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ARIZONA'S Economy

Long Strange Trip: Arizona's Recovery Continues at a Slower Pace

By George W. Hammond, Ph.D., EBRC Director and Research Professor December 1, 2020



he Arizona recovery continued in the third quarter, although at a much slower pace than during the April-June period. The state has received a significant boost from the CARES Act, with just over \$40 billion in federal funds flowing to the state in the second quarter. That supported taxable sales and boosted the recovery in retail trade, warehousing, and transportation jobs. While construction employment rose modestly from June to October, housing permits surged, rising almost one-third over the year in the third quarter.

The outlook for Arizona remains unusually uncertain and continues to be dominated by the pandemic. The baseline forecast assumes that the outbreak recedes from summer highs, but remains elevated. It also assumes

significant federal stimulus in the fourth quarter of 2020. Under these assumptions, the state is forecast to return to pre-pandemic employment levels by mid-2021. The pessimistic scenario projects a slower recovery, with the state returning to its prior peak at the end of 2021.

Arizona Recent Developments

Arizona added 55,600 jobs (seasonally adjusted) from June to October. Trade, transportation, and utilities added the most jobs during the period, followed by professional and business services; government; education and health services; leisure and hospitality; construction; other services; financial activities; and information. Manufacturing jobs were stable, while natural resources and mining jobs fell slightly.

Overall, the state has now replaced 193,900 of the 294,600 jobs lost from February to April, for a 65.8% replacement rate. The nation has replaced 54.5% of the jobs lost from February to April.

Note that the state needs to add 100,700 jobs to return to pre-pandemic employment. If the state can continue to add nearly 13,900 jobs per month on average, as it has since June, then employment will be back to pre-

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pandemic levels next June. However, that may be a difficult pace to maintain, since over-the-month job gains averaged 6,200 during 2015-2019.

Exhibit 1 shows seasonallyadjusted employment from both the establishment and household surveys. As the exhibit suggests, we have a long way to go to replace the jobs lost during the spring.

Seasonally-adjusted employment measured by the household survey experienced a huge jump in September that was not reflected in the establishment survey. These data are always volatile during the current year and seem to be even more volatile than usual this year. This may be related to reduced survey response rates during the pandemic.

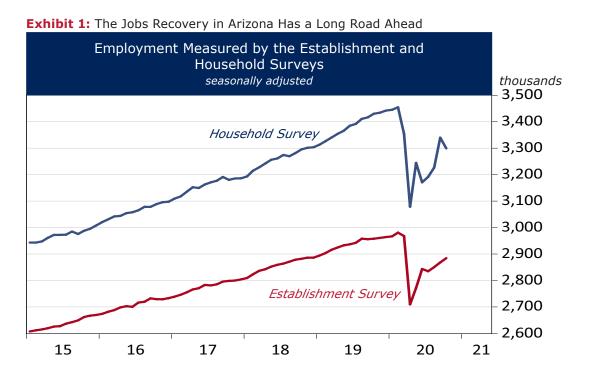
The household survey also generates estimates of the state unemployment rate. These estimates have also been very volatile, with the seasonally adjusted state rate falling from 10.7% in July to 5.9% in August then back up to 6.5% in September and 8.0% in October.

The travel and tourism sector continues to struggle with the impact of the pandemic. As Exhibit 2 shows, leisure and hospitality jobs in October were 54,500 below February. Through October, jobs at eating and drinking places have recovered much faster than jobs in accommodation or arts, entertainment, and recreation. Employment at eating and drinking places was down 9.7% in October, compared to -29.4% and -34.3% for accommodations and arts. entertainment, and recreation.

From February to October, jobs in professional and business services were down 18,100, reflecting losses in employment services (temporary help). These jobs are very sensitive to the business cycle.

Employment in education and health services declined by 14,700 from February to October, reflecting large declines in health care and social assistance (although education jobs were down as well). Job losses in health care and social assistance were fairly evenly distributed across social assistance, ambulatory health care, nursing and residential care facilities, and hospitals.

Two sectors posted more jobs in October than February: other services and trade, transportation, and utilities. Job gains in trade, transportation, and utilities were driven by transportation, warehousing, and utilities. Retail and wholesale trade jobs were up slightly.



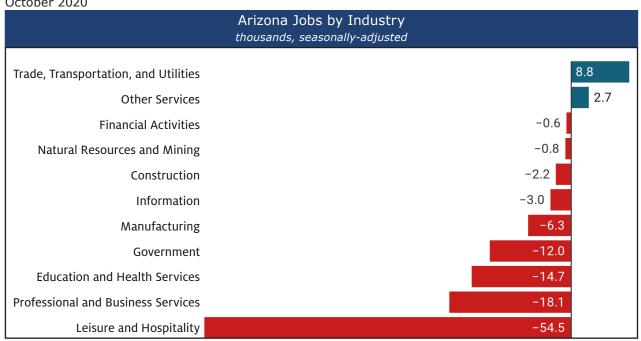


Exhibit 2: Arizona's Leisure and Hospitality Sector Remained Hardest Hit From February 2020 To October 2020

Arizona's personal income skyrocketed in the second quarter of 2020, thanks to the CARES Act. State personal income rose 11.6% over the year, driven by a 62.2% increase in transfer receipts. Net earnings by place of residence fell 0.8% and income from dividends, interest, and rent fell 1.3%.

According to estimates from the U.S. Bureau of Economic Analysis, the CARES Act pumped \$40.2 billion into Arizona in the second quarter. The largest contribution came from the Economic Impact Payments (Recovery Rebates), which added \$23.4 billion to state income. Absent CARES Act funds, Arizona's personal income would have declined 3.8% (or -14.4% annualized) from the first to the second quarter.

