

# AZB ARIZONA BUSINESS

ARIZONA STATE UNIVERSITY'S MONTHLY NEWSLETTER ON THE ARIZONA ECONOMY

## Job growth outlook turns sunny for U.S. and Arizona

The forecasts for the nation and Arizona are unchanged. Employment is finally growing on a year-over-year basis — the last major piece of the national economic puzzle. This is good news because the national economy finally is moving in the direction necessary to keep the recovery and the forecasts on track. It is also good news because the problems with the national economy were the primary drag on the Arizona economy.

It is necessary to understand how the economy got to this point before endeavoring to gauge its future direction. The two biggest economic news stories of the 1990s were low interest rates and the extended period of above-average business investment spending. Interest rates may have received more attention, but the business investment may have been the more important for the economy as a whole. Useful capital investment, no matter the type, will increase productivity and help sustain an expansion. It can be argued that a significant fraction of the investment during the last expansion was not particularly useful — primarily in the area of telecommunication fiber optics — but the bulk of the investment was worthwhile and the economy responded accordingly.

Capital investment can be divided into two types. The first type expands the output capacity of the economy by adding facilities. The second type replaces current capital with more efficient machines or facilities that allow more output with the current labor force, or the same output with fewer workers. It is difficult to quantify, but it appears that a very large portion of the capital investment in the '90s was of the second variety. The employment impacts of the second type of investment are minimal when the economy is expanding rapidly. Workers who are laid off have a relatively easy time finding other jobs. However, the impact during a recession is significant because a firm can cut employees when demand is down and not rehire for an extended period after demand picks up, thanks to increased efficiency. This is the primary reason the recovery has been called "jobless" at the national level. For many years, efficiency capital investment was limited to goods-producing sectors like manufacturing and mining. The difference during the last cycle was that a significant portion of the efficiency capital investment occurred in service-providing industries, which means the job impacts were much more widespread.

The drop in spending during the recession was mostly a decline in business spending — in both capital and non-capital areas. Thus, the recession was fairly mild in terms of consumer spending. The explanation is twofold: low interest rates and baby-boomer demographics. The demographics have gotten very little attention, but they are vitally important in explaining the immediate past and future of the economy.

People typically earn and spend the most between the ages of 45 and 64. The number of people entering this age group began to rise in the late 1980s and peaked around 2003. The stock market bubble and the continued spending (even during a recession) were mainly due to the fact that so many people were in their peak earning and spending years during this time. The economy also will feel the impact as the boomers move beyond this demographic range. The net change in people in their peak years will hit a low point in 2011, rebound slightly, and finally go negative in 2017.

The boomer spending spree was aided and abetted by unusually low interest rates, facilitating the borrowing and the refinancing of debt. It is probably unprecedented for the economy to head into a recession with low interest rates which then dropped even lower. The ability to refinance a mortgage — either to lower payments or take out equity — allowed many people to continue spending far longer than economic conditions would seem to warrant. The downside is that interest rates will have to rise if the economy continues to expand. Many people now have little equity left in their homes, which could make the next downturn more painful.

The net result of all the factors working on the economy has been a healthy increase in Gross Domestic Product without, until recently, an overall increase in jobs. However, the news is far from all bad for employment. On the positive side, unemployment on a percent-

### Quarterly Economic Forecast

CENTER FOR BUSINESS RESEARCH

W. P. CAREY SCHOOL of BUSINESS



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age basis never even approached the heights that have been typical in previous recessions. On the negative side, the national economy went 41 months without month-over-same-month-last-year job growth. Generally, people who did lose a job have had a difficult time finding new work. The recent small improvement in the employment picture has already been reflected in more positive consumer confidence figures, which bodes

well for the continuing recovery.

The immediate future covered by the forecast can best be described as continued gradual improvement. The forecast is on more solid ground after the recent good news on the job front. For the longer term, the biggest factor will be demographics. The drop in people entering their peak years will make stock bubbles and other investment excesses less likely, but will also make it less

likely that in the future consumer spending will be recession-proof. There will also be significantly fewer new workers entering the work force, which is likely to accelerate efficiency-based capital spending.

