

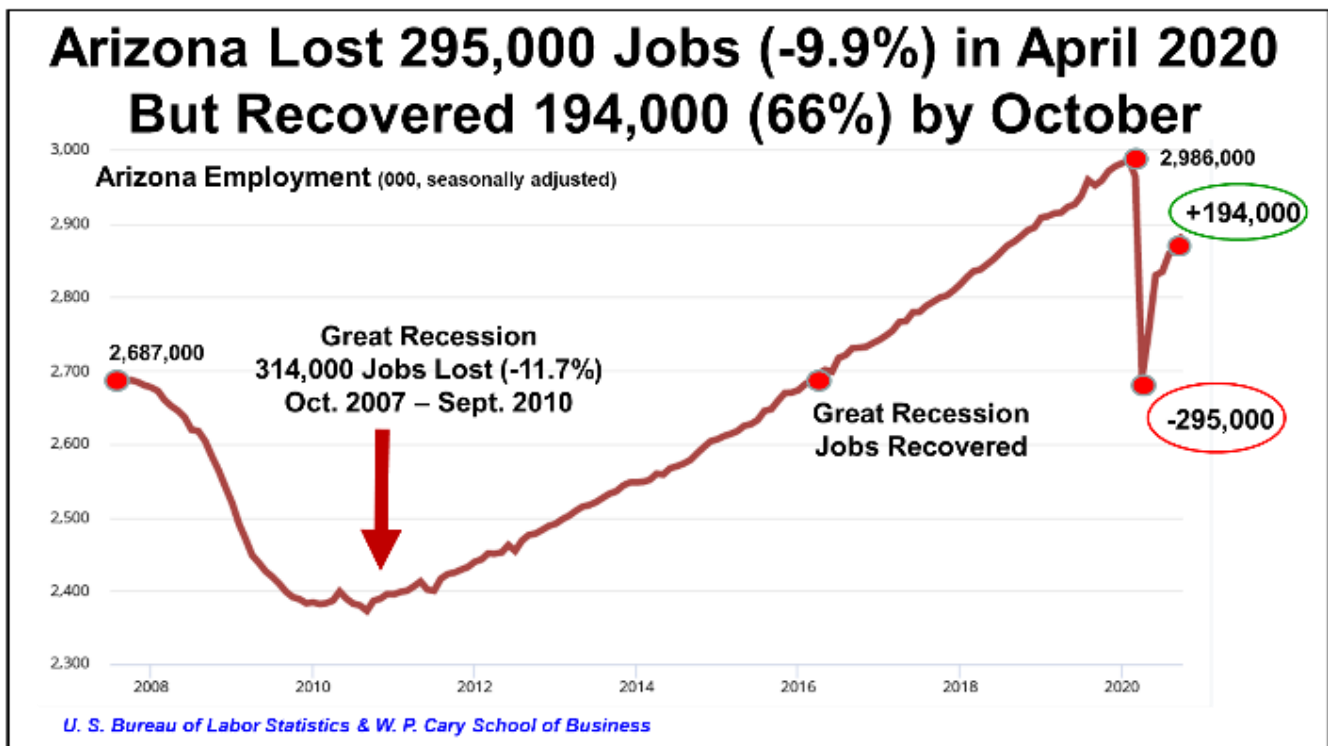
Economic Outlook for Arizona, Greater Phoenix, and the West

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The onset of the Covid-19 pandemic ended the longest U.S. jobs expansion on record, coming after an increase of employment of 112 consecutive months that began in October 2010 and extended through February 2020. During that period, the national economy added nearly 22 million jobs, and essentially all those jobs were lost by April of 2020. As of October 2020, there were still some 10 million U.S. workers unemployed.

In the April 2020 downturn, Arizona lost 295,000 jobs, a decline nearly as large as the 314,000 jobs lost in the Great Recession. While Arizona's job losses did not take employment back to 2010 levels, the decrease was approximately equal in size to all the jobs added since 2016, which in turn marked the recovery of jobs lost since October 2007, the start of the Great Recession in Arizona.

Unlike the Great Recession, when employment recovery was delayed over eight years, the rebound from the April downturn is forecast to be much swifter, tracing a "V shaped" pattern. Through October, two-thirds of the jobs lost had been recovered, and Arizona appears on track to replace all lost jobs in 2021. This swift recovery is anticipated because before the external shock of the pandemic the Arizona economy was sound. Arizona was among the leading growth states for key indicators such as income, employment, and population. However, as discussed below, the recovery depends on a vaccine developed and distributed early in 2021, as well as continuing positive policy support at the federal level, so considerable economic uncertainty remains.



