 million were either 65 years and over or between the ages of 25 and 34 in August 2021. Within the State's Asian population, over 1 million persons were 65 years and over. In addition, over 900,000 Asians were either 0 to 15 (988,800 persons) or 25 to 34 (964,400 persons). For Black residents within the State, the largest numbers were among the age cohorts 0 to 15 (485,800 persons) and 25 to 34 (412,000 persons) years of age.

- In August 2021, four out of every ten (40.1 percent) or 15.5 million Californians identified as Hispanic and the largest shares of Hispanics were concentrated among the younger age cohorts. Hispanics made up over half (52.1 percent) of all Californians age 0 to 15, nearly half (49.6 percent) of young people between the ages of 16 and 24, and over 43 percent (43.1 percent) of Californians between the ages of 25 and 34.

- California's foreign-born population stood at 9.6 million in August 2021 and it was comprised of 5.3 million persons that were U.S. citizens by naturalization and 4.3 million persons that were not U.S. citizens. Nearly one out of every four Californians was foreign-born in August 2021. Among the foreign-born, the largest age cohorts were as follows: 45 to 54 (2.03 million), 65 and over (1.96 million), and 35 to 44 (1.90 million).

Table 21

Demographic Characteristics of Californians by Age

(August 2021, 12-Month Average of Current Population Survey Data)

	All Ages Number	0 to 15 Number	16 to 24 Number	25 to 34 Number	35 to 44 Number	45 to 54 Number	55 to 64 Number	65 and over Number
All Demographic Groups*	**38,886,000**	**7,731,000**	**4,571,200**	**5,776,800**	**5,232,300**	**4,776,300**	**4,721,200**	**6,077,200**
Gender								
Male	19,197,600	3,952,000	2,333,900	2,912,100	2,615,000	2,340,000	2,298,200	2,746,400
Female	19,688,400	3,779,000	2,237,300	2,864,700	2,617,300	2,436,300	2,423,000	3,330,800
Race								
White	28,030,900	5,544,500	3,260,300	4,023,700	3,700,500	3,483,200	3,498,700	4,520,000
Black	2,467,600	485,800	282,500	412,000	336,900	320,300	295,300	334,800
American Indian, Alaskan Native	649,300	145,500	83,900	101,000	116,200	60,700	67,200	74,800
Asian	6,077,100	988,800	648,900	964,400	898,400	791,700	750,000	1,034,900
Hawaiian/Pacific Islander	248,100	40,600	36,400	34,700	32,400	41,600	27,500	34,900
One or more races	1,413,000	525,800	259,200	241,000	147,900	78,800	82,500	77,800
Ethnicity								
Latino/Hispanic	15,598,800	4,024,000	2,268,800	2,488,600	2,195,700	1,842,800	1,452,200	1,326,700
Non-Hispanic	23,286,900	3,707,000	2,302,400	3,288,100	3,036,600	2,933,400	3,269,000	4,750,400
National Origin								
Native-Born	29,189,000	7,481,000	4,083,000	4,477,300	3,327,800	2,745,900	2,962,700	4,111,300
Foreign-Born	9,696,600	250,000	488,100	1,299,400	1,904,500	2,030,300	1,758,500	1,965,800
U.S. Citizen by Naturalization	5,326,700	39,700	170,800	455,600	835,200	1,127,400	1,146,900	1,551,100
Not A U.S. Citizen	4,369,900	210,300	317,300	843,800	1,069,300	902,900	611,600	414,700

	0 to 15 Share (%) of Demographic Group	16 to 24 Share (%) of Demographic Group	25 to 34 Share (%) of Demographic Group	35 to 44 Share (%) of Demographic Group	45 to 54 Share (%) of Demographic Group	55 to 64 Share (%) of Demographic Group	65 and over Share (%) of Demographic Group
All Demographic Groups*	**19.9%**	**11.8%**	**14.9%**	**13.5%**	**12.3%**	**12.1%**	**15.6%**
Gender							
Male	20.6%	12.2%	15.2%	13.6%	12.2%	12.0%	14.3%
Female	19.2%	11.4%	14.6%	13.3%	12.4%	12.3%	16.9%
Race							