While construction jobs have weakened during the pandemic, housing permit activity has surged. Preliminary seasonally adjusted housing permit data suggest that statewide total permits were up 25.2% year to date through October compared to last year. Even so, house prices continue to rise at a rapid pace.

Arizona Outlook

The forecast for Arizona depends on global and national economic performance. The current state and local forecasts rely on the October 2020 U.S. forecast generated by IHS Markit, which was based on the following assumptions:

COVID-19 infections and deaths recede from July levels, but remain elevated. This creates stop-andgo openings by states. A vaccine is assumed to become widely available in mid-2021.

The forecast includes current federal fiscal policy actions and assumes legislation enacting a \$300/week unemployment insurance supplement from October through December. Further, the forecast assumes \$270 billion in stimulus checks are disbursed in the fourth quarter of 2020. As of this writing, it does not appear that this assumption will be met, which suggests that the baseline projections may be too optimistic.

The Federal Reserve maintains its policy rate near 0% until late 2026.

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Exhibit 3: Arizona Outlook Summary

	Actual			
	2019	2020	2021	2022
Growth Rate				
Nonfarm Jobs	2.8	-2.0	4.3	3.2
Personal Income	5.0	6.4	0.9	5.8
Retail Plus Remote Sales	7.7	9.5	4.4	3.1
Population	1.6	1.4	1.5	1.5
Level				
Unempl. Rate	4.7	7.6	6.3	5.2
Housing Permits	46,580	53,526	49,885	46,880

Real foreign GDP contracts 6.7% in 2020. Growth rebounds to 4.4% in 2021.

The current baseline forecast calls for a sharp rebound in real GDP growth in the third quarter, but the level remains well below the pre-pandemic peak. Thereafter, growth decelerates significantly as the current durable goods spending overshoot unwinds, fiscal stimulus fades out in 2021, and the pandemic accelerates this winter.

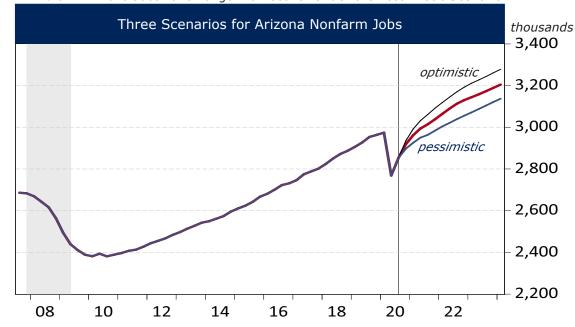
The national forecast sets the stage for Arizona's recovery, summarized in **Exhibit 3**. In the baseline, state jobs are expected to decline 2.0% in 2020, on an annual average basis. Jobs rebound in 2021, rising 4.3%, followed by 3.2% growth in 2022.

On a quarterly basis, the baseline forecast calls for Arizona jobs to return to their pre-pandemic peak in the second guarter of 2021. Keep in mind that this assumes a major federal fiscal stimulus package in the fourth quarter of 2020. The pessimistic scenario envisions a slower recovery, with state jobs reaching pre-pandemic levels at the end of 2021.

Overall, Arizona population growth is forecast to hit 1.5% in 2021 (fiscal year basis) and then gradually decelerate as the aging of the baby boom generation raises deaths while births stabilize and recover weakly.

The combination of remote sales with traditional retail beginning at the end

Exhibit 4: Arizona Jobs Take Longer To Recover Under the Pessimistic Scenario



of 2019 artificially boosts growth in the combined category in 2020. The forecast calls for growth in retail plus remote sales sector to rise 9.5% in 2020, then decelerate to 4.4% in 2021 and 3.1% in 2022.

The baseline forecast calls for nonfarm payroll jobs in Phoenix to decline 2.0% in 2020, then rebound with 4.0% growth in 2021 and 3.3% in 2022. Maricopa County generates the bulk of the job gains for the metropolitan area during the next decade. However, job gains in Pinal County are expected to be robust, in part driven by expanding auto/truck manufacturing in the county.

The Tucson metropolitan area also generates a solid recovery from the pandemic. Tucson nonfarm payroll jobs are forecast to decline 3.2% in 2020. Growth returns in 2021 with a 3.4% increase, followed by 2.1% growth in 2022.

Risks to the Outlook

The risks to the outlook primarily revolve around the progress of the outbreak. Exhibit 4 shows three scenarios for Arizona nonfarm jobs.

The pessimistic scenario assumes that the progress of the outbreak is less controlled than under the baseline, with large negative impacts on consumer spending, particularly services. The result is a slower recovery. Under this assumption, Arizona jobs return to their prepandemic peak in the fourth quarter of 2021.

The optimistic scenario assumes a less threatening progression of the outbreak, with correspondingly faster gains in consumer spending. The result in this case is faster growth in the near term. Under this assumption, Arizona jobs return to their prepandemic peak in the first quarter of 2021.

Need more information about the outlook for Arizona, Phoenix, and Tucson? Email George Hammond at ghammond@arizona.edu.



