

Scottsdale Economy Report



This report is designed to provide an analysis of various components of the national, regional and local economy. The economy is a broad term used to describe movement of goods and services, also referred to as supply and demand. Economic conditions are largely dictated by people as conveyors of goods and services. Upticks and declines in the economy can be traced back to a variety of human-based factors that when analyzed, can help to define current conditions and establish future projections. This report considers eight economic indicators including: Personal Income, GDP and Consumer Confidence, Inflation, Labor Force and Unemployment Rates, Industry Employment, Sales Tax Collections, Tourism, and Construction Permitting Activity.



**Personal
Income**



**GDP & Consumer
Confidence**



Inflation



**Unemployment
Rate**



**Changes in
Employment by
Industry**



**Sales Tax
Collections**



Tourism



**Construction
Permit Activity**

Overall Forecast

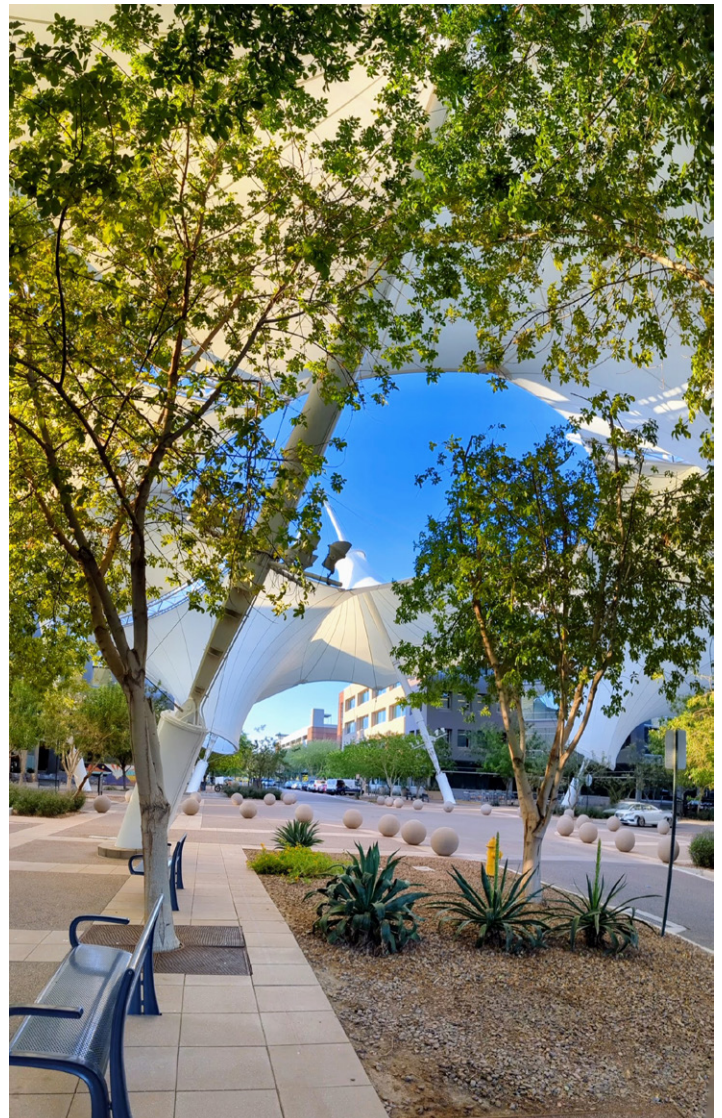
The labor market in Arizona has remained very strong with low unemployment, increasing wage rates and significant job growth. According to the Bureau of Labor Statistics, Current Employment Statistics, Arizona now has 87,000 more jobs than before the pandemic. However, retail sales are beginning to slow as a result of inflation rates that exceed wage increases, and a depletion of consumer savings accumulated during the pandemic. High inflation has dampened personal income growth, although personal income in Arizona was 16.6% above pre-pandemic levels as of Q2 2022 before adjusting for inflation.

The Arizona economic forecast from UA Economic and Business Research Center calls for slower growth for the remainder of 2022, and a high probability of a recession in 2023. While it is likely that the Phoenix metro area will fare better than the nation as a whole, a national recession is becoming increasingly likely. The Russia-Ukraine conflict, which is affecting global growth rates, coupled with continued supply chain disruptions and the impacts of rising interest rates designed to combat inflation, will likely increase unemployment in the next one to two years and decrease overall productivity.

Job-related in-migration has long been a key driver of growth in the Phoenix Metro area. According to the Census Bureau, the Phoenix Metro area was the second fastest growing metro area in the nation from 2020 to 2021 adding more than 78,000 new residents, including net in-migration of 70,100, or 90% of the total increase in population. In-migration accounted for 77% to 80% of metro area population growth in 2018 and 2019, prior to the pandemic.

In the longer term, in-migration will continue to be the primary factor driving population and labor force growth in Arizona and the Phoenix Metro area. However, the ability to continue to attract new residents from other parts of the country in large numbers will be contingent on relative cost of living in Arizona, tax and regulatory policies, and natural resource availability and cost, namely water resources.

The following sections describe current national and local trends for eight key economic indicators.





Personal Income

In addition to a strong housing market, and in spite of job losses during 2020 personal income growth in Arizona reached record highs last year. According to the Bureau of Economic Analysis, Arizona and Montana led the nation in personal income growth in 2020 at 8.4%. Nationally, personal income grew by 6.1% in 2020 compared to 3.9% in 2019, even though 2019 was generally considered to be a strong year for the economy. The increase in government transfer payments related to the CARES Act of 36.6% nationally accounted for the increase in personal income while earnings increased

only 0.3% in aggregate. In Arizona, government transfer payments rose by 32.4% in 2020 while net earnings increased by 2.1%. Over the coming year, it is expected that personal income growth will drop to a more sustainable level of around 3.5%, as the economy transitions away from reliance on federal funding and shifts toward earnings growth. During the first four months of 2021, there were significant increases in personal income in January and March, offset by declines in February and April, resulting in a year-to-date decline in personal income of 2.3% from January to April.