## ARIZONA

Arizona continues to gather momentum and will continue to do so, particularly now that the national economy has turned

**TABLE 1**  
**2004 AND 2005 ECONOMIC FORECASTS: UNITED STATES**

	<i>Actual</i> 2000	<i>Actual</i> 2001	<i>Actual</i> 2002	<i>Actual</i> 2003	<i>Forecast</i> 2004	<i>Forecast</i> 2005
<b>Gross Domestic Product</b>						
Billions of 1996 Dollars .....	9,817.0	9,866.7	10,083.1	10,398.0	10,813.9	11,203.2
Percent Change .....	3.7	0.5	2.2	3.1	4.0	3.6
Industrial Production (Percent Change) .....	4.3	(3.4)	(0.5)	0.3	4.2	4.0
Net Exports (Billions of 1996 Dollars) .....	(379.5)	(398.1)	(470.6)	(509.1)	(541.0)	(525.0)
<b>Housing Starts</b>						
Number in Thousands .....	1,592.3	1,636.7	1,747.7	1,862.4	1,707.8	1,625.8
Percent Change* .....	(4.5)	2.8	6.8	6.6	(8.3)	(4.8)
Unemployment Rate (Percent) .....	4.0	4.8	5.8	6.0	5.8	5.5
Consumer Price Index (Percent Change) .....	3.4	2.8	1.6	2.3	1.8	2.2
Three-Month Treasury Bill Rate (Percent) .....	5.8	3.4	1.6	1.0	1.5	2.4
10-Year Treasury Note Rate (Percent) .....	6.0	5.0	4.6	4.0	4.8	5.2

\*Calculated prior to rounding

**TABLE 2**  
**2004 AND 2005 ECONOMIC FORECASTS: ARIZONA**

	<i>Actual</i> 2000	<i>Actual</i> 2001	<i>Actual</i> 2002	<i>Actual</i> 2003	<i>Forecast</i> 2004	<i>Forecast</i> 2005
<b>Personal Income</b>						
Millions of Current Dollars .....	131,046	137,331	142,725	150,289* 159,907	170,781	
Percent Change .....	9.0	4.8	3.9	5.3 6.4	6.8	
<b>Retail Sales</b>						
Millions of Current Dollars .....	43,940	44,833	45,425	47,818	50,591	53,779
Percent Change .....	7.8	2.0	1.3	5.3	5.8	6.3
Unemployment Rate (Percent) .....	3.9	4.7	6.2	5.6	5.0	4.5
<b>Wage and Salary Employment</b>						
Number in Thousands .....	2,242.7	2,265.0	2,265.1	2,289.3	2,350.4	2,431.9
Percent Change .....	3.7	1.0	0.0	1.1	2.7	3.5
<b>Population</b>						
Number in Thousands .....	5,169	5,321	5,468	5,615	5,761	5,917
Percent Change .....	3.0	2.9	2.8	2.7	2.6	2.7
<b>Single-Family Units Permitted</b>						
Number .....	48,846	50,930	55,649	65,649	62,367	61,119
Percent Change .....	(5.6)	4.3	9.3	18.0	(5.0)	(2.0)
<b>Multifamily Units Permitted **</b>						
Number .....	10,920	10,414	8,830	7,135	6,707	6,774
Percent Change .....	(9.5)	(4.6)	(15.2)	(19.2)	(6.0)	1.0

\*Estimate \*\* Apartment complexes of three or more units

Source (Tables 1 and 2): Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

a corner. The near-term performance of the state's economy still depends largely on the course of the national economy, but in the long term, Arizonans have a large role in determining their future.

The biggest risk to the national economy is the euphemistic "international events." The outcome of critical issues such as war, terrorism threats, shifting alliances and destabilized governments remain as much a mystery to economists as to everyone else. Arizona is more vulnerable than many other states because so much of our tourism depends on air travel from outside the state. Tourism has been making something of a comeback, but it remains fragile.

The hot-button political issue related to the economy is the number of jobs lost to other countries. It is difficult to quantify the jobs which are being lost in Arizona to outsourcing, particularly because of the current economic cycle. Job loss historically has been primarily a function of demand: when demand goes down, people are laid off until demand increases and then they are rehired. Companies have become much more comfortable with the idea of actively managing their payroll and product mix, which leads to job elimination. It was commonplace to see a company simultaneously hiring in one division while firing in or eliminating another division. The pattern

was not as noticeable when the economy was growing rapidly, but when the hiring stopped and the firing continued it became more evident. Job elimination was also expanded because of the failure of so many Internet and telecommunication firms. The pattern so far suggests that the majority of jobs lost in Arizona were cyclical, but the portion that were eliminated outright here and nationally was significantly higher than in the past.