ARIZONA ECONOMIC OUTLOOK: KEY INDICATORS

Indicator	Actual 2019	Estimated 2020	Forecast 2021
Personal Income <i>Millions</i> <i>Percent Change</i>	\$335,243 5.0	\$357,700 6.5	\$369,500 3.5
Average Annual Wage <i>Percent Change</i>	\$53,800 3.7	\$56,300 4.7	\$57,800 2.6
Non-Farm Employment <i>Thousands</i> <i>Percent Change</i>	2,937 2.8	2,863 -2.5	2,978 4.0
Annual Growth in Non-Farm Employment	79,700	-74,000	115,000
Single Family Housing <i>Permits</i> <i>Percent Change</i>	33,981 5.8	40,800 21.0	46,900 15.0
Population <i>Thousands</i> <i>Percent Change</i>	7,279 1.7	7,388 1.5	7,506 1.6
Annual Growth In Population	120,693	109,000	118,000
Unemployment <i>December Rate</i> <i>Seasonally Adjusted</i>	4.5	6.2	6.1

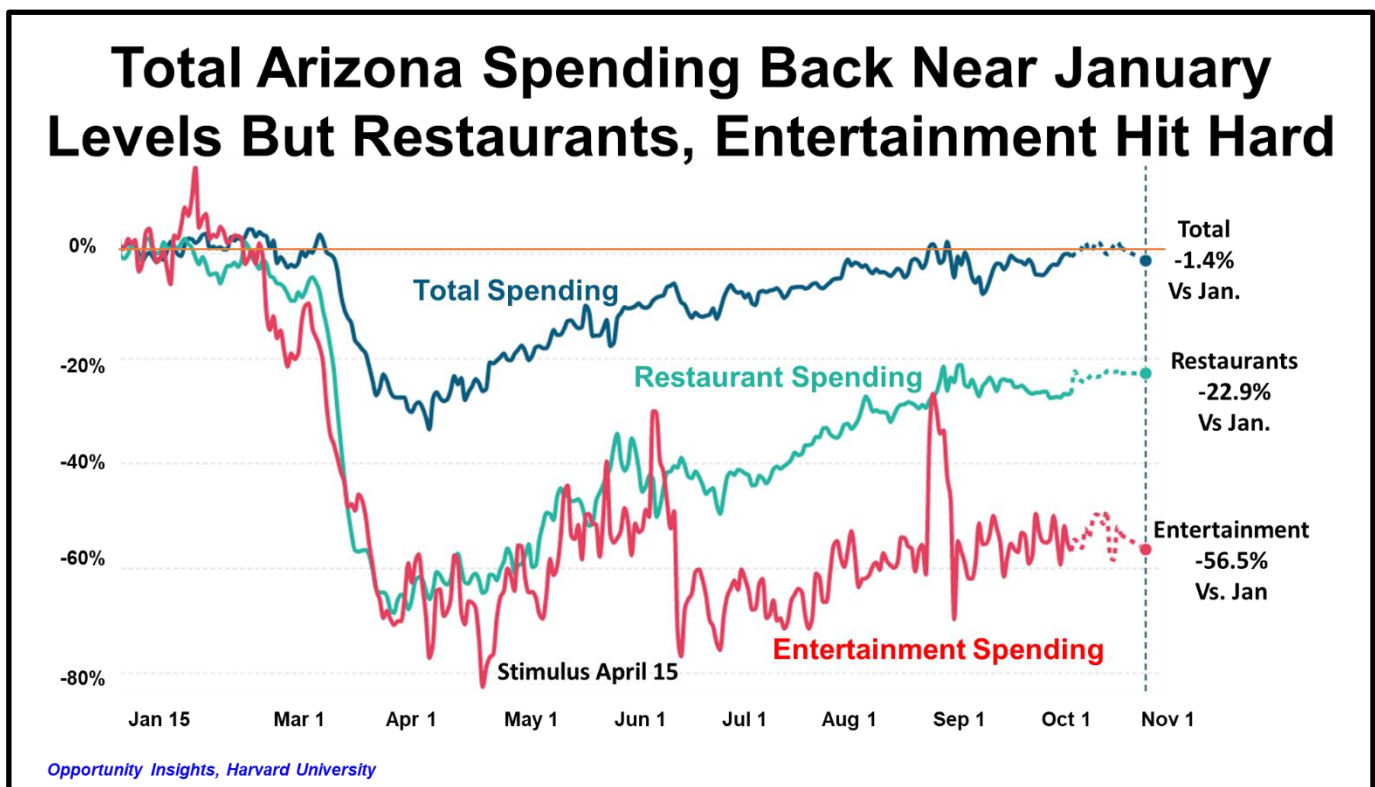
Personal Income, U.S. Bureau of Economic Analysis; Annual Wage, Quarterly Census of Employment and Statistics (QCEW), U. S. Bureau of Labor Statistics (BLS); Employment, Current Employment Statistics (CES), BLS; Single Family Housing permits, U.S. Census Bureau; Population, U. S. Census Bureau; Unemployment, BLS. Forecasts by W. P. Carey School of Business based on data available November 2020.