GDP & Consumer Confidence

Advance estimates of real GDP for Q3 2022 show a 2.6% increase for the quarter, following two quarters of declines. The year 2020 was a roller coaster year for GDP with a record 29.9% decline in Q2 2020, the largest single-quarter decline in history, followed by a whiplash increase of 35.3% in Q3 2020. GDP growth remained strong throughout 2021, driven by consumer spending which accounts for about 70% of GDP, and ending the year with a 7% increase in Q4 2021. However, 2022 signaled the start of a slowdown with declines of -1.6% and -0.6% in the first two quarters, respectively, largely due to a decrease in purchases of consumer goods that was only partially offset by gains in purchases of services. The availability of goods has been impacted by supply chain issues much more significantly than services, and the effects of inflation on the price of services tends to lag the effects on the price of goods. The upturn in Q3 2022 GDP reflects a decrease in private inventory investment, and an increase in nonresidential fixed investment and government spending, that offset the slower growth in consumer spending. According to the IHS Markit, real GDP is projected to end the year up 1.4% overall in 2022, followed by continued slower

growth in 2023 at 1.3%. The slowdown in 2022 overall is primarily due to the end of government subsidies in 2021, and the Federal Reserve's current fiscal policy aimed at reducing inflation.

The Conference Board, which tracks consumer confidence as a leading economic indicator, reported an increase in the consumer confidence index from August 2022 to September 2022 of 4.4, which is somewhat surprising given the current slowing in the economy, but is reflective of strong job growth and declining gas prices during that time period. However, the index decreased by 5.3 points from September 2022 to October 2022, reflecting increasing concerns about inflation and its effects on food and gas prices. There are two factors that go into this index – the Present Situation Index and the Expectations Index, that both decreased from September to October. The Present Situation Index decreased by 11.3 points while the Expectations Index decreased by 1.4 points. The Expectations Index measures consumers' expectations for the next six months regarding the economy and labor market conditions. Consumer's plans to buy automobiles, appliances and other big ticket items remained strong.



Inflation

After more than 10 years annual increases in the consumer price index of less than 3% per year, the confluence of events that occurred during the pandemic created the perfect storm for higher inflation. This includes the impact of CARES Act dollars temporarily boosting household spending in 2020 and 2021, combined with pent up consumer demand due to shut downs and other limitations during the pandemic, along with global supply chain disruptions and shortages that have continued into 2022, resulting in a simultaneous increase in demand and decrease in supply, leading to rapid price increases or inflation. Inflation is projected at 7.8% for 2022 overall based on forecasts from IHS Markit, but is expected to decline to a more manageable 3.3% in late 2023 or early 2024 as supply chain issues are resolved, oil prices fall, and the unemployment rate increases.

For metro Phoenix, housing prices have increased at a higher rate than most of the rest of the country, leading to above average inflation at 13.0% year over year in August 2022 versus 8.6% nationally (Bureau of Labor Statistics, CPI-U).

However, for all items excluding shelter, the change in the CPI for the first half of 2022 versus the first half of 2021 is only 9.6% in metro Phoenix, compared to 9.9% nationally. Housing prices in Metro Phoenix have now been declining since June 2022 in response to higher interest rates, but it will likely take one to two years before inflation returns to a more sustainable level and the housing market returns to a more stable condition.

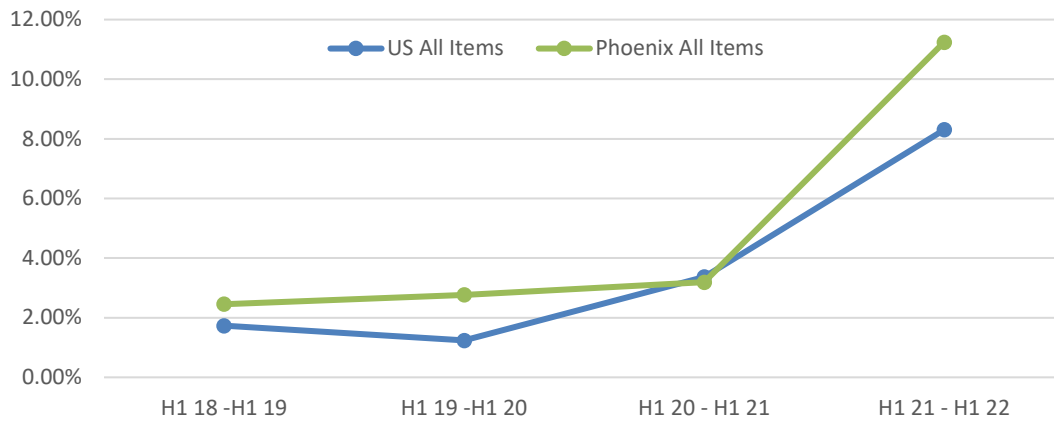
One important point to understand is that inflation may disproportionately affect different types of people. While everyone may pay more for food as a result of inflation, people who already have a mortgage on an existing home are not impacted by rising home prices or rising interest rates unless they sell or refinance, whereas renters are impacted by higher prices when they renew their lease each year. Also, people who have a long commute, or whose job requires driving, are disproportionately impacted by higher gas prices. Inflation is generally regressive and has a greater impact on lower income households that struggle to meet their basic needs.



Inflation (cont.)