	0 to 15 Share (%) of Demographic Group	16 to 24 Share (%) of Demographic Group	25 to 34 Share (%) of Demographic Group	35 to 44 Share (%) of Demographic Group	45 to 54 Share (%) of Demographic Group	55 to 64 Share (%) of Demographic Group	65 and over Share (%) of Demographic Group
White	19.8%	11.6%	14.4%	13.2%	12.4%	12.5%	16.1%
Black	19.7%	11.4%	16.7%	13.7%	13.0%	12.0%	13.6%
American Indian, Alaskan Native	22.4%	12.9%	15.6%	17.9%	9.3%	10.3%	11.5%
Asian	16.3%	10.7%	15.9%	14.8%	13.0%	12.3%	17.0%
Hawaiian/Pacific Islander	16.4%	14.7%	14.0%	13.1%	16.8%	11.1%	14.1%
One or more races	37.2%	18.3%	17.1%	10.5%	5.6%	5.8%	5.5%
Ethnicity							
Latino/Hispanic	25.8%	14.5%	16.0%	14.1%	11.8%	9.3%	8.5%
Non-Hispanic	15.9%	9.9%	14.1%	13.0%	12.6%	14.0%	20.4%
National Origin							
Native-Born	25.6%	14.0%	15.3%	11.4%	9.4%	10.2%	14.1%
Foreign-Born	2.6%	5.0%	13.4%	19.6%	20.9%	18.1%	20.3%
U.S. Citizen by Naturalization	0.7%	3.2%	8.6%	15.7%	21.2%	21.5%	29.1%
Not A U.S. Citizen	4.8%	7.3%	19.3%	24.5%	20.7%	14.0%	9.5%

Source: Employment Development Department

Educational Attainment

- According to the BLS, increased education is often associated with both higher wages and lower unemployment. The BLS also found that among the employed, the likelihood of working in a management, professional, or related occupation increases with educational attainment. By contrast, the likelihood of working in service occupations; natural resources, construction, and maintenance occupations; and production, transportation, and material moving occupations decreases by educational attainment.

- Just over one-third (34.1 percent) of all California's working-age population, those age 16 and older, had a bachelor's degree or higher in August 2021 and an additional 8.2 percent had earned an associate degree. In numerical terms, over 10 million California's had earned a bachelor's degree or higher and 2.5 million had earned an associate degree.

- In contrast, nearly 25 percent (24.5 percent) of California's working-age population earned a high school diploma only and just over 15 percent (15.6 percent) never graduated high school. In addition, nearly 18 percent (17.7 percent) of Californians earned a high school diploma and had some college experience.

- Among racial and ethnic groups, educational attainment patterns varied considerably. Asians tended to have the highest educational attainment among California racial and ethnic groups. Just under 60 percent (59.9 percent) of California Asians had an associate degree or higher, with 53.7 percent of them having a bachelor's degree or higher.

- Hispanics tended to have the lowest educational attainment levels among California's racial and ethnic groups in August 2021 with 6 out of every ten (60.8 percent) Hispanics 16 years and older had not graduated high school or had only a high school diploma. The percent shares of those who had a high school diploma (31.4 percent) and those that did not complete high school (29.4 percent) were roughly similar.

- The shares of Black and White Californians who had an associate degree or higher were nearly identical at 39.2 and 39.1 percent, respectively, but a slightly higher share of Whites (30.8 percent) than Blacks (28.8 percent) had a bachelor's degree or higher. In addition, Blacks (10.4 percent) had a slightly higher share of persons with an associate degree than Whites (8.3 percent).

- In terms of national origin, native-born Californians tended to have higher educational attainment levels than the foreign-born. One out of every three (35.5 percent) native-born Californians held a bachelor's degree or higher and just over nine percent held an associate degree (9.1 percent) in August 2021. In addition, 9.9 percent of native Californians did not complete high school and 24.4 percent held a high school diploma alone. In sharp contrast, over half (53.7 percent) of foreign-born Californians had either never completed high school (29.0 percent) or only attained a high school diploma (24.7 percent).