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FORECAST TABLES

Arizona	2020	2021	2022	2023	2024
Personal Income (\$ mil)	356,812	359,965	380,751	401,227	422,303
% Chg from Year Ago	6.4%	0.9%	5.8%	5.4%	5.3%
Retail Sales (\$mil)	119,528	128,953	134,238	140,018	146,378
% Chg from Year Ago	4.4%	7.9%	4.1%	4.3%	4.5%
Total Nonfarm Employment (000s)	2,878.5	3,002.0	3,099.1	3,165.8	3,229.1
% Chg from Year Ago	-2.0%	4.3%	3.2%	2.2%	2.0%
Population (000s), July 1st estimates	7,285.0	7,397.0	7,510.0	7,615.0	7,717.0
% Chg from Year Ago	1.4%	1.5%	1.5%	1.4%	1.3%
Residential Building Permits (units)	53,526	49,884	46,880	44,538	43,593
% Chg from Year Ago	14.9%	-6.8%	-6.0%	-5.0%	-2.1%

Phoenix-Mesa-Glendale MSA	2020	2021	2022	2023	2024
Personal Income (\$ mil)	252,293	258,394	274,043	289,439	305,778
% Chg from Year Ago	6.7%	2.4%	6.1%	5.6%	5.6%
Retail Sales (\$mil)	82,150	88,654	93,622	98,370	103,288
% Chg from Year Ago	1.7%	7.9%	5.6%	5.1%	5.0%
Total Nonfarm Employment (000s)	2,134.0	2,220.0	2,293.5	2,349.8	2,409.5
% Chg from Year Ago	-2.0%	4.0%	3.3%	2.5%	2.5%
Population (000s)	4,904.0	4,997.0	5,089.0	5,176.0	5,260.0
% Chg from Year Ago	1.7%	1.9%	1.8%	1.7%	1.6%
Residential Permits (units)	41,159	39,174	38,271	37,847	37,657
% Chg from Year Ago	14.7%	-4.8%	-2.3%	-1.1%	-0.5%

Tucson MSA	2020	2021	2022	2023	2024
Personal Income (\$ mil)	51,223	51,659	53,783	56,077	58,515
% Chg from Year Ago	6.8%	0.9%	4.1%	4.3%	4.3%
Retail Sales (\$ mil)	15,331	16,275	16,919	17,571	18,265
% Chg from Year Ago	0.5%	6.2%	4.0%	3.9%	3.9%
Total Nonfarm Employment (000s)	377.2	390.2	398.4	402.7	406.6
% Chg from Year Ago	-3.2%	3.4%	2.1%	1.1%	1.0%
Population (000s), July 1st estimates	1,053.0	1,064.0	1,074.0	1,084.0	1,093.0
% Chg from Year Ago	0.8%	1.1%	1.0%	0.9%	0.8%
Residential Permits (units)	4,692	4,470	4,389	4,321	4,233
% Chg from Year Ago	8.8%	-4.7%	-1.8%	-1.6%	-2.0%



Arizona - Labor Force and Employment, SA	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020			
Persons (000s, seasonally adjusted), Local Area	Unemployment	Statistics, BLS						
Civilian Labor Force	3,509.6	3,565.8	3,414.6	3,576.0	3,587.3			
% Chg from Year Ago	-0.8%	0.3%	-4.4%	-0.3%	-0.2%			
Employment	3,158.5	3,185.6	3,212.1	3,342.3	3,298.8			
Unemployment	351.2	380.2	202.5	233.7	288.5			
Unemployment Rate	10.0	10.7	5.9	6.5	8.0			
Employees on Nonagricultural Payrolls (000s, seasonally adjusted), Current Employment Statistics, BLS								
Total	2,830.1	2,834.7	2,859.4	2,864.6	2,885.7			
% Chg from Year Ago	-3.3%	-3.5%	-3.4%	-3.0%	-2.5%			
Total Private	2,422.8	2,413.5	2,429.0	2,447.8	2,470.9			
% Chg from Year Ago	-3.3%	-4.1%	-3.8%	-3.2%	-2.6%			
Goods Producing	353.5	353.1	354.1	354.9	357.0			
Mining and Logging	13.2	13.2	13.3	13.0	13.1			
Construction	168.9	169.0	169.9	170.7	172.5			
Manufacturing	171.4	170.9	170.9	171.2	171.4			
Durable Goods	129.7	128.9	129.2	130.1	129.6			
Non-Durable Goods	41.7	42.0	41.7	41.1	41.8			
Service Providing	2,476.6	2,481.6	2,505.3	2,509.7	2,528.7			
Private Service Providing	2,069.3	2,060.4	2,074.9	2,092.9	2,113.9			
Wholesale Trade	105.4	104.5	104.4	104.3	102.4			
Retail Trade	322.8	323.0	327.5	329.0	328.5			
Transportation and Utilities	117.9	119.2	121.4	124.7	130.3			
Information	44.7	45.3	46.1	45.9	45.9			
Finance and Insurance	176.4	176.1	176.3	176.9	177.3			
Real Estate and Rental and Leasing	54.1	54.4	55.6	54.6	54.5			
Professional and Business Services	416.8	416.8	419.2	422.7	430.4			
Professional, Scientific, and Technical Services	156.8	160.8	160.0	160.5	162.4			
Management of Companies and Enterprises	30.0	29.5	29.7	29.9	30.4			
Administrative and Support Waste Management and Remediation Services	230.0	226.5	229.5	232.3	237.6			
Educational Services	68.5	71.5	69.6	67.2	67.9			
Health Care and Social Assistance	387.1	386.8	389.8	393.5	394.8			
Arts, Entertainment, and Recreation	31.3	29.0	28.3	29.9	31.6			
Accommodation and Food Services	248.1	237.9	241.1	248.1	252.3			
Other Services	96.2	95.9	95.6	96.1	98.0			
Government	407.3	421.2	430.4	416.8	414.8			
% Chg from Year Ago	-3.2%	0.0%	-0.7%	-1.4%	-2.0%			
Federal Government	58.0	58.4	62.0	61.7	59.3			
State Government	93.5	94.0	103.3	92.0	91.3			
State dovernment	50.0			20				