ARIZONA OUTLOOK

Arizona and the nation are in a recession which began in February 2020, as determined by the National Bureau of Economic Research. However, Arizona is on a path to full replacement of lost jobs during 2021, and is expected to have a stronger rebound than most states. This is because Arizona was among the leading growth states entering the recession, and as the service sector rebounds, the traditional Arizona growth industries of health care, tourism, finance, transportation, warehousing, and distribution will benefit.

Arizona Personal Income

Personal income is a measure of all sources of income such as wages, dividends, interest, profits, and transfers, including unemployment insurance and special benefits related to the CARES act, passed to combat the economic effects of the Covid pandemic. Figures on Arizona personal income growth are available at this time from the U. S. Bureau of Economic Analysis only through the first half of 2020. The growth rate is 8.1 percent, boosted by an injection of \$10 billion stimulus funding in Q2, including pandemic-related unemployment compensation assistance and other supplements. The impact on Arizona consumer spending is shown in the chart below. From a decline of more than one third, total spending reversed course and now has returned near the January pre-pandemic level. However, the lingering effects of the pandemic and associated lockdowns on restaurants and entertainment are also evident. Although many analysts believe additional stimulus is required, the current forecast of an 8.5 percent rise in 2020 personal income and an increase of 3.5 percent in 2021 assumes a much more modest level of additional stimulus, as compared to the CARES act.



Arizona Employment

Arizona added 79,700 new jobs in 2019, following 80,500 in 2018, the two best years for labor market growth since the expansion began in 2010. At the start of the year (pre-pandemic) Arizona's year-to-date growth through February was 78,400 jobs compared to the year before, an increase of 2.7 percent, ranking Arizona third among all states in job growth over that limited period. As of October 2020, after the onset of pandemic related jobs losses, year-over-year figures show the economy 73,800 jobs below October 2019.

Although the nation is in recession, some Arizona industries are actually performing above year-ago levels. Transportation, warehousing, wholesaling, and retail trade have increased, providing evidence of the continuing emergence of Arizona as a regional distribution center.

Among industries losing jobs, the greatest losses have been felt within the hospitality sector, with food services down by more than 20,000 jobs compared to last year, and accommodation down nearly 14,000.

The Arizona employment forecast for 2021 calls for an addition of 115,000 jobs and a growth rate of 4.0 percent over 2020.

It must be emphasized that this forecast relies on several key assumptions. First and foremost among these is that a Covid vaccine will be widely distributed during the first half of the year. That would lead to a rapid reversal of job losses in the hospitality sector and other services such as health care, with the potential of recovery of nearly 40,000 jobs in those industries alone.