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Table 22

Demographic Characteristics of Californians by Educational Attainment (16 Years and Older)

(August 2021, 12-Month Average of Current Population Survey Data)

	All Educational Attainment Groups Number	**Did Not Complete High School** Number	**High School Diploma, No College** Number	**High School Graduate, Some College** Number	**Associate Degree** Number	**Bachelor's Degree or Higher** Number
All Demographic Groups*	**31,154,800**	**4,873,800**	**7,622,100**	**5,501,300**	**2,541,200**	**10,616,400**
Gender						
Male	15,253,200	2,495,300	3,938,400	2,723,400	1,118,500	4,977,600
Female	15,901,600	2,378,500	3,683,700	2,777,900	1,422,700	5,638,800
Race						
White	22,485,400	3,865,800	5,711,300	4,113,800	1,863,700	6,930,800
Black	1,980,600	219,600	545,900	438,700	205,500	570,900
American Indian, Alaskan Native	502,300	127,300	145,700	99,300	49,500	80,500
Asian	5,091,000	495,100	932,600	613,800	316,800	2,732,800
Hawaiian/Pacific Islander	207,600	26,000	62,700	39,700	28,200	51,000
One or more races	n/a	n/a	n/a	n/a	n/a	n/a
Ethnicity						
Latino/Hispanic	11,575,400	3,397,900	3,636,600	2,074,000	804,300	1,662,700
Non-Hispanic	19,579,400	1,475,900	3,985,600	3,427,300	1,736,900	8,953,700
National Origin						
Native-Born	21,689,500	2,141,400	5,299,700	4,586,100	1,966,400	7,695,900
Foreign-Born	9,465,800	2,749,100	2,334,200	905,600	566,200	2,910,700

	All Educational Attainment Groups Share (%) of Demographic Group	**Did Not Complete High School** Share (%) of Demographic Group	**High School Diploma, No College** Share (%) of Demographic Group	**High School Graduate, Some College** Share (%) of Demographic Group	**Associate Degree** Share (%) of Demographic Group	**Bachelor's Degree or Higher** Share (%) of Demographic Group
All Demographic Groups*	**-**	**15.6%**	**24.5%**	**17.7%**	**8.2%**	**34.1%**
Gender						
Male	-	16.4%	25.8%	17.9%	7.3%	32.6%
Female	-	15.0%	23.2%	17.5%	8.9%	35.5%
Race						

	All Educational Attainment Groups Share (%) of Demographic Group	Did Not Complete High School Share (%) of Demographic Group	High School Diploma, No College Share (%) of Demographic Group	High School Graduate, Some College Share (%) of Demographic Group	Associate Degree Share (%) of Demographic Group	Bachelor's Degree or Higher Share (%) of Demographic Group
White	-	17.2%	25.4%	18.3%	8.3%	30.8%
Black	-	11.1%	27.6%	22.1%	10.4%	28.8%
American Indian, Alaskan Native	-	25.3%	29.0%	19.8%	9.9%	16.0%
Asian	-	9.7%	18.3%	12.1%	6.2%	53.7%
Hawaiian/Pacific Islander	-	12.5%	30.2%	19.1%	13.6%	24.6%
Ethnicity						
Latino/Hispanic	-	29.4%	31.4%	17.9%	6.9%	14.4%
Non-Hispanic	-	7.5%	20.4%	17.5%	8.9%	45.7%
National Origin						
Native-Born	-	9.9%	24.4%	21.1%	9.1%	35.5%
Foreign-Born	-	29.0%	24.7%	9.6%	6.0%	30.7%

Source: Employment Development Department.

Target Populations

Veterans

- According to the U.S. Department of Veterans Affairs, a veteran is defined as a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable.

- There were 1.3 million veterans in California in August 2021, and this total accounted for 7.5 percent of the nation's veterans (18.6 million). Just over 90 percent (91.8 percent) or 1.2 million of the state's veterans were men and 8.2 percent or 114,100 were women.