At its core, outsourcing is the result of using price as the primary (or only) metric of value. The danger of being the low-cost producer is that someone else may undercut your price. Mexico and other countries

**TABLE 3**  
**2004 AND 2005 ECONOMIC FORECASTS: MARICOPA COUNTY**

	<i>Actual</i> 2000	<i>Actual</i> 2001	<i>Actual</i> 2002	<i>Actual</i> 2003	<i>Forecast</i> 2004	<i>Forecast</i> 2005
<i>Retail Sales</i>						
Millions of Current Dollars.....	30,167	30,605	30,690	32,320*	34,259	36,520
Percent Change.....	8.4	1.5	0.3	5.3	6.0	6.6
Unemployment Rate (Percent).....	2.7	3.9	5.6	4.9	4.8	4.5
<i>Wage and Salary Employment</i>						
Number in Thousands.....	1,541.0	1,559.5	1,556.9	1,576.6	1,628.6	1,697.0
Percent Change.....	3.6	1.2	(0.2)	1.3	3.3	4.2
<i>Population</i>						
Number in Thousands.....	3,097	3,194	3,289	3,382	3,473	3,571
Percent Change.....	3.4	3.1	3.0	2.8	2.7	2.8
<i>Single-Family Units Permitted</i>						
Number in Thousands.....	33,107	33,428	35,360	41,056	38,182	38,182
Percent Change.....	(6.6)	1.0	5.8	16.1	(7.0)	0.0
<i>Multifamily Units Permitted **</i>						
Number in Thousands.....	9,490	8,964	7,268	5,407	5,083	5,159
Percent Change.....	(0.4)	(5.5)	(18.9)	(25.6)	(6.0)	1.5

\*Estimate \*\* Apartment complexes of three or more units

**TABLE 4**  
**ARIZONA EMPLOYMENT FORECASTS: 2004 and 2005**  
**(In Thousands)**

	<i>Actual</i> 2000	<i>Percent</i> <i>Change</i>	<i>Actual</i> 2001	<i>Percent</i> <i>Change</i>	<i>Actual</i> 2002	<i>Percent</i> <i>Change</i>	<i>Actual</i> 2003	<i>Percent</i> <i>Change</i>	<i>Forecast</i> 2004	<i>Percent</i> <i>Change</i>	<i>Forecast</i> 2005	<i>Percent</i> <i>Change</i>
Manufacturing.....	209.9	1.2	201.7	(3.9)	183.5	(9.0)	174.0	(5.2)	175.7	1.0	179.3	2.0
Mining.....	9.8	(11.7)	9.6	(2.0)	8.7	(9.4)	8.0	(8.0)	7.9	(1.0)	8.0	1.5
Construction.....	168.1	4.5	173.6	3.3	172.2	(0.8)	176.6	2.6	171.3	(3.0)	157.6	(8.0)
TWU*.....	74.3	1.0	76.6	3.1	76.0	(0.8)	76.6	0.8	78.4	2.4	80.8	3.0
Information.....	54.4	15.5	53.9	(0.9)	51.7	(4.1)	49.4	(4.4)	49.9	1.0	51.3	2.8
Trade.....	363.5	3.8	364.0	0.1	364.9	0.2	368.2	0.9	381.1	3.5	398.2	4.5
Financial Activities.....	151.0	2.4	153.4	1.6	155.1	1.1	159.3	2.7	164.1	3.0	171.5	4.5
Services.....	845.0	4.2	854.5	1.1	862.5	0.9	883.7	2.5	923.5	4.5	978.9	6.0
Government.....	366.7	3.6	377.8	3.0	390.4	3.3	393.7	0.8	398.4	1.2	406.4	2.0
Total Wage and Salary Employment.....	2,242.7	3.7	2,265.0	1.0	2,265.1	0.0	2,289.3	1.1	2,350.4	2.7	2,431.9	3.5
Unemployment Rate	3.9%		4.7%		6.2%		5.6%		5.0%		4.5%	