Change In All Items CPI For Urban Consumers – US Average Vs Metro Phoenix First Half 2018 To First Half 2022

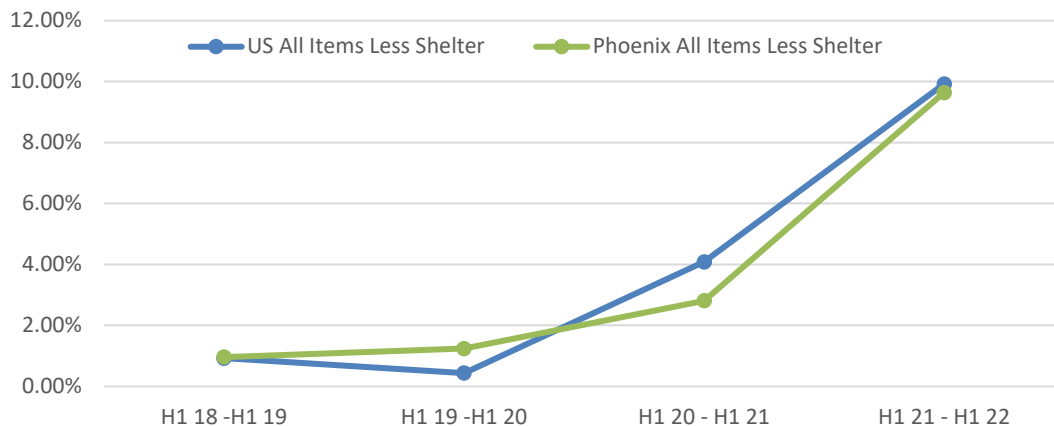
Source: Bureau of Labor Statistics, Consumer Price Index-All Urban Consumers (not seasonally adjusted)



Bureau of Labor Statistics, Consumer Price Index-All Urban Consumers (not seasonally adjusted).

Change In All Items Less Shelter CPI For Urban Consumers – US Average Vs Metro Phoenix First Half 2018 To First Half 2022

Bureau of Labor Statistics, Consumer Price Index-All Urban Consumers (not seasonally adjusted)



Bureau of Labor Statistics, Consumer Price Index-All Urban Consumers (not seasonally adjusted).



Unemployment Rate

Prior to the COVID-19 pandemic, the previous all-time high unemployment rate in Arizona was about 11% in 1982 during the global recession of the early 1980's. As of April 2020, the state unemployment rate peaked at 13.5% while the national rate rose to 14.4% (not seasonally adjusted). The highest unemployment rate on record for the U.S. was 24.9% in 1933. However, since October 2021, the unemployment rate in Arizona and Metro Phoenix has been around 4%, dropping to as low as 2.4% in metro Phoenix in March 2022.

Labor force participation is high, and throughout 2022, there have been significantly more job openings than applicants to fill those jobs. However, as the Federal Reserve continues to raise interest rates to counter inflation, unemployment will slowly increase as the number of job openings decreases. While the current unemployment rate of 3.5% in the Phoenix metro area is indicative of a very strong job market with both labor force

an employment continuing to grow, it is likely that unemployment both nationally and locally will increase somewhat over the next one or two years. IHS Markit projects national unemployment to increase to 4.3% in 2023 and 4.9% in 2024.

September labor force and unemployment data for the Phoenix metro area and for Scottsdale show similar patterns. The September 2022 unemployment rate for the Phoenix Metro area was 3.5% and has been hovering at between 3.3% and 3.5% for the past 3 months after dipping to a low of 2.4% at the peak of the visitor season in March 2022. The corresponding unemployment rate for Scottsdale was 3.0%, up slightly from a low of 1.8% in March. Scottsdale's unemployment rate for September 2022 is similar to, or less than, many of the other larger cities in the metro area, and represents a dramatic decline from peak pandemic unemployment rates in April 2020. Note that this data from the Bureau of Labor Statistics is based on place of residence, not place of work.

Labor Force and Unemployment Trends

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics, November 2022.

Note: Not seasonally adjusted.

	Current Data								
	Jan-20	Feb-20	Mar-20	Apr-20	May-22	Jun-22	Jul-22	Aug-22	Sep-22
Labor Force									
National (000)	163,497	164,235	162,537	155,830	164,157	165,012	165,321	164,971	164,463
Arizona	3,491,416	3,504,064	3,494,129	3,368,901	3,577,622	3,586,281	3,586,200	3,619,366	3,641,787
Phoenix Metro	2,464,310	2,493,707	2,461,279	2,376,341	2,549,407	2,554,987	2,560,113	2,572,762	2,588,873
Scottsdale	146,879	147,475	146,512	142,982	152,408	152,638	153,109	153,771	154,596
Employment									
National (000)	156,994	158,017	155,167	133,326	158,609	158,678	159,067	158,714	159,003
Arizona	3,316,135	3,335,488	3,291,200	2,914,700	3,456,846	3,442,790	3,443,837	3,467,052	3,489,856
Phoenix Metro	2,355,828	2,368,129	2,334,366	2,072,395	2,476,053	2,468,486	2,475,114	2,484,160	2,497,136
Scottsdale	141,544	142,296	140,219	124,574	148,956	148,492	148,888	149,327	150,020
Unemployment Rate									
National	4.0%	3.8%	4.5%	14.4%	3.4%	3.8%	3.8%	3.8%	3.3%
Arizona	5.0%	4.8%	5.8%	13.5%	3.4%	4.0%	4.0%	4.2%	4.2%
Phoenix Metro	4.4%	5.0%	5.2%	12.8%	2.9%	3.4%	3.3%	3.4%	3.5%
Scottsdale	3.6%	3.5%	4.3%	12.9%	2.3%	2.7%	2.8%	2.9%	3.0%