- In August 2021, just over 67 percent (67.4 percent) of veterans residing in the Golden State were 55 years and older. One out of every five (22.8 percent) veterans were between the ages of 35 and 54. Veterans between the ages of 18 and 34 accounted for the smallest share of the state's veterans, 9.8 percent, in August 2021.

- In terms of time period of service, 31.9 percent or 443,000 of the state's veterans served honorably in the Vietnam era which extended from August 1964 to April 1975. Just over 20 percent (21.9 percent) of the state's veterans served from September 2001 or later. Veterans that served between May 1975 and July 1990 accounted for 18.4 percent or 255,000 of the state's vets.

- According to the U.S. Department of Veterans Affairs, veterans bring a host of qualities and traits

that today's employers demand from their respective workforce. These qualities and traits include, but are not limited to: trust, self-motivation, confidence, being mission-driven, having gold-standard work ethic, loyalty, respect, ability to improvise, discipline, teamwork, and the ability to lead.

- According to the U.S. Census Bureau, in August 2021, 587,300 veterans were employed within the state of California. The largest concentrations of employed veterans were in the following industries: public administration (98,600); health care and social assistance (59,800); durable goods manufacturing (51,200); professional and technical services (50,900); and construction (50,800).

- In August 2021, just over 15 percent (15.1 percent) or 88,700 of veterans were employed in a management occupation in California and these types of jobs can range from emergency management directors to general and operations managers. Sizeable numbers of employed veterans were employed in occupations focused on the following: sales (62,100); office and administrative support (43,200); installation, maintenance, and repair (40,000); protective service (39,200); and business and financial operations (38,900).

Immigrant (foreign-born) workers

- The U.S. Census Bureau uses the term foreign-born to refer to anyone who is not a U.S. citizen at birth. This includes naturalized U.S. citizens, lawful permanent residents (immigrants), temporary migrants (such as foreign students), humanitarian migrants (such as refugees), and unauthorized migrants.

- In August 2021, California's civilian labor force was made up of 5.2 million employed and 460,900 unemployed foreign-born persons. In addition, the unemployment rate and labor force participation rate for foreign-born workers was 8.1 percent and 60.6 percent, respectively.

- In August 2021, the largest number of foreign-born workers, 622,400, were employed within the health care and social assistance industry. This industry is comprised of establishments that specialize in providing services that range from ambulatory health care to community food and housing. It is worth noting that over 500,000 employed foreign-born workers were employed in either the professional and technical services (516,000) or construction (509,900) industries. In addition, 8.3 percent and 7.9 percent of the state's employed foreign-born workers were employed in the retail trade (436,700) or accommodation and food services (415,500) industries, respectively.

- In August 2021, over 1.3 million of the state's foreign-born workforce were employed in either a management (467,100), transportation and material moving (462,200), or construction and extraction (429,800) occupation. Over 350,000 of the employed foreign-born held a job related to office and administrative support (for example, accounting clerks), building and grounds cleaning (for example, landscaping workers), or sales (for example, insurance sales agents). The fewest numbers of foreign-born workers were employed in protective service (37,900) and legal (22,700) occupations.

Californians with Disabilities

- The U.S. Department of Housing and Urban Development (HUD) defines a person with a disability as any person who has a physical or mental impairment that substantially limits one or more major life activities, has a record of such impairment, or is regarded as having such an impairment. Examples of major life activities include: walking, talking, seeing, breathing, performing manual tasks, or caring for oneself.

- In August 2021, there were 3.0 million persons with a disability in the Golden State. Persons with disabilities made up 2.8 percent or 546,200 members of the state's civilian labor force which was comprised of 18.9 million persons. The civilian labor force for persons with disabilities was made up of 470,100 employed and 76,100 unemployed persons. The unemployment rate and labor force participation rate for this segment of the California labor force stood at 13.9 percent and 18.1 percent, respectively, in August 2021.

- For persons with disabilities, the largest number of employed persons worked within the health care and social assistance (71,900) and retail trade (55,400) industries in August 2021. In addition, over 30,000 employed persons with disabilities held jobs in the following industries: professional and technical services (39,700); construction (34,700); educational services (33,300); public administration (31,100); and accommodation and food services (30,600) industries.