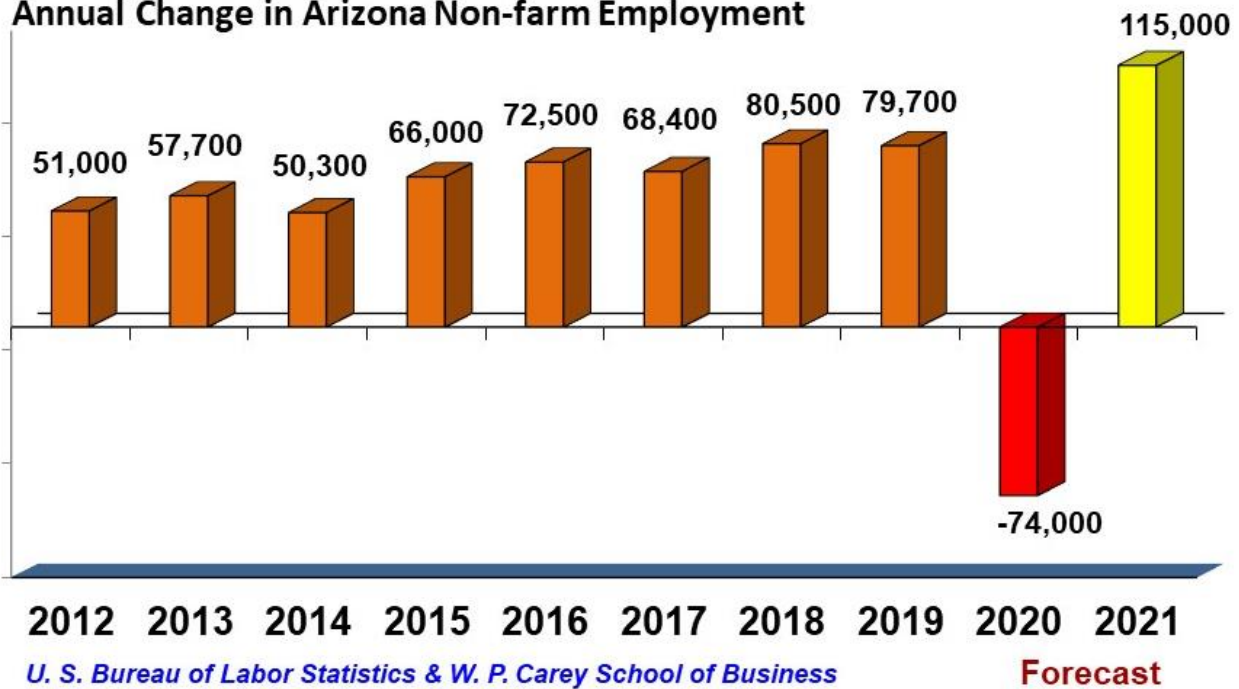
The second assumption, not as critical but nonetheless important, is that there will be additional stimulus at the Federal level in the form of fiscal policies aimed at the unemployed and small businesses, although smaller than the CARES act initiatives. In addition, the forecast assumes that monetary policy remains in an accommodative mode, with low interest rates supporting residential and commercial construction, as well as consumer spending.

Arizona Industries Year/Year October 2020	Jobs Added
Transportation/Warehousing	10,800
Retail Trade	3,300
Wholesale Trade	2,400
Federal Government	2,400
Other (Repair, etc.) Services	1,700
	Jobs Lost
Non-Farm Employment	-73,800
Food Services	-20,200
Accommodation/Lodging	-13,900
Local Government	-10,600
Manufacturing	-6,900
Health Care	-4,100
Information	-3,700
Educational Services	-1,800
Real Estate	-1,300
Financial Activities	-1,000
Construction	-500
State Government	-500

*U. S. Bureau of Labor Statistics & W. P. Carey
School of Business*

Arizona To Add 115,000 Jobs in 2021

Annual Change in Arizona Non-farm Employment



The current recession is fundamentally different from previous recessions triggered by various excesses such as over-investment in residential construction or monetary tightening to control inflation. The economy in 2020 fell prey to a global pandemic that affected supply chains, consumer behavior, and created massive disruptions to business and employment around the globe. As risks and restrictions associated with the pandemic abate, normal growth patterns should emerge. For Arizona, that could bring increases in health care and construction employment of over 10,000 new jobs, recovery of the hospitality industry, along with a resumption of growth over the total economy approaching the normal 65,000 to 75,000 new jobs driven by population, business expansion, and tourism, to a total of 115,000 new 2021 jobs.