Arizona - Earnings, Sales, Housing, Bankruptcy	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Average Hourly Earnings by Industry (\$, not sea	sonally adjusted	I), BLS			
Total Private	27.28	27.50	27.65	27.68	27.93
% Chg from Year Ago	3.9%	4.0%	3.8%	2.8%	4.2%
Construction	27.71	28.75	27.91	27.84	27.80
Manufacturing	29.57	29.57	30.43	30.62	29.76
Financial Activities	31.51	31.82	32.41	31.60	31.92
Professional and Business Services	31.06	31.02	31.11	31.50	33.10
Trade, Transportation, and Utilities	25.68	26.14	26.40	26.55	26.32
Education and Health Services	26.20	26.15	25.82	25.97	26.10
Leisure and Hospitality	17.73	17.45	17.62	17.68	17.86
Sales (\$000s, accrual), ADOR					
Aggregate Retail Sales, EBRC*	9,821,561.7	9,192,586.2	9,474,532.3	9,631,964.7	
% Chg from Year Ago	6.4%	2.3%	2.6%	7.8%	
Retail Sales	6,864,918.4	6,385,855.3	6,584,580.0	6,680,004.9	
Food, EBRC**	1,299,854.5	1,241,048.2	1,236,419.9	1,250,477.9	
Restaurants & Bars	1,108,654.1	1,014,762.7	1,082,556.8	1,145,603.0	
Gasoline, EBRC***	530,280.6	533,765.5	552,042.4	534,733.7	
Gallons, ADOT	220,399.3	223,519.9	232,243.3	229,598.0	
Utilities	907,927.2	1,195,058.8	1,269,645.9	1,181,203.0	
Communications	143,611.8	136,833.7	123,235.0	110,445.2	
Amusements	42,076.6	36,053.6	39,236.8	49,080.5	
Rentals Personal Property	373,440.0	379,978.2	374,519.2	406,579.6	
Contracting	1,637,895.9	1,563,849.1	1,480,670.6	1,515,239.8	
Hotel/Motel	154,054.8	139,876.5	146,212.1	169,186.2	
Mining, Oil, & Gas Production	19,836.4	15,663.1	19,393.9	15,265.0	
Mining Severance	64,038.5	105,915.0	93,856.1	89,934.2	
Printing	14,983.6	15,891.9	15,198.2	18,906.8	
Publishing	2,949.9	2,491.9	2,691.2	2,922.6	
Use Tax	708,199.5	668,718.2	708,970.4	800,478.2	
New Housing Units Authorized (seasonally adjus	ted), Census C-4	40			
Total Units	4,805	5,063	4,516	4,829	5,418
% Chg from Year Ago	22.5%	47.0%	16.7%	31.8%	32.6%
Single Family Units	3,145	3,659	3,440	4,174	4,001
% Chg from Year Ago	25.3%	30.2%	25.3%	56.0%	29.4%
Bankruptcy Filings, U.S. Bankruptcy Court - Ariz	ona District				
Total	1,122	1,143	1,074	1,065	1,019
% Chg from Year Ago	-13.3%	-23.7%	-30.7%	-21.1%	-31.9%
Chapter 7	975	996	945	925	892
Chapter 11	17	8	8	6	7
Chapter 13	130	138	121	134	120

^{*}EBRC estimates Aggregate Retail Sales by summing Retail Sales (ADOR), Food Sales estimated by EBRC (food is not taxable in Arizona), Restaurant and Bar Sales (ADOR), and Gasoline Sales estimated by EBRC using number of gallons sold in Arizona (ADOT) and current tax rate on gasoline (ADOR).

^{**}estimated by EBRC.

^{***}estimated by EBRC using gallons sold (ADOT) and tax rate (ADOR).



Arizona - Population and Vital Statistics	2015	2016	2017	2018	2019	
All Estimates are as of July 1st (Fiscal Year), ADHS, ADOA & EBRC						
Population (persons)*	6,758,251	6,835,518	6,965,897	7,076,199	7,187,990	
% Chg from Year Ago	1.4%	1.1%	1.9%	1.6%	1.6%	
Births	86,454	84,471	83,013	80,915	80,125	
Birth Rate per 1000 Persons	12.8	12.4	11.9	11.4	11.1	
Deaths	52,633	55,965	56,281	58,823	58,950	
Net Migration	57,189	48,761	103,647	88,210	90,616	

^{*}This population figure is from the Arizona Dept. of Administration (ADOA), rather than the official Census population count. EBRC considers the ADOA estimate more realistic.

Arizona - Personal Income and Earnings	2015	2016	2017	2018	2019
Per capita personal income (\$), BEA	39,718.0	40,801.0	42,590.0	44,597.0	46,058.0
% Chg from Year Ago	3.8%	2.7%	4.4%	4.7%	3.3%
Personal Income Derivation (\$ millions), BEA					
Total Personal Income	271.3	283.2	300.0	319.2	335.2
% Chg from Year Ago	5.4%	4.4%	5.9%	6.4%	5.0%
Earnings by place of work	182.7	190.7	201.7	215.1	227.1
Less: Contributions for government social insurance	21.0	21.9	23.2	24.8	26.3
Plus: Adjustment for residence	1.5	1.6	1.7	1.7	1.8
Equals: Net earnings by place of residence	163.2	170.4	180.2	192.0	202.7
Plus: Dividends, interest, and rent	53.4	56.1	60.0	64.9	66.1
Plus: Personal current transfer receipts	54.7	56.7	59.7	62.3	66.5
Components of Earnings (\$ millions), BEA					
Total Wages and salaries	134.1	139.3	147.7	157.0	167.1
% Chg from Year Ago	5.0%	3.9%	6.0%	6.3%	6.4%
Supplements to wages and salaries	29.9	31.5	33.5	36.0	36.8
Proprietors' income	18.6	19.9	20.6	22.1	23.3
Farm	0.9	1.0	0.9	0.9	1.1
Nonfarm	17.7	18.9	19.8	21.2	22.2