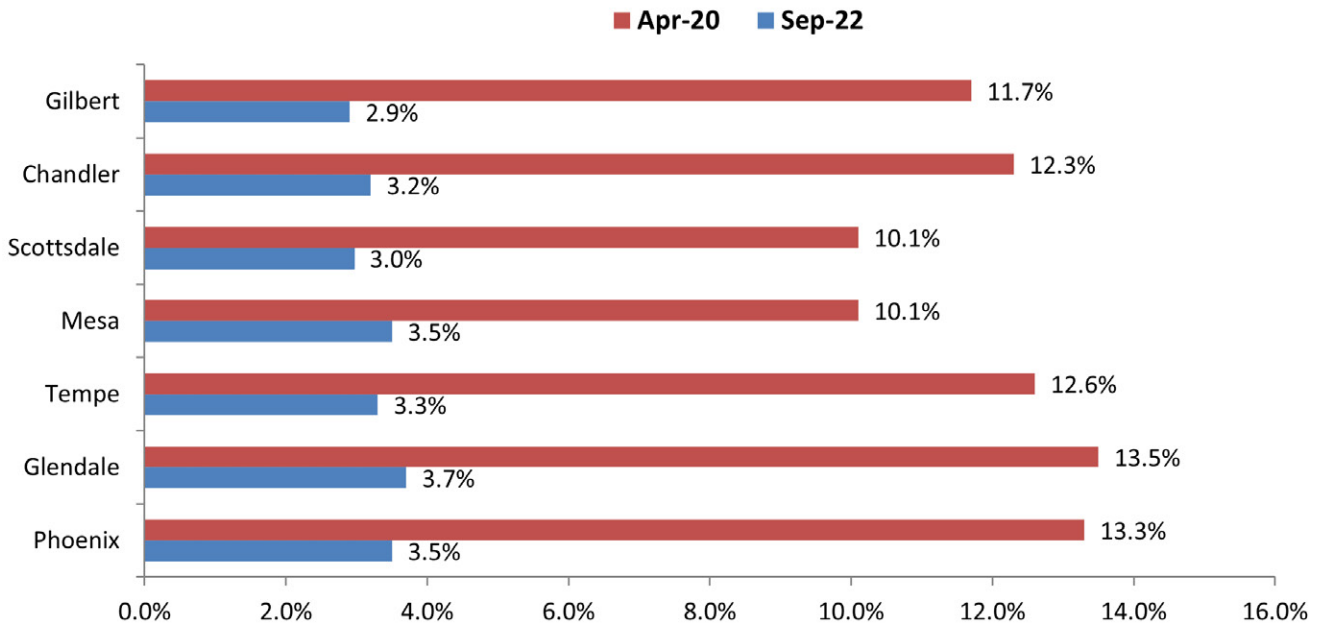


Unemployment Rate (cont.)

Labor Force and Unemployment Trends

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics, 2022.

Unemployment Rates by City - April 2020 vs September 2022





Changes in Employment by Industry

In order to better understand the current state of the economy, it is important to look at changes in employment by industry since not all industries have recovered from the pandemic at the same rate, or suffered the same initial losses in 2020. Changes in industry employment between February 2020 (pre-pandemic) and April 2020 (trough of the pandemic) can be compared to current data for September 2022 for the U.S. and the Phoenix metro area, providing useful insights about the varying level of job growth across different sectors.

The Bureau of Labor Statistics Current Employment Survey shows growth in nonfarm employment of 1.4% nationwide (not seasonally adjusted) between February 2020 (pre-pandemic) and September 2022. April 2020 represented the worst month during the pandemic. The nation lost 20.7 million jobs in that two month period. Since that time 22.8 million jobs have been added back, leaving the nation 2.1 million jobs above pre-pandemic levels. In the Phoenix Metro area, the decline in non-farm employment from February 2020 to April 2020 was 11% or 242,800 jobs. Since April 2020 in the trough of the pandemic recession, 332,400 jobs have been added through September 2022. Overall, the Phoenix metro area is at 104% of pre-pandemic (February 2020) employment levels, although there is significant variation in growth by sector. Projections issued by the UA Economic and Business Research Center in September 2022 call for lower annual job growth for the Phoenix Metro area of 1.9% in 2023 and 2.2% in 2024 and 2025. The following sections describe trends by sector over the past two years.

- ▶ Unlike previous recessions, the **construction** sector came back strong and fast with employment growth from April 2020 to April 2021 up 367,000 nationally, or 5% over pre-pandemic levels. In the Phoenix metro area, construction employment is currently up 9,300 jobs over pre-pandemic levels. Long-term projections for the metro area call for 54,300 new jobs by 2030, or 31% growth in the construction sector from 2020 to 2030, according to the Arizona Office of Economic Opportunity projections.
- ▶ The most significant impact of the pandemic was in **leisure and hospitality**, which is particularly important to the Phoenix Metro economy. While there is significant seasonality in this sector, all of the 7.1 million jobs lost nationally had finally been recovered as of May 2022. As of September 2022 Phoenix Metro had recovered only 91,500 of the 96,500 jobs lost in leisure and hospitality. This sector generally represents low wage seasonal jobs, and some former restaurant and hotel workers have moved on to more stable, higher paying jobs in other industries such as transportation and warehousing, leaving the hospitality industry with a shortage of labor at current wage rates. Nonetheless, this sector is projected to grow by 30% between 2020 and 2030, adding more than 89,500 new jobs in the Phoenix metro area.
- ▶ The **professional and business services** sector was also heavily impacted by the pandemic, despite the ability of many professional service workers to work from home. This sector is lost 2.1 million jobs nationally from February 2020 to April 2020, and 30,200 jobs locally. Most of those losses were in administrative and support services. Employment in this sector nationally took until June of 2021 to surpass pre-pandemic levels, and there are now 1.3 million new jobs that have been created as of September 2022. In the Phoenix Metro area, recovery in this sector was sluggish through September 2020, but then gained speed through the end of 2020. There are now 14,200 more professional and business services jobs in the Phoenix Metro area than there were prior to the pandemic. This sector is projected to add 110,527 jobs between 2020 and 2030, resulting in 25% job growth, making it the second largest sector for job growth in the region following health care.



Changes in Employment by Industry (cont.)