Arizona Job Growth: 2015 - 2021

Year	Percent Change	Job Growth
2015	2.6	66,000
2016	2.7	72,500
2017	2.5	68,400
2018	2.9	80,500
2019	2.8	79,700
2020*	2.5	-74,000
2021*	4.0	115,000

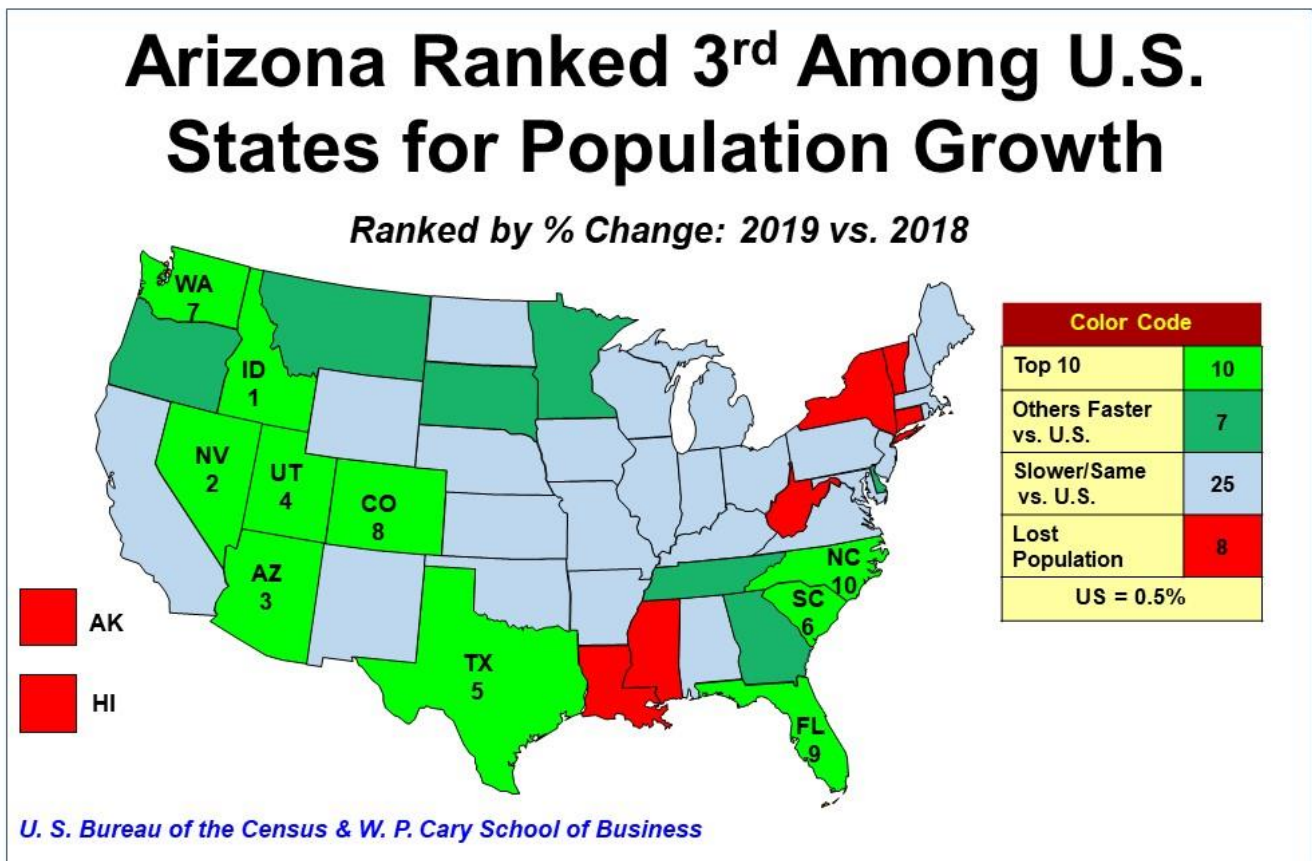
* Forecast

U. S. Bureau of Labor Statistics and W. P. Carey School of Business

Arizona Population

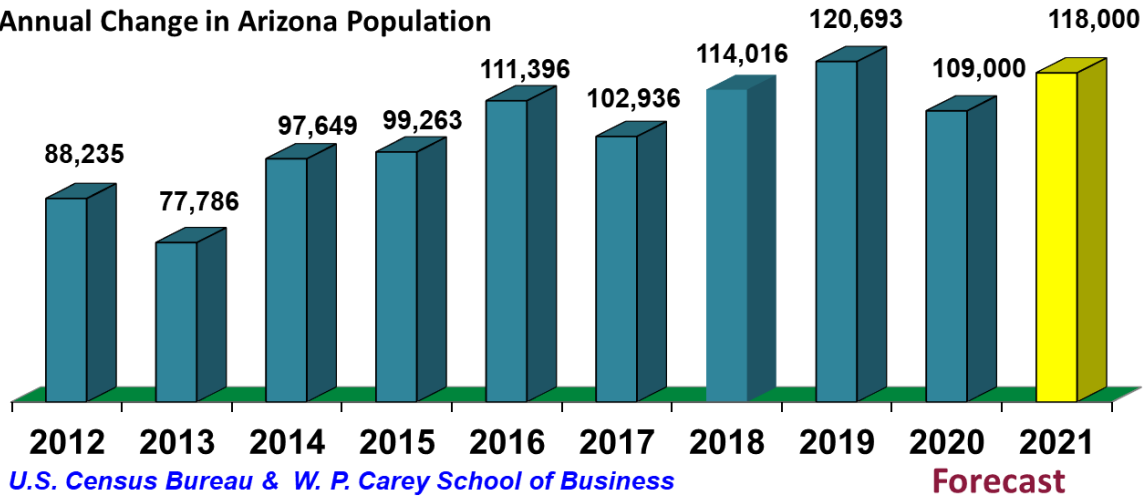
Historically, Arizona has ranked among the leading states for population growth, whether measured by percentage increase or absolute gain in numbers of new residents. The average annual rate of population growth during the past five years was 1.6 percent, approximately triple the national pace of population growth. The latest available (2019) estimates from the U.S. Census Bureau show that Arizona's population increased by 1.7 percent as the state added 120,693 new residents. Arizona had the third fastest increase, behind Idaho and Nevada and also the third greatest number of new residents behind Texas and Florida and ahead of North Carolina and Georgia among the top five. Figures for 2020 will be released by the Census Bureau in late December.

Arizona ranked third in the number of new domestic migrants, attracting a net of 91,017 from other states. The largest source of new-comers was California, followed by Washington, Texas, and Colorado. Similarly, those leaving Arizona were most likely to go to California, Texas, Colorado, and Washington, in that order. Arizona was 21st in international migration, adding 7,782 residents from international origins. After slower growth in 2020, the forecast for 2021 calls for an increase in population of 1.6 percent, implying an increase of 118,000 new residents, marking the sixth consecutive year of Arizona population growth exceeding 100,000 persons.



Arizona Population to Grow By 100,000 New Residents for 6th Year

Annual Change in Arizona Population



Arizona Housing