Inflation and Prices - United States	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
U.S. Consumer Price Indices (seasonally Adjusted)	, BLS				
All Urban Consumers: All Items	257.21	258.72	259.68	260.21	260.33
% Chg from Year Ago	0.7%	1.0%	1.3%	1.4%	1.2%
Western States - All Urban Consumers: All items	274.16	275.60	276.44	276.42	276.88
% Chg from Year Ago	1.2%	1.7%	1.9%	1.6%	1.2%
U.S. Producer Price Index for All Commodities	101.00	100.00	10100	105.10	105.00
(seas. adj.), BLS	191.20	192.90	194.00	195.40	195.90
% Chg from Year Ago	-4.5%	-3.9%	-2.6%	-1.5%	-1.4%

Arizona - Travel and Tourism	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	
Employment (000s, 12-month moving average	s*), BLS					
Leisure and Hospitality	309.6	304.5	299.4	294.9	290.9	
% Chg from Year Ago	-5.6%	-7.2%	-8.9%	-10.3%	-11.7%	
Accommodation	41.2	39.9	38.6	37.4	36.2	
% Chg from Year Ago	-9.9%	-12.7%	-15.4%	-17.9%	-20.4%	
Sales (\$000s, accrual, 12-month moving average*), ADOR						
Hotel/Motel	226,834.0	220,533.0	214,778.6	208,039.0		
% Chg from Year Ago	-25.4%	-27.3%	-29.2%	-31.4%		
Phoenix Sky Harbor International Airport (12-n	nonth moving ave	erages*)				
Total Passengers	2,894,081	2,687,351	2,500,515	2,344,244	2,176,595	
% Chg from Year Ago	-23.7%	-29.2%	-34.2%	-38.6%	-43.2%	
Tucson International Airport (12-month moving	g averages*)					
Total Passengers	234,094	218,511	204,116	190,315	175,689	
% Chg from Year Ago	-25.2%	-30.3%	-35.0%	-39.6%	-44.3%	

^{*}These data series are all quite volatile, thus the 12-month moving average yields more accurate information on trend.

Arizona - Travel and Tourism, cont.	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020			
International Border Crossings (Northbound) - Nogales District, Bureau of Transportation Statistics								
Pedestrians	236,416	229,385	200,304	233,864	243,896			
% Chg from Year Ago	-54.1%	-52.7%	-63.8%	-56.9%	-62.3%			
Personal Vehicle Passengers	501,270	562,423	628,816	704,108	726,922			
% Chg from Year Ago	-62.8%	-57.3%	-56.3%	-50.4%	-45.6%			
Personal Vehicles	336,217	369,265	410,629	443,687	455,127			
% Chg from Year Ago	-53.1%	-45.6%	-42.5%	-39.9%	-35.3%			
Buses	324	337	328	360	366			
% Chg from Year Ago	-70.4%	-66.2%	-70.7%	-67.7%	-65.5%			
Trains	38	45	61	42	48			
% Chg from Year Ago	-33.3%	-28.6%	17.3%	-34.4%	-14.3%			
Trucks	40,900	38,798	25,704	24,157	25,530			
% Chg from Year Ago	-14.7%	-0.6%	4.6%	7.3%	15.1%			

^{*}Figures are totals of all Arizona border ports of entry (Nogales District): Douglas, Lukeville, Naco, Nogales, San Luis. Crossings are from Mexico into the United States.

Arizona - Travel and Tourism, cont.	2015	2016	2017	2018	2019
Visits (000s) Arizona State and National Parks,	NPS & ASPB				_
Total Arizona	22,512.9	23,519.0	26,373.5	25,499.8	25,187.4
% Chg from Year Ago	8.3%	4.5%	12.1%	-3.3%	-1.2%
Northern Arizona	19,587.1	20,487.0	23,052.4	22,167.8	21,700.9
% Chg from Year Ago	8.3%	4.6%	12.5%	-3.8%	-2.1%
Historical	1,177.8	1,158.5	1,181.8	1,134.0	1,074.5
Scenic	7,670.7	7,837.6	8,193.0	7,950.8	7,555.3
Water-based	10,738.6	11,490.8	13,677.6	13,083.1	13,071.0
Southern Arizona	2,925.7	3,032.1	3,321.1	3,332.0	3,486.6
% Chg from Year Ago	8.5%	3.6%	9.5%	0.3%	4.6%
Historical	454.6	455.9	457.5	411.3	428.3
Scenic	2,059.9	2,154.8	2,410.0	2,440.8	2,570.0
Water-based	411.2	421.4	453.5	479.9	488.3