- ▶ **Retail trade** has also shown a strong recovery, despite significant job losses during the pandemic. Nationally, retail trade is 313,500 jobs above pre-pandemic levels as of September 2022, and locally it is 14,900 jobs ahead. The retail sector accounts for 1 in every 9 jobs in metro Phoenix. Over the 10 year period from 2020 to 2030, the retail sector is projected to grow by 9%, with adding 27,700 new jobs in the Phoenix metro area.
- ▶ One of the strongest growth sectors in the Phoenix metro area in the past two years has been **transportation** and **warehousing**, which has added 22,400 net new jobs (+25%) since February 2020, accounting for one quarter of all job growth in the region. A number of large new distribution and fulfillment centers have opened in the both the East Valley and West Valley along local freeway corridors, fueling growth in this sector. On a national level, the transportation and warehousing sector is has grown by 13% (734,000 jobs). Local projections for the Phoenix metro area show 43% growth in this sector from 2020 to 2030, equating to nearly 51,200 new jobs.
- ▶ **Health services**, which was slow to recover nationally, has just recently surpassed pre-pandemic levels and is now up 0.1% compared to February 2020 employment levels. However, this sector fully recoved in the Phoenix metro area by July 2021, and is now showing growth of 8% (23,100 jobs) over pre-pandemic levels. Health services are projected to account for 1 in every 4 jobs created in the Phoenix metro area between 2020 and 2030, resulting in 203,800 new jobs.
- ▶ The **manufacturing** sector lost about 1.4 million jobs nationally from February 2020 to April 2020, and although this is much less than losses in other sectors, recovery on a national level has been hampered by persistant supply chain challenges, particularly for durable goods. In the Phoenix metro area, where manufacturing accounts for 6.5% of total employment, compared to 8.5% nationally, only 5,200 jobs were lost during the pandemic. Since that time there have been 13,700 new manufacturing jobs created in the Phoenix metro area, compared to pre-pandemic levels. The manufacturing sector is projected to add 37,800 new jobs from 2020 to 2030, resulting in 21% growth in this sector in metro Phoenix, although this projection may be low due to the number of large manufacturing companies that have announced new locations in the metro area just in the last 12 to 18 months, including companies in semiconductor, battery and electric vehicle manufacturing.

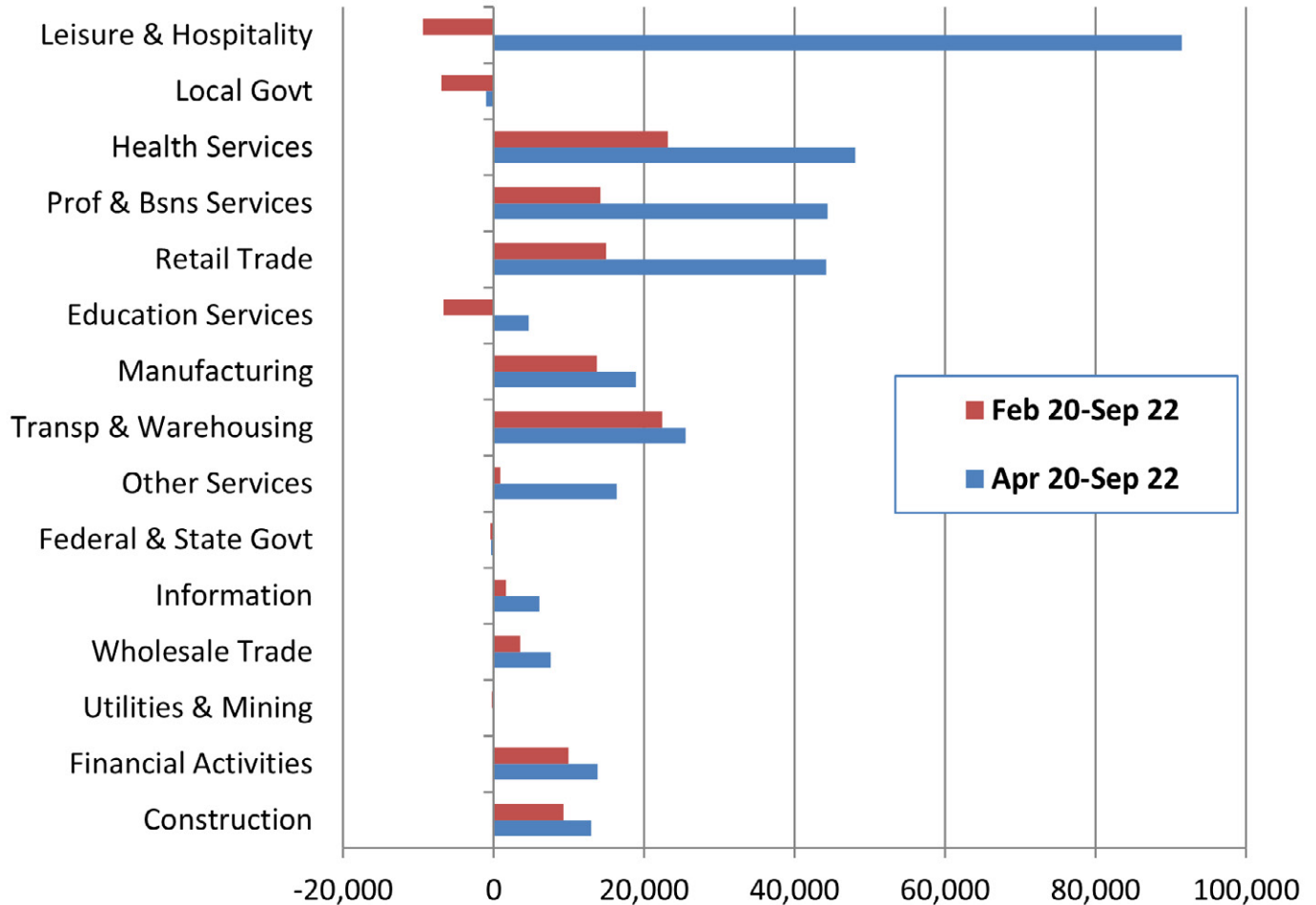
Industry employment data from the Bureau of Labor Statistics is not available at the city level. However some local comparisons can be made using quarterly estimates from EMSI for Q3 2022 versus Q2 2020. Based on data from EMSI, overall industry employment in Scottsdale has increased by 10% since the pandemic (Q2 2020). The largest increases have been in finance and insurance, manufacturing, other services and information, which account for the vast majority of all job growth in the city during this period.