- In terms of the jobs most often held by employed persons with disabilities, management (58,000) and sales (51,100) occupations had the highest concentration of workers in August 2021. Also, employed persons with disabilities held over 30,000 office and administrative support (36,700) and transportation and material moving (32,600) jobs in the Golden State.

- In August 2021, one out of every five (21.6 percent) or 652,600 persons with a disability had attained a bachelor's degree or higher. A breakout of this collective level of educational attainment is as follows: bachelor's degree (431,300); master's degree (159,800); doctorate degree (30,800); and professional degree (30,700). Nearly 30 percent (29.1 percent) of persons with a disability in California had attained a high school diploma or equivalent and 21.0 percent or 634,700 persons with a disability had not completed high school.

Californians with Disabilities by Age and Type of Disability

- According to the BLS, nationwide, persons with disabilities reported that their own disability, lack of education or training, lack of transportation, and the need for special features at the job were some of the barriers they faced to finding a job. In addition, among persons with a disability who were employed, over half experienced some difficulty completing their work duties because of their disability.

- According to the 12-month average data from the CPS, among Californians 16 years and older, there were 3.0 million people with a disability in the State in August 2021. They comprised 9.7 percent of California's working age population.

- Persons with disabilities can have more than one type of disability. The most commonly cited type of disability in August 2021 was difficulty walking or climbing stairs (1.6 million persons), followed by difficulty doing errands (1.2 million persons), and difficulty remembering or making decisions (1.0 million persons).

- In terms of age cohorts, Californian's age 75 and over comprised the largest number (940,000 persons) of persons with a disability in California in August 2021. Furthermore, among the 3.0 million persons with a disability in the Golden State, just over 51 percent (51.5) were 65 years and older. In contrast, younger persons age 16 to 24 made up the smallest number of persons with a disability (174,500).

- The CPS data suggests a strong relationship between advancing age and the incidence of having a disability. Less than 4 percent (3.8 percent) of the State's persons between the ages of 16 and 24 reported having a disability in August 2021. This is in stark contrast to just over 38 percent (38.2 percent) of persons 75 years and over reporting to have a disability. The disability most often cited by persons 75 years and over are as follows: difficulty walking or climbing stairs (606,600 persons), difficulty doing errands (472,300 persons), or deafness or serious difficulty hearing (411,500 persons).

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Table 23

Californians with Disabilities by Age and Type of Disability

(August 2021: 12-Moving Average Current Population Survey Data)

	All Ages Number	**16 to 24** Number	**25 to 34** Number	**35 to 44** Number	**45 to 54** Number	**55 to 64** Number	**65 to 74** Number	**75 and Over** Number
All Persons	31,154,800	4,560,400	5,787,000	5,241,300	4,777,000	4,723,200	3,603,600	2,462,400
Doesn't Have a Disability	28,139,600	4,385,900	5,560,500	5,010,400	4,488,400	4,182,100	2,990,000	1,522,400
Has a Disability	3,015,200	174,500	226,500	230,900	288,600	541,100	613,600	940,000
Share (%) of Age Cohort Having a Disability	**9.7%**	**3.8%**	**3.9%**	**4.4%**	**6.0%**	**11.5%**	**17.0%**	**38.2%**
Type of Disability								
Difficulty Walking or Climbing Stairs	1,666,200	20,200	60,000	88,800	159,000	347,100	384,600	606,600
Difficulty Doing Errands	1,241,900	75,300	106,600	80,000	115,600	199,300	192,600	472,300
Difficulty Remembering or Making Decisions	1,020,600	136,600	129,000	104,800	123,900	157,600	122,500	246,100
Deafness or Serious Difficulty Hearing	840,200	15,100	33,500	39,600	44,000	98,600	197,900	411,500
Difficulty Dressing or Bathing	630,900	23,400	38,000	46,100	58,100	116,500	95,400	253,400
Blindness or Difficulty Seeing Without Glasses	482,500	13,300	34,700	37,600	37,300	82,100	106,800	170,600