Phoenix-Mesa-Glendale MSA - Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020		
Persons (000s), Local Area Unemployment St	atistics, BLS						
Civilian Labor Force (000s), BLS	2,479.4	2,518.9	2,411.4	2,539.4	2,547.6		
Unemployment Rate	9.8	10.4	5.9	6.2	7.5		
Employees on Nonagricultural Payrolls (000s)	Employees on Nonagricultural Payrolls (000s), Current Employment Statistics, BLS						
Total Nonfarm Employment	2,060.7	2,050.7	2,099.6	2,130.1	2,164.8		
Mining and Logging	3.6	3.6	3.5	3.3	3.3		
Construction	133.4	132.0	132.7	134.6	136.6		
Manufacturing	130.5	129.9	130.3	130.9	131.2		
Trade, Transportation, & Utilities	407.7	408.3	413.2	417.5	422.4		
Information	37.8	38.0	38.4	38.1	38.1		
Financial Activities	203.4	202.6	204.3	205.0	206.9		
Professional & Business Services	341.9	343.4	345.5	350.3	362.5		
Education and Health Services	330.4	332.5	337.0	339.5	344.7		
Leisure and Hospitality	189.4	177.6	180.9	189.9	197.1		
Other Services	71.6	71.4	71.7	72.1	73.0		
Government	211.0	211.4	242.1	248.9	249.0		
Average Hourly Earnings, Private, \$, BLS	28.72	28.92	29.06	29.09	29.41		
Sales (\$ accrual), ADOR							
Aggregate Retail Sales, EBRC	6,946,470,803	6,519,456,074	6,773,574,625	6,929,454,832			
Retail Sales	4,944,379,738	4,577,395,571	4,762,243,670	4,864,652,125			
Food	889	892	896	899			
Restaurants and Bars	776,531,817	703,195,262	755,876,406	809,339,543			
Gasoline, EBRC	323,990,146	332,008,632	343,442,922	338,429,009			
Amusements	28,923,000	22,324,693	24,059,593	32,870,668			
Hotel/Motel	91,000,987	74,901,229	82,278,479	97,841,732			
New Housing Units Authorized (seasonally adj	justed), Census (C-40					
Total Units	3,789	4,039	3,572	3,709	4,509		
Single Family Units	2,324	2,751	2,617	3,170	3,149		
Housing Sales and Prices, ARMLS							
Units Sold	9,715	10,559	9,213	9,656	10,039		
Average Price (\$)	370,089	393,918	402,222	412,260	427,846		

^{*}Go to www.azeconomy.org for a more detailed breakout of employment categories.

Phoenix-Mesa-Glendale MSA - Annual Data	2014	2015	2016	2017	2018
Population (persons, July 1st estimates), Census	4,491,423	4,581,122	4,675,966	4,761,694	4,857,962
% Chg from Year Ago	2.0%	2.0%	2.1%	1.8%	2.0%
Personal income (\$ millions), BEA	179,406	190,039	198,541	210,503	224,072
% Chg from Year Ago	6.6%	5.9%	4.5%	6.0%	6.5%
Per capita personal income (\$), BEA	39,944	41,483	42,460	44,208	46,125
% Chg from Year Ago	4.6%	3.9%	2.4%	4.1%	4.3%

on MSA (Pima Co.) - Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020		
ons (000s), Local Area Unemploymen	t Statistics, BLS	tatistics, BLS					
ian Labor Force (000s), BLS	496222	500705	476987	499135	499137		
nemployment Rate	9.9	10.6	5.9	6.3	7.9		
loyees on Nonagricultural Payrolls (00	00s), Current Empl	oyment Statistics	s, BLS*				
l Nonfarm Employment	369.6	364.3	372.7	374.9	379.5		
ining and Logging	1.8	1.8	1.8	1.8	1.8		
onstruction	18.5	18.2	18.3	18.1	18.5		
anufacturing	27.0	26.8	26.8	26.3	26.4		
ade, Transportation, and Utilities	64.1	63.8	65.0	65.3	66.8		
formation	4.1	4.0	4.1	4.1	4.1		
nancial Activities	16.4	16.3	16.2	16.0	15.9		
ofessional and Business Services	47.4	46.5	46.1	45.8	46.6		
lucation and Health Services	66.0	65.8	65.5	65.9	66.6		
eisure and Hospitality	41.6	38.4	38.2	39.2	40.2		
ther Services	13.6	13.4	13.4	13.4	13.5		
overnment	69.1	69.3	77.3	79.0	79.1		
s (\$ accrual), ADOR							
egate Retail , EBRC	1,298,160,015	1,231,069,445	1,275,621,975	1,264,110,510			
etail	889,195,670	831,251,341	864,842,407	850,196,894			
ood, EBRC	184,564,071	185,110,661	185,645,575	186,168,811			
estaurants & Bars	146,182,185	134,312,507	141,151,941	145,642,837			
asoline, EBRC	67,564,448	69,269,837	72,425,530	70,154,058			
sements	2,868,125	2,965,242	3,543,191	4,235,284			
el/Motel	20,579,805	14,712,625	17,713,198	19,062,757			
Residential Permits Authorized (sease	onally adjusted), C	Census C-40					
l Units	406	451	428	448	436		
ngle Family Units	354	414	361	393	379		
sing Sales and Prices, TAR							
s Sold	1,452	1,581	1,329	1,362	1,341		
age Price (\$)	NA	NA	NA	NA	NA		

 $^{{}^*\}text{Go}$ to www.azeconomy.org for a more detailed breakout of employment categories.

Tucson MSA (Pima Co.) - Annual Data	2014	2015	2016	2017	2018
Population (persons), Census*	1,004,675	1,009,737	1,017,624	1,027,502	1,039,073
% Chg from Year Ago	0.7%	0.5%	0.8%	1.0%	1.1%
Personal income (\$ millions), BEA	38,208	39,405	40,608	43,292	45,748
% Chg from Year Ago	4.3%	3.1%	3.1%	6.6%	5.7%
Per capita personal income (\$)**	38,031	39,025	39,904	42,133	44,028
% Chg from Year Ago	3.5%	2.6%	2.3%	5.6%	4.5%