Changes in Employment by Industry (cont.)

Change in Metro Phoenix Employment by Industry Pre-Pandemic to Current and Trough of Pandemic to Current

Source: Bureau of Labor Statistics, Current Employment Statistics, October 2022





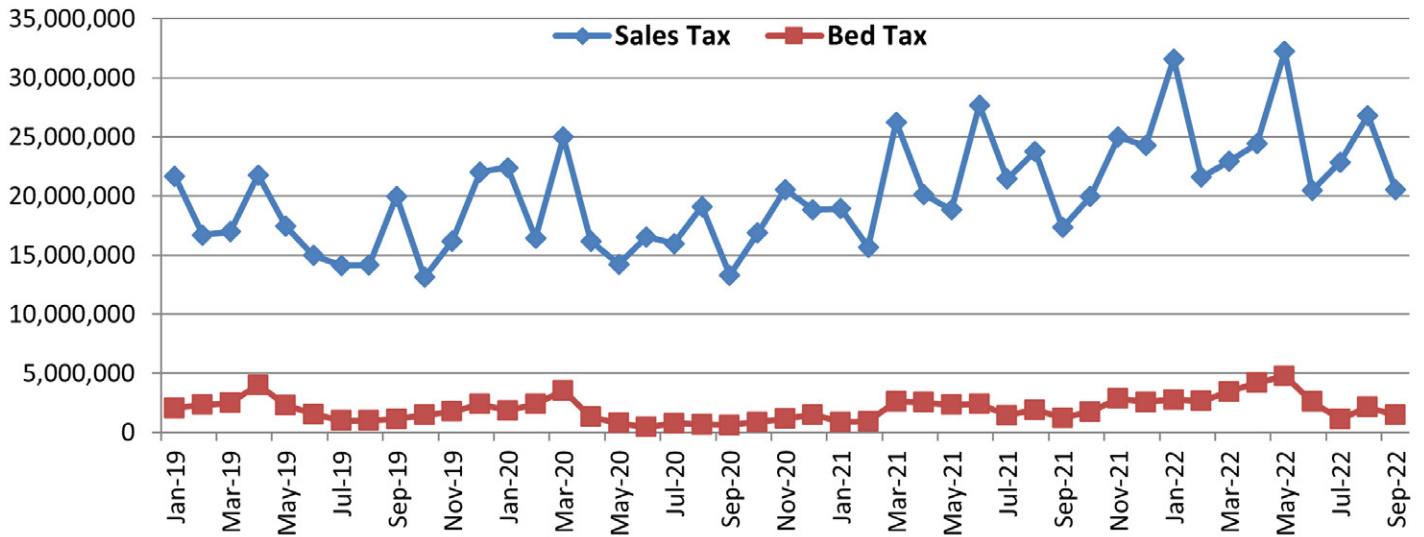
Sales Tax Collections

The most current sales tax collections data available is for activity occurring in August 2022 (September 2022 collections) and shows an increase of 18% year over year for Scottsdale, comparing January to September 2022 to the same 9-month period in 2021. The most significant increases in collections in 2022 versus 2021 are in the hotel/motel (+74%), miscellaneous retail (+24%) and restaurant (+21%) sectors. The only decline year over year was in auto sales (-0.2%), which has been declining since April 2022, in response to increases in interest rates and the effects on auto loans.

Growth in 2022 can be contrasted with growth in 2021 for the same time period (January to September). Between 2020 and 2021, year-to-date collections were up 19%, which is similar to the overall rate of increase in 2022. However, the rate of increase by sector was quite different with hotel/motel sales not fully recovering until 2022, but there were strong restaurant sales (+43%), miscellaneous retail (+28%) and other taxable sales (+35%) year over year in 2021. The only decline in sales in 2021 was in food stores (-0.5%), which likely reflected a return to dining in restaurants as pandemic related risks declined.

¹ Year over year comparisons are made to normalize for seasonal variations in sales tax collections.