After reaching a peak exceeding 80,000 units in the early 2000 period, Arizona single family housing permits declined during the Great Recession to a low of 10,000 in 2011. Permits recovered slowly to pass the 30,000 mark in 2018 and are expected to exceed 40,000 in 2020, then increase by an additional 15 percent, to 46,900, in 2021.

Home ownership in the nation has surged during the pandemic, reaching the highest level (67.4%) of the decade. Strong housing demand is supported by low mortgage interest rates and greater focus on use of the home for work, leisure, and home schooling due to the pandemic. In addition, home building in Arizona benefits from population growth stronger than in all but a very few states. Offsetting positive demand factors are Covid-related impacts on building supply chains and labor availability. Construction, normally an Arizona growth industry, is down by 500

jobs compared to last year. As a result, home prices continue to rise. Sales prices are up by double digits in 2020, as inventory of homes for sale is extremely tight.

Arizona Single-Family Housing Permits		
Year	Percent Change	Number of Permits
2015	32.5	22,311
2016	11.4	24,853
2017	13.0	28,072
2018	14.4	32,127
2019	5.8	33,981
2020*	20.0	40,800
2021*	15.0	46,900

*Forecast

U. S. Census Bureau and W. P. Carey School of Business

GREATER PHOENIX OUTLOOK

During 2019, the Greater Phoenix area contributed eight out of every ten new jobs created in the state, 74 percent of single family permits, and more than 80 percent of statewide population growth. In February of 2020, before the Covid-19 pandemic affected the economy, the Greater Phoenix area ranked fourth among all large metropolitan areas in the rate of job growth. However, Greater Phoenix accounted for 69 percent of Arizona job losses in April of 2020, with a seasonally adjusted employment decline of 203,000 workers. The Phoenix area economy is projected to add 90,000 new jobs in 2021, with an employment growth rate of 4.2 percent. The population of the Greater Phoenix area surpassed five million for the first time in 2020 and is forecast to rise to 5.1 million in 2021, at a 1.7 percent growth rate.