Flagstaff MSA (Coconino County) - Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	70.3	70.1	66.8	70.0	70.1
Unemployment Rate	13.3	13.7	7.9	8.2	9.7
Total Nonfarm Employment (000s), BLS	57.1	55.7	57.7	57.8	58.4
Private	38.9	38.6	39.3	39.4	40.2
Government	15.3	14.5	15.7	15.5	15.5
Average Hourly Earnings, Total Private, \$, BLS	20.10	19.08	19.50	20.12	20.83
Retail Sales (\$, accrual), ADOR*	135,904,844	140,683,477	136,110,070	141,976,627	
Total New Residential Permits (units), Census C-40	47	63	65	71	56

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Flagstaff MSA (Coconino County) - Annual Data	2014	2015	2016	2017	2018
Population (persons), Census*	137,583	139,024	140,515	141,107	142,854
% Chg from Year Ago	0.6%	1.1%	1.1%	0.4%	1.2%
Personal income (\$ millions), BEA	5,591	5,940	6,222	6,584	6,876
% Chg from Year Ago	6.7%	6.2%	4.8%	5.8%	4.4%
Per capita personal income (\$), BEA**	40,639	42,726	44,279	46,662	48,129
% Chg from Year Ago	6.0%	5.1%	3.6%	5.4%	3.1%

Lake Havasu City - Kingman MSA (Mohave					
County) - Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	86.4	87.9	83.4	87.4	87.4
Unemployment Rate	12.7	12.7	7.4	7.9	9.1
Total Nonfarm Employment (000s), BLS	48.7	48.9	50.1	50.3	51.2
Private	41.1	41.4	42.0	42.2	43.3
Government	7.6	7.5	8.1	8.1	7.9
Average Hourly Earnings, Total Private, \$, BLS	22.14	22.02	22.39	21.82	21.45
Retail Sales (\$, accrual), ADOR*	217,908,142	190,974,062	179,467,162	194,760,815	
Total New Residential Permits (units), Census C-40	122	142	136	168	120

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Lake Havasu City-Kingman MSA (Mohave County)					
- Annual Data	2014	2015	2016	2017	2018
Population (persons), Census*	203,474	204,661	205,521	207,114	209,550
% Chg from Year Ago	0.2%	0.6%	0.4%	0.8%	1.2%
Personal income (\$ millions), BEA	5,789	6,010	6,225	6,574	6,946
% Chg from Year Ago	6.5%	3.8%	3.6%	5.6%	5.7%
Per capita personal income (\$), BEA**	28,450	29,366	30,286	31,742	33,148
% Chg from Year Ago	6.3%	3.2%	3.1%	4.8%	4.4%

Prescott Valley-Prescott MSA (Yavapai County)- Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	107.0	108.4	105.8	109.3	109.5
Unemployment Rate	8.7	9.3	5.2	5.8	7.3
Total Nonfarm Employment (000s), BLS	64.6	64.0	65.9	65.8	66.2
Private	54.5	54.0	54.9	54.6	55.2
Government	10.1	10.0	11.0	11.2	11.0
Average Hourly Earnings, Total Private (\$), BLS	21.83	22.11	22.18	22.08	22.36
Retail Sales (\$, accrual), ADOR*	211,909,257	207,092,187	210,631,289	209,174,208	
Total New Residential Permits (units), Census C-40	125	132	145	160	170

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Prescott Valley-Prescott MSA (Yavapai County)- Annual Data	2015	2016	2017	2018	2019
Population (persons), Census	220,805	224,575	228,082	231,772	235,099
% Chg from Year Ago	1.4%	1.7%	1.6%	1.6%	1.4%
Personal Income (\$, millions), BEA	7,843	8,233	8,817	9,371	9,731
% Chg from Year Ago	5.0%	4.0%	7.0%	6.0%	3.0%
Per Capita Personal Income (\$), BEA	35,524	36,662	38,661	40,435	41,393
% Chg from Year Ago	3.9%	3.2%	5.5%	4.6%	2.4%

Sierra Vista - Douglas MSA (Cochise County) -					
Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	50.8	51.7	50.0	52.3	52.2
Unemployment Rate	8.8	9.4	5.3	5.5	6.6
Total Nonfarm Employment (000s), BLS	33.7	33.9	34.6	34.4	34.7
Private	23.2	23.6	23.7	23.5	23.9
Government	10.5	10.3	10.9	10.9	10.8
Average Hourly Earnings, Total Private (\$), BLS	24.63	24.29	24.03	23.77	24.16
Retail Sales (\$, accrual), ADOR*	92,189,565	82,708,626	81,601,661	63,545,576	
Total New Residential Permits (units), Census C-40	76	29	18	22	18

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Sierra Vista - Douglas MSA (Cochise County) -					
Annual Data	2014	2015	2016	2017	2018
Population (persons), Census*	127,352	126,502	125,782	124,990	126,770
% Chg from Year Ago	-1.7%	-0.7%	-0.6%	-0.6%	1.4%
Personal income (\$ millions), BEA	4,562	4,658	4,732	4,895	5,110
% Chg from Year Ago	2.2%	2.1%	1.6%	3.5%	4.4%
Per capita personal income (\$), BEA**	35,822	36,818	37,621	39,165	40,308
% Chg from Year Ago	4.0%	2.8%	2.2%	4.1%	2.9%



Yuma MSA (Yuma County) - Monthly Data	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	92.5	97.8	90.3	97.4	97.5
Unemployment Rate	22.0	25.1	16.4	16.7	15.6
Total Nonfarm Employment (000s), BLS	51.8	52.0	53.6	53.8	54.5
Private	38.7	39.0	39.3	39.3	40.1
Government	13.1	13.0	14.3	14.5	14.4
Average Hourly Earnings, Total Private (\$), BLS	21.95	22.35	22.26	21.99	22.16
Retail Sales (\$, accrual), ADOR*	153,869,257	145,909,169	147,025,619	151,096,491	
Total New Residential Permits (units), Census C-40	134	164	115	86	85