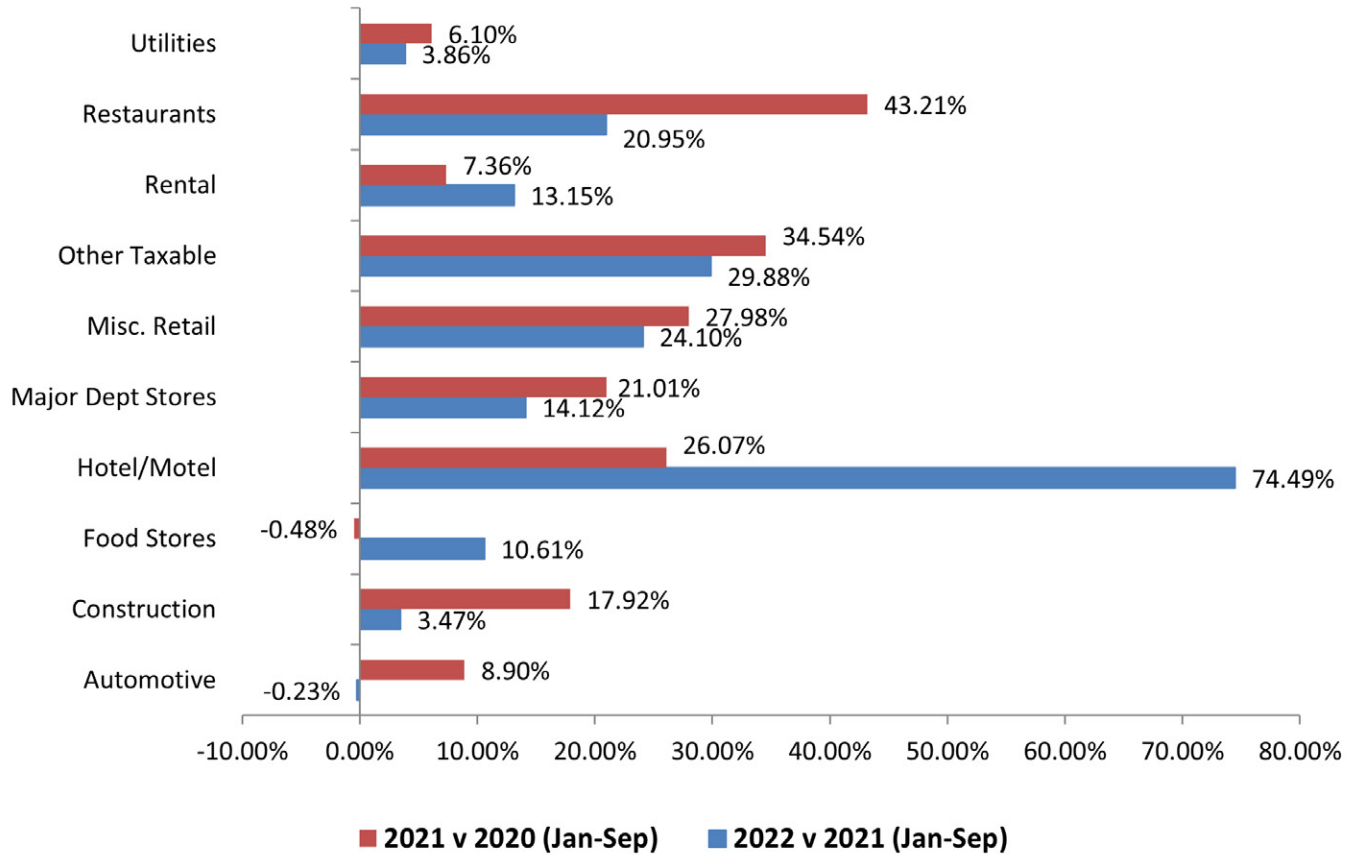
Scottsdale Monthly Sales and Bed Tax Collections





Sales Tax Collections (cont.)

Year Over Year Changes in Collections by Sector in Scottsdale



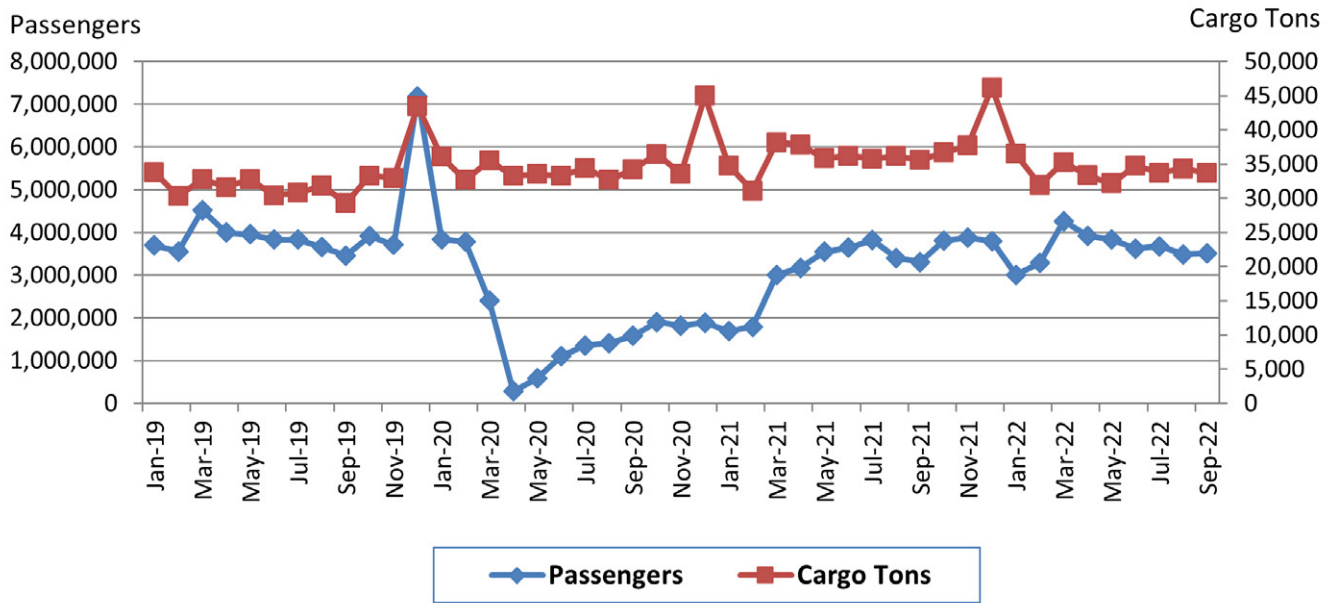


Tourism

Tourism, which is an important economic driver in Scottsdale, declined dramatically in Spring 2020 and remained well below average levels throughout 2021, even though Arizona was largely open for business following an initial shut-down in March 2020. Passenger volumes (both enplanements and deplanements) at Sky Harbor dropped by 88% between March 2020 and April 2020, compared to a 27% normal seasonal decrease during the same period in 2019. Passenger volumes for April 2022 were back to within 2% of April 2019 levels. However, year to date (January to September), passenger enplanements are still down about 6% in 2022 compared to the same period in 2019, which is consistent with other visitor data such as hotel demand.

Passenger and Cargo Volume Trends Sky Harbor International Airport

* Passenger counts include enplanements and deplanements. Cargo includes mail and freight enplaned and deplaned.
Source: Sky Harbor International Airport, 2022.