Age Distribution of Persons Who Have a Disability

Type of Disability	**All Ages Share (%)**	**16 to 24 Share (%)**	**25 to 34 Share (%)**	**35 to 44 Share (%)**	**45 to 54 Share (%)**	**55 to 64 Share (%)**	**65 to 74 Share (%)**	**75 and Over Share (%)**
Difficulty Walking or Climbing Stairs	100%	1.2%	3.6%	5.3%	9.5%	20.8%	23.1%	36.4%
Difficulty Doing Errands	100%	6.1%	8.6%	6.4%	9.3%	16.0%	15.5%	38.0%
Difficulty Remembering or Making Decisions	100%	13.4%	12.6%	10.3%	12.1%	15.4%	12.0%	24.1%
Deafness or Serious Difficulty Hearing	100%	1.8%	4.0%	4.7%	5.2%	11.7%	23.6%	49.0%
Difficulty Dressing or Bathing	100%	3.7%	6.0%	7.3%	9.2%	18.5%	15.1%	40.2%
Blindness or Difficulty Seeing Without Glasses	100%	2.8%	7.2%	7.8%	7.7%	17.0%	22.1%	35.4%

Source: U.S. Census Bureau; Employment Development Department.

Youth Employment

- According to the U.S. Census Bureau, in August 2021, young workers (persons between the ages of 16 and 24) accounted for 11.6 percent or 2.1 million members of the state's civilian labor force (18.9 million persons). Just over ten percent (10.8 percent) of the total number of employed

persons (17.3 million) within the Golden State were young people. In addition, one out of every five unemployed Californians (20.0 percent) were younger people. As of August 2021, the unemployment rate and labor force participation rate for younger workers stood at 14.6 percent and 48.1 percent respectively.

- Generally speaking, younger workers tended to be employed in industries where entry-level employment did not require a postsecondary education or advanced technical training and skills. For example, four out of every ten or 42.8 percent of employed younger workers had jobs within either the retail trade (412,000) or accommodation and food services (390,600) industries. The types of jobs within these industries can range from cashier to short order cook.

- In August 2021, over 300,000 of California's younger workers were employed in a sales and related occupation. The types of jobs included in this occupational group include, but are not limited to: cashiers, counter and rental clerks, and first-line supervisors of retail sales workers. Over 200,000 younger workers were employed in food preparation and serving (276,500), office and administrative support (250,300), and transportation and material moving (215,000) jobs.

In-Migration

- Migration is defined as the movement of people from one location to another permanent place of residence. The reasons why people migrate are due to push and pull factors. Push factors such as retirement, movement of a business, or lack of work often drive people from their current place of residence. A healthy economy and a pleasant climate are examples of pull factors that attract people to new locations.

- The Public Policy Institute of California (PPIC) found that people who move to California are different from those who move out. In general, those who move to California are more likely to be working age, employed, and earning high wages—and are less likely to be in poverty—than those who move away. In addition, those who move to California also tend to have higher education levels than those who move out.

- According to the latest figures from the U.S. Census Bureau's American Community Survey, 480,200 people migrated out of California in 2019 and 653,600 migrated in from another state. According to the latest estimates, between 2017 and 2019, the number of people migrating out of the state declined by 42,900 people. Over this two-year period, migration into the Golden State decreased from 661,000 in 2017 to 653,600 in 2019, a net change of roughly 7,400 people.

- In 2019, Californians that moved out of the state tended to gravitate towards the states of New York (37,600), Texas (37,000), and Washington (31,900). One out of every five (22.2 percent) Californians that migrated out of the state moved to one of these three states.

- California attracted 653,600 residents from across the country in 2019 and these residents previously resided in the states of Texas (82,200), Arizona (59,700), Nevada (47,300), and Washington (46,800). One in three persons (36.1 percent) that migrated into California that year

came from one of these four states.

Justice Involved Individuals

- According to Brooking Institution research, over 640,000 formerly incarcerated individuals return to communities across the United States each year and more than half of the formerly incarcerated are unable to find stable employment within their first year of return to society.