\*Transportation, Warehousing and Utilities

Source (Tables 3 and 4): Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

that built sizable manufacturing sectors on the basis of being a low-cost producer were undercut when China opened itself more to the world markets. In the past, Arizona has sold itself as a low-cost producer — at least for companies wanting to locate in the United States. Recent efforts such as those related to T-Gen and the Arizona Biodesign Institute are more likely to provide export-

resistant jobs and revenue streams to Arizona. It is not easy to pick the “next big thing.” A significant number of states have targeted biotechnology, which makes it even harder to attain the critical mass required to thrive in an industry. Arizona was able to do it in semiconductor manufacturing, but the state is only a small player in the semiconductor research and development sector. Manu-

facturing jobs can — and likely will — be outsourced over time, but R&D jobs are much more difficult to outsource because price is not so large a part of the metric.

— Tracy Clark  
Associate Director

Bank One Economic Outlook Center

## Bank One Arizona Leading Index dips in March

The Bank One Arizona Index of Leading Economic Indicators fell by 0.2 percent in March to 124.0. This is 4.1 percent above the March 2003 number of 119.1 (1987 = 100).

The Leading Index has dipped slightly a couple of times in the last few months, amid a general upward trend since November 2002.

The positive influences in the March index included the inflation-adjusted value of Maricopa County residential building permits and the M2 money supply. The construction sector has been fueled by low interest rates, which have served to attract many lower-income households to homeownership.

Arizona saw job growth of 8.6 percent in the construction and mining sector in March 2004 compared to March 2003, bringing its rank to third in the nation for growth in the sector. The Federal Reserve has been reluctant to raise interest rates, but this may change in the face of strong economic growth across the nation.

Delivery times from suppliers, purchased materials inventory levels, new orders, production, employment, the number of hours worked in manufacturing, and sensitive materials prices were negative influences on the Leading Index in March.

The largest negative contribution came from the number of hours worked in manufacturing. For years the manufacturing sector has been suffering across the nation, and Arizona was no exception. Structural change in the semiconductor industry has contributed to this. Only a few states in the nation are managing to eke out some growth in the sector, but the outlook for manufacturing has been dismal for some time.

The production component from the Arizona Business Conditions Survey showed the second-largest decline. It had been at significantly high levels, so it is not surprising to see a decline.

The good news is that Arizona ranks third in the nation when it comes to nonfarm job

growth, with March 2004 over March 2003 registering a 2.0 percent increase.

Of more concern is the negative influence of the price component of the Leading Index. During the last recession, prices fell and stayed weak until recently. Responding to increased demand as economic recovery began in earnest a few months ago, prices increased. Now, however, key inputs such as fuel and steel are showing sharp increases

in price unrelated to increases in economic activity.

The small dip seen in the Leading Index is not currently a concern. The story may change, however, if the Leading Index continues to falter over the next few months.

— Dawn McLaren  
Economic Analyst

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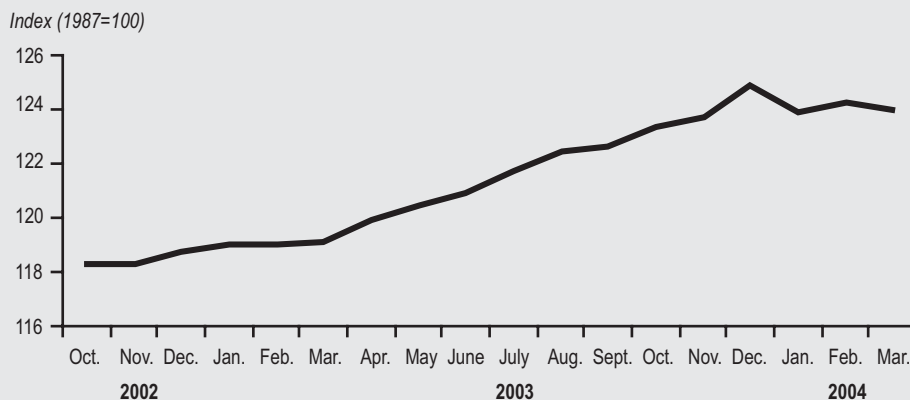
**TABLE 1**  
**NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS\***

	December	January	February	March
Delivery Time*	0.22	-0.18	0.19	-0.12
Inventory Levels*	0.00	-0.01	-0.10	-0.04
New Orders*	0.07	-0.03	-0.03	-0.06
Production*	-0.01	0.09	0.02	-0.13
Employment*	0.03	0.34	-0.14	-0.04
Residential Building Permits	0.64	-0.75	0.06	0.35
Average Workweek, Manufacturing	0.00	-0.17	0.03	-0.28
Money Supply	-0.15	-0.13	0.34	0.18
Change in Sensitive Materials Prices	0.20	0.04	-0.06	-0.11

\* The net contribution of each component is calculated by multiplying the monthly percent change in its index by its relative importance.