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Yuma MSA (Yuma County) - Annual Data	2014	2015	2016	2017	2018
Population (persons), Census*	204,283	205,456	207,520	209,756	212,128
% Chg from Year Ago	0.8%	0.6%	1.0%	1.1%	1.1%
Personal income (\$ millions), BEA	5,945	6,493	6,877	7,352	7,569
% Chg from Year Ago	0.2%	9.2%	5.9%	6.9%	3.0%
Per capita personal income (\$), BEA**	29,099	31,602	33,141	35,049	35,682
% Chg from Year Ago	-0.7%	8.6%	4.9%	5.8%	1.8%

TABLES: SOURCES AND ABBREVIATIONS



ADHS: Arizona Department of Health Services

ADOR: Arizona Department of Revenue

ADOT: Arizona Department of Transportation

AOEO: Arizona Office of Economic Opportunity, Arizona

Commerce Authority

ARMLS: Arizona Regional Multiple Listing Service

ASPB: Arizona State Parks Board

BEA: Bureau of Economic Analysis, U.S. Department of

Commerce

BLS: Bureau of Labor Statistics, U.S. Department of

Labor

Census C-40: U.S. Census Bureau, U.S. Department of

Commerce

Micropolitan SA: Micropolitan Statistical Area must have at least one urban cluster of at least 10,000, but less than 50,000 inhabitants.

Co.: County

EBR: The Economic and Business Research Center, The

University of Arizona.

MSA: Metropolitan Statistical Area must have at least one core urbanized area of 50,000 or more inhabitants.

PSHIA: Phoenix Sky Harbor International Airport

SAAR: Seasonally adjusted at annual rates

TAR: Tucson Association of Realtors

U.S. Bankruptcy Court: District of Arizona

USCBP: U.S. Customs and Border Protection, U.S. De-

partment of Homeland Security

BTS: Bureau of Transportation Statistics, U.S. Depart-

ment of Transportation

NPS: National Parks Service

ARIZONA ECONOMIC INDICATORS - COUNTIES

Apache County Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	19.7	19.5	19.2	20.2	20.1
Unemployment Rate	16.3	18.1	10.3	11.0	12.7
Total Nonfarm Employment (000s), ADOA	16.4	15.6	17.2	17.2	17.1
Private	6.7	6.6	6.7	6.7	6.7
Government	9.7	9.0	10.4	10.4	10.4
Retail Sales (\$, accrual), ADOR*	14,751,031	14,451,024	12,809,136	14,826,884	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Gila County (Payson Micropolitan SA) Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	20.7	20.6	20.1	21.2	21.0
Unemployment Rate	9.2	10.4	5.9	6.3	7.7
Total Nonfarm Employment (000s), ADOA	14.1	13.7	14.2	14.2	14.2
Private	8.8	8.7	8.8	8.7	8.8
Government	5.3	5.0	5.5	5.5	5.4
Retail Sales (\$, accrual), ADOR*	36,124,066	36,748,344	34,289,898	34,846,457	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Graham County Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	14.9	14.5	14.5	15.8	15.8
Unemployment Rate	8.9	10.0	5.3	5.4	6.3
Total Nonfarm Employment (000s), ADOA	8.8	8.3	8.9	9.3	9.4
Private	6.2	6.2	6.3	6.3	6.4
Government	2.5	2.0	2.6	3.0	3.0
Retail Sales (\$, accrual), ADOR*	30,499,243	28,628,604	26,740,133	25,736,746	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Greenlee County Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	4.6	4.7	4.5	4.6	4.7
Unemployment Rate	7.1	8.1	4.6	4.8	6.1
Total Nonfarm Employment (000s), ADOA	5.2	5.2	5.2	5.2	5.2
Private	4.7	4.7	4.6	4.6	4.6
Government	0.6	0.4	0.6	0.6	0.6
Retail Sales (\$, accrual), ADOR*	10,687,840	9,302,504	8,976,294	10,455,990	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

ARIZONA ECONOMIC INDICATORS - COUNTIES

La Paz County Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	8.8	8.7	8.7	9.6	9.9
Unemployment Rate	8.0	9.0	5.8	6.1	6.6
Total Nonfarm Employment (000s), ADOA	5.6	5.5	5.6	5.6	5.7
Private	3.4	3.4	3.4	3.4	3.4
Government	2.3	2.1	2.3	2.3	2.3
Retail Sales (\$, accrual), ADOR*	13,911,916	14,010,108	12,224,653	12,459,758	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Navajo County (Show Low Micropolitan SA) Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	39.8	40.0	39.3	41.2	40.8
Unemployment Rate	12.9	13.8	8.0	8.3	9.6
Total Nonfarm Employment (000s), ADOA	25.2	24.8	26.4	26.4	26.3
Private	16.1	16.0	16.3	16.1	16.0
Government	9.1	8.7	10.2	10.3	10.3
Retail Sales (\$, accrual), ADOR*	86,811,070	83,365,915	83,845,169	82,829,009	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

Santa Cruz County Summary - Monthly	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020
Civilian Labor Force (000s), BLS	18.8	18.5	18.1	19.1	19.3
Unemployment Rate	13.6	16.2	10.4	11.2	13.0
Total Nonfarm Employment (000s), ADOA	12.0	11.2	12.1	12.0	12.2
Private	8.3	7.7	7.7	7.7	7.9
Government	3.7	3.5	4.4	4.4	4.4
Retail Sales (\$, accrual), ADOR*	26,776,691	23,334,382	23,772,857	23,447,340	

^{*}This retail sales figure does not include food, restaurant and bar, or gasoline sales.

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