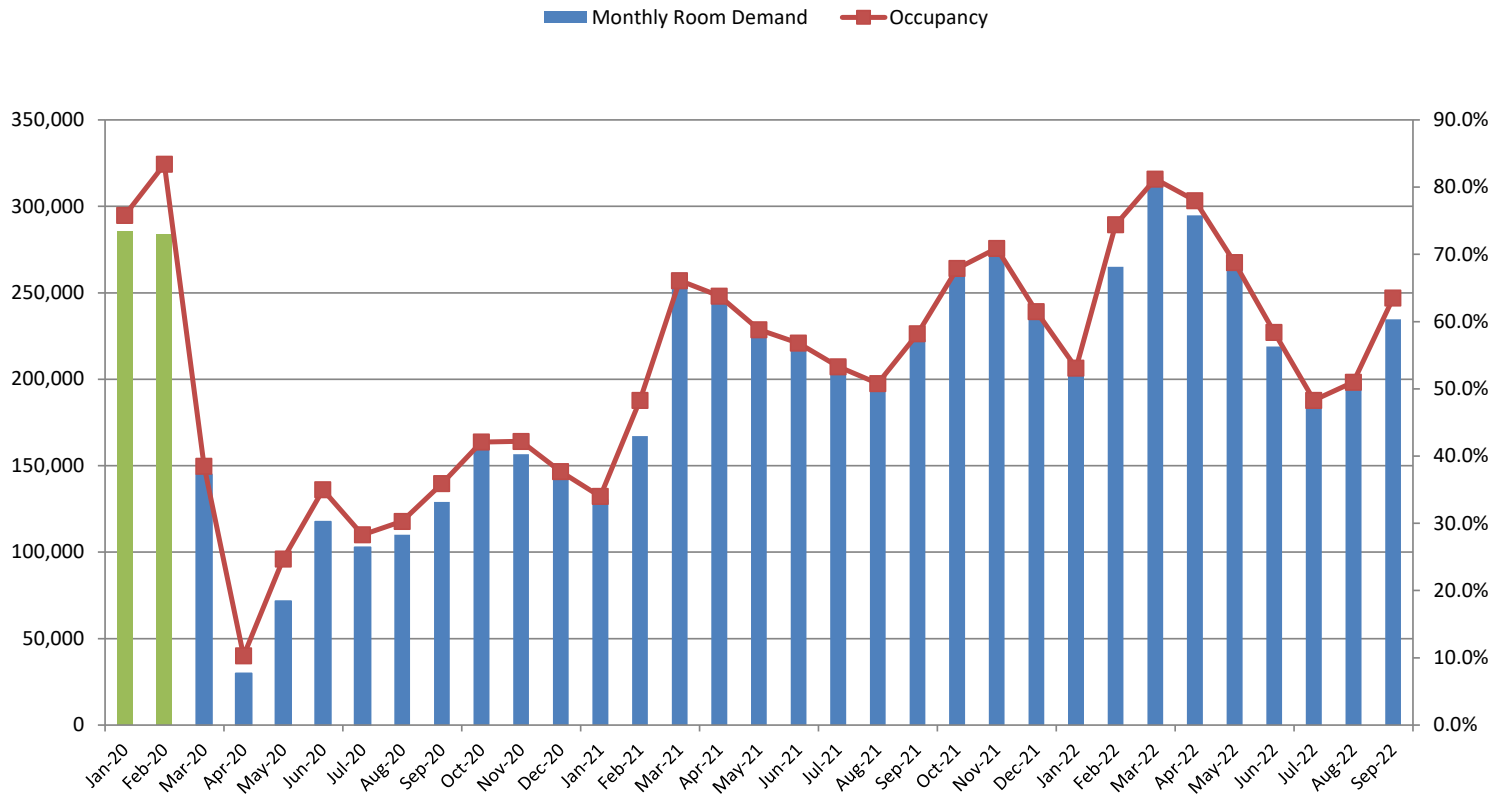


Tourism (cont.)

Scottsdale Monthly Room Demand and Occupancy Rate Jan 2020 - Sep 2022

Source: Smith Travel Research Custom Report for Scottsdale, September 2022.

Note: Green bars indicate pre-pandemic time period.





Construction Permit Activity

The housing market in metro Phoenix remained strong throughout 2020 and 2021, excluding a brief decline in April and May of 2020 due to COVID-19. High job growth and high in-migration fueled strong demand, driving prices up as builders struggled with supply chain issues and labor shortages. Total housing permits statewide increased 8.3% year over year in 2021 and are expected to decline only modestly in 2022 by 1.8%, according to the UA Economic and Business Research Center. The Phoenix metro area accounted for 77% of total statewide housing permits in 2021. Despite a sustained high level of permitting activity in 2021 and 2022 in metro Phoenix and statewide, residential permits in metro Phoenix are projected to fall by 6% to 8% per year over the next three years.

The S&P CoreLogic/Case-Shiller Home Price Index, which tracks changes in residential real estate prices in the 20 largest metro areas showed Phoenix leading the nation throughout much of 2021 with a 32.5% annual price increase in 2021, compared to an 18.5% average for all 20 cities. However, the Case-Shiller Home Price Index for Phoenix appears to have peaked in June 2022, and has now declined about 1% per month for two consecutive months.

Experts do not anticipate a housing market crash such as the one that occurred 2007 when the housing market in metro Phoenix was highly over-valued, but demand has been slowing for a number of months a result of rising interest rates. Median home prices in Maricopa County are still up about 8% year over year as of September 2022, although there have been some declines in recent months according to data from the ARMLS. There are also more homes on the market, with the current inventory up over 133% year over year. Although some may see these changes as a negative, experts believe that the market is actually normalizing.



Construction Permit Activity (cont.)

Number of Building Permits Issued by Type

Source: City of Scottsdale, 2022.