\* Based on indicators from the Purchasing Management Association of Arizona, Purchasing Management Association of Southern Arizona and the Northern Arizona Group.

**FIGURE I**  
**ARIZONA INDEX OF LEADING ECONOMIC INDICATORS**



Source: Bank One Economic Outlook Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

# Snowbird households add \$1 billion to state's economy

The Center for Business Research has conducted an annual survey of mobile home and RV/travel parks in Arizona since 1984 to estimate the number of "snowbirds" in the most visible accommodations for winter visitors (our definition of a snowbird is a retired/semi-retired individual 55 and older who stays at the seasonal residence at least one month). For the first time during the 2001-2002 season the Center contacted only a sample of 33 Phoenix area parks and 27 parks outside the Phoenix area, rather than conducting a complete survey of the more than 1,000 parks throughout the state. The reasons were the overall costs of surveying, the declining number of park managers willing to provide responses, and the stability of the results over the previous five years.

For the 2002-2003 season, the Center again attempted to survey all of the parks in its database. Unfortunately, survey problems became more pronounced even with additional interviewers and more hours devoted to telephoning. As a result, for the 2003-2004 season the Center returned to a survey of smaller set of parks. Information was collected from a representative sample — 26 parks in the Phoenix/Apache Junction area and 30 elsewhere in the state. The parks selected (1) reflected the size distribution and composition (mobile home versus RV/travel trailer) of all of the parks in our statewide database and (2) had provided numbers last year so direct year-to-year comparisons could be made.

## RESULTS FROM THIS YEAR'S SURVEY

The 26 Phoenix area parks in the sample ranged from 109 to 1,800 spaces, with a total of 14,945 spaces out of the estimated 102,500 in the 541 Phoenix/Apache Junction area parks in the database. Compared to numbers reported last year for these parks, the overall occupancy rate declined from 90 percent to 87 percent. Quite significantly, the percent of these occupied spaces filled by snowbird households fell from 64 to 61 percent, and for combined snowbird and shorter-term households, from 67 to 62 percent. As a result, the number of snowbird households in the valleywide sample fell by 9 percent, and the number of snowbird and shorter-term households combined dropped by 12 percent. The declining numbers are consistent with the Center's findings for the past six years.

The 30 parks surveyed in the rest of the state ranged in size from 46 to 1,294 spaces, with a total of 10,378 spaces out of the estimated

74,600 in the 466 parks outside the Phoenix/Apache Junction area in the database. Compared to last year, the overall occupancy rate in the 30 parks was up significantly: 84 percent versus 60 percent. Since the percentages of the occupied spaces occupied by snowbird households and by snowbird and shorter-term households combined stayed nearly the same from last year to this — 60 percent and 66 percent respectively — the number of seasonal households in our sample was up significantly in certain parts of the state. The numbers of snowbirds and snowbird and shorter-term households combined in the sample declined 7 percent and 2 percent respectively in Tucson, but increased 13 percent and 18 percent respectively in the Yuma area and 29 percent and 27 percent respectively in the Arizona City/Casa Grande/Coolidge/Florence parks.

The results are consistent with the Center's findings of the past six years that the number of park snowbird households has been decreasing in the two major urban areas in the state, while it has been growing elsewhere in the state.

## COMMENTARY

Since 1990, findings from the park surveys have been used to estimate the total spending by snowbird households each season. Last year the estimates were \$340 million for Phoenix/Apache Junction area park snowbirds and \$270 million for park snowbirds elsewhere in the state.

While the survey focuses on the parks, the number of seasonal residents staying in single-family homes, townhouses, condominiums, apartments, hotels, motels, with friends and relatives, and on public lands have been estimated in past years based on findings from household surveys conducted by the Center in the 1990s. Approximately half the respondents lived in mobile home and RV/travel trailer parks, and the rest lived in other accommodations. Norton Consulting, doing similar studies for the Yuma area, found three-quarters in parks and one-quarter in other accommodations.