Low mortgage rates, and “work at home schedules” have increased the demand for housing in the Phoenix area as well as across the nation. Single family permits are expected to increase by 20 percent in 2020 and an additional 15 percent in 2021. Meanwhile, population growth boosted by a flow of younger in-migrants has led to a surge in multi-family permits of 45 percent for 2020. Multi-family will cool only slightly in 2021, as high home prices and limited inventory continue to influence the market.

GREATER PHOENIX ECONOMIC OUTLOOK: 2021			
Indicator	Actual 2019	Estimated 2020	Forecast 2021
Personal Income (Millions) <i>Percent Change</i>	\$237,836 5.4	\$259,955 9.3	\$271,913 3.6
Non-Farm Employment (Thousands) <i>Percent Change</i>	2,177 3.3	2,136 -1.9	2,226 4.2
Manufacturing Employment (Thousands) <i>Percent Change</i>	133 3.6	131 -1.5	132 1.0
Population (Thousands) <i>Percent Change</i>	4,948 2.0	5,022 1.5	5,108 1.7
Single Family Permits <i>Percent Change</i>	25,026 6.4	30,280 20.0	34,800 15.0
Multi-Family Permits <i>Percent Change</i>	10,847 38.8	15,900 45.0	14,100 -11.3
Unemployment Rate (December)	3.6	6.0	5.8

2020 estimates and 2021 forecasts by W. P. Carey School of Business, based on data available November, 2020; also see economic and real estate forecasts from Greater Phoenix Blue Chip Forecast, <http://seidmaninstitute.com/greater-phoenix-blue-chip/>

WESTERN STATES OUTLOOK

Economic forecasts for the Western states are updated monthly by the W. P. Carey School of Business and made available on the School's *Western Blue Chip* internet site. Forecasts are contributed by a panel of 70 analysts across the Western States.

Nevada, Utah, Idaho and Arizona are projected to see the greatest percentage gains in employment for the year ahead, with jobs growing faster than 4.0 percent. Job gains in Washington and Oregon will exceed 3.0 percent. California and Colorado are projected to have the lowest job growth among Western states, below 2.0 percent.

The Blue Chip forecasters expect to see the most gains in single-family housing permits in Arizona (15.0 percent), Utah (9.3 percent), Colorado (8.0 percent), and California (7.7 percent).

Population growth is an important driver of economic growth in the Western states. In the most recent Census report (2019), the top five fastest growing states were in the West, including Idaho, Nevada, Arizona, Utah and Texas. Arizona and Nevada are expected to have the fastest population growth among Western states in 2021, with 1.6 percent gains, approximately triple the nation's rate of population growth.

WESTERN STATES ECONOMIC OUTLOOK: 2021 <i>Percentage Change in Key Indicators</i>			
State	Non-Farm Employment	Single-Family Permits	Population
Arizona*	4.0	15.0	1.6
California	1.4	7.7	0.4
Colorado	1.6	8.0	1.1
Idaho	4.4	3.5	1.5
Montana	2.1	2.0	0.5
Nevada	5.2	0.6	1.6
New Mexico	2.1	2.1	0.5
Oregon	3.6	3.7	0.8
Texas	2.4	4.6	1.3
Utah	4.5	9.3	1.4
Washington	3.3	4.9	1.0
Wyoming	2.5	2.0	0.2

*Forecast from W. P. Carey School of Business
State forecasts from Western Blue Chip, W. P. Carey School of Business based on data available November 2020. Monthly updates are available at <http://seidmaninstitute.com/western-blue-chip/>