- Barriers to employment are any of the job candidates' attributes (e.g., skills, experience, and work history) that may hinder their chances for acquiring gainful employment. California's ex-offenders are challenged by barriers such as a limited education, a lack of work experience, and negative stigmas when trying to find a job in today's economy.

- However, according to the Brooking Institution, research has demonstrated that health, housing, skill development, mentorship, social networks, and the collaborative efforts of public and private organizations collectively improve the reentry experience; improving the chances of acquiring stable employment.

- California's Department of Corrections and Rehabilitation (CDCR) data on parolees provides insight into the number of persons being released from confinement in state prison. This information helps to gauge the number of ex-offenders that may have sought entry into the state's labor force within a given year. According to the latest data from CDCR, from June 2018 to June 2019, the total active parolee population increased from 47,370 to 50,822.

- In terms of demographics, 17.7 percent of parolees (8,980) in California were between the ages of 25 and 29 years old. In addition, parolees between the ages of 18 and 49 made up over three-quarters (78.1 percent) of the active parolee population in 2019.

- The counties that had the largest concentrations of the state's 50,822 parolees in 2019 were as follows: Los Angeles (16,002), San Bernardino (3,689), Sacramento (3,442), Riverside (3,246), San Diego (3,019), and Orange (2,371). All of the state's remaining counties made up 19,053 or 37.5 percent of the remaining total that year.

Homelessness

- The U.S. HUD defines a homeless person as one who lacks a fixed, regular, and adequate nighttime residence. HUD estimated that in 2020 there were 580,466 homeless people in the U.S. and 61.0 percent (354,386) of them were sheltered and 39.0 percent (226,080) were unsheltered. Between 2019 and 2020, people experiencing homelessness increased by 12,751 people. The age cohorts of the nation's homeless people in 2020 are as follows: Over the age of 24 (428,859), under the age of 18 (106,364), and between the ages of 18 and 24 (45,243).

- In 2020, there were 161,548 homeless people in California, and among this total, 113,660 were unsheltered and 47,888 were sheltered. In 2020, California accounted for more than half of all

unsheltered people in the country. Between 2019 and 2020, the number of homeless people in California increased by 6.8 percent or 10,270 people. In five major cities in California, more than 80 percent of homeless individuals were unsheltered: San Jose (87.0 percent), Los Angeles (84.0), Fresno (84.0), Oakland (82.0), and Long Beach (81.0).

- California accounted for 15 percent of people in families experiencing homelessness in the U.S (25,777). The state had a net increase of 3,276 in its population of families experiencing homelessness between 2019 and 2020. The state also accounted for 31 percent of all veterans experiencing homelessness in the United States in 2020 (11,401 veterans) and more than half of all were unsheltered (7,996 veterans). Between 2019 and 2020, the state experienced a net increase of 421 homeless veterans.

- In addition, four of every ten individuals with chronic patterns of homelessness in the United States were in California (48,812 people), and among this group, 40,776 were unsheltered. Between 2019 and 2020, the state's number of chronically homeless individuals increased by 9,537.

Skill Gaps

While state level labor market data can provide helpful insight into employer needs and potential workforce skill gaps at a macro level, due to the sheer complexity of California's economy, skills gap assessments are most accurate and reflective of the diversity of the state when conducted at the regional level.

For this reason, Local Workforce Boards are required to engage with other core program partners and employers within their RPUs to conduct a regional analysis of economic conditions as a part of the WIOA RegionalPlanning process. This analysis must include, but is not limited to, the following:

- An analysis of the regional workforce which includes current labor force employment and unemployment data;
- Information on labor market trends;
- Educational and skill levels of the workforce, including individuals with barriers to employment.

California believes that conducting these assessments as part of a meaningful regional planning effort drives regional sector career pathways that are comprised of the following components: multiple on-ramps to enter and exit with industry recognized credentials; active participation by employers for training and placement; innovations in program content and delivery for upskilling; and integrated support services, including academic and safety-net resources.