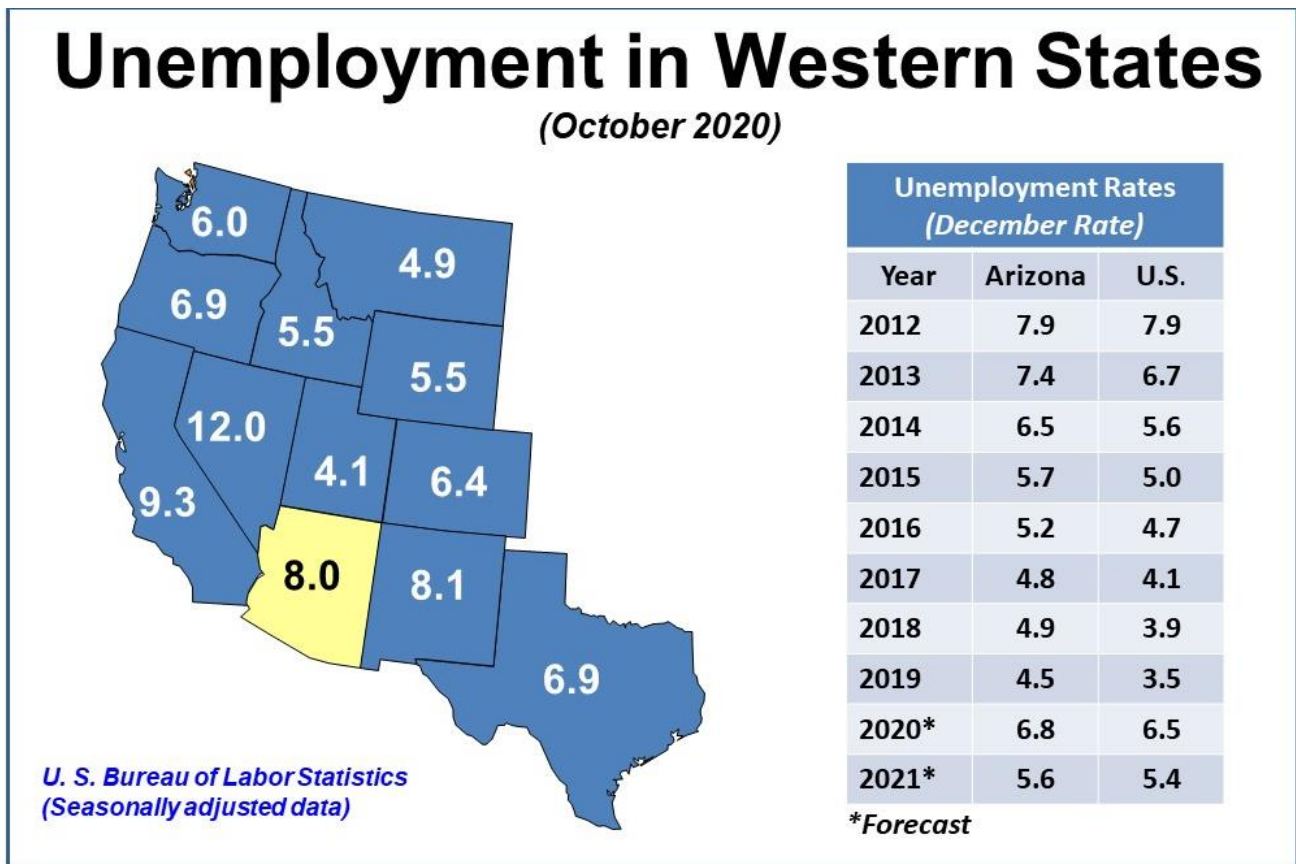
Western States Unemployment

The national unemployment rate increased from a 50-year low of 3.5 percent in February of 2020 to an all-time recorded high of 14.7 percent in April, as 23 million workers were without jobs. By October, the U.S. unemployment rate was 6.9 percent, a recovery of 7.8 points from the April peak.

Unemployment rates in four of the twelve Western states exceeded the national rate in October. Nevada (12.0) and California (9.3) had the highest seasonally adjusted unemployment rates in the West, followed by New Mexico (8.1) and Arizona (8.0).

Utah had the lowest unemployment rate among the Western states, at 4.1 percent, and fifth lowest among all states. Although the Arizona unemployment rate is typically slightly greater than the national rate, Arizona's April unemployment rate spiked below the U.S. rate, at 13.4 percent. This was an all-time high for Arizona, with 474,000 workers unemployed. By October, the number of Arizona unemployed was 234,000, an improvement of 240,000.

The Arizona unemployment rates in the past three months (5.9, 6.5, 8.0) averaged 6.8 percent. This figure was used as the forecast rate for December shown in the table below. By 2021, job growth is expected to be fairly robust, as vaccine distribution restores economic normality. The 2021 Arizona unemployment rate is expected to be between 5 to 6 percent as workers returning to the labor force find jobs.



2020 estimates and 2021 unemployment rate forecasts by W. P. Carey School of Business, based on data available November, 2020