Using these percentages, the number of non-park snowbird households was estimated last year to be 42,000 for the Phoenix/Apache Junction area and 34,000 elsewhere in the state. When combined with the park snowbird households, these estimates implied an overall snowbird population of more than 130,000 households and total spending of approximately \$1 billion by snowbird households during the 2002-2003 season.

As discussed in last year's report, there is anecdotal evidence that growing numbers of snowbirds are choosing to live in second homes and condominiums in the Phoenix area. (See *AZB/Arizona Business*, June 2003). Others with motor homes may travel from Phoenix to visit other locations in the state.

Therefore, even with the decline in snowbird households in the Phoenix area parks, a growing seasonal population in other accommodations in the area, increases in park snowbird households elsewhere in the state, and the recognition of a more mobile lifestyle resulting in a higher proportion of short-term winter visitors, implies that the overall impact of elderly seasonal households on the state was at least \$1 billion for the 2003-2004 season.

What's next on the horizon is open to speculation. Given the sheer size of the baby boom generation, we have every reason to believe the overall number of snowbirds will grow significantly over the next 10 years. Arizona will remain a prime destination for those embracing the snowbird lifestyle. But the traditional park crowd likely will give way to a younger generation of snowbirds looking elsewhere.

As the Phoenix and Tucson areas continue to grow, it is likely that they will attract smaller shares of the snowbird population. They will continue to have appeal for golfing and other amenities, and snowbird households able to afford upscale homes and condominiums will still come. Mobile home and RV/travel trailer parks not displaced by urban expansion also should continue to draw sizable numbers. Older parks may have difficulty attracting the baby-boom generation. As a result, many may evolve into housing for younger households or be leveled for new subdivisions and retail stores.

Both those in the industry and policymakers in Arizona should be ready to adapt quickly to the changing nature of the snowbird industry, or other states will surely step forward to cater to the big-spending crowd of baby-boom retirees who will be seeking meaningful personal experiences as they move through their retirement years.

— **Dr. Stephen Happel**  
*Professor of Economics*

— **Dr. Timothy Hogan**

*Director, Center for Business Research*

— **Wing-yan Choi**

*Business Honors Student*

# Economy expanded a little in '03 despite weak job market

The current national economic expansion, which began in late 2001, has been distinguished by a very weak employment market. Strong productivity growth has produced gains in other measures of economic performance, such as the Gross Domestic Product, but this growth has been below the average of prior economic cycles. Arizona's aggregate growth has been greater than that of the nation since late 2001, but also has been subpar in comparison to other economic cycles.

## NATIONAL ECONOMIC CYCLE

The timing of national economic cycles is determined by the National Bureau of Economic Research (NBER), which emphasizes economy-wide measures of economic activity that are reported on a monthly basis. The NBER considers inflation-adjusted Gross Domestic Product (real GDP) to be the single best measure of aggregate economic activity. However, real GDP is reported quarterly and is subject to considerable revision. Thus the NBER also considers several monthly economic measures, particularly payroll employment and inflation-adjusted personal income less transfer payments. Industrial production and real sales in the manufacturing and wholesale-retail sectors are among the other measures reviewed.

According to the NBER, the most recent recession lasted a shorter-than-average eight months, from March to November 2001. Other than employment, each of the other important economic measures reached a trough between September and December of 2001. Since then, however, each of these measures has shown less growth than the average of prior post-World War II cycles. Real GDP has come closest to average growth, but the expansion in real personal income less transfer payments was minimal until recently and employment growth continues to be weak.

Nationally, employment declined substantially from April 2001 through February 2002. The length (11 months) and magnitude (average monthly drop of 191,000 jobs) of the employment recession were close to the average of prior cycles. However, the performance of the job market in the two years since February 2002 has been much different than in previous cycles.

The employment recession in most prior cycles was followed by a few months of modest job growth of about 75,000 per month, then a one-to-two-year period of very strong gains averaging 250,000-to-300,000 per month. Two previous cycles had longer periods of modest-to-moderate job growth. In the early 1990s,

monthly employment gains averaged 75,000 for a 22-month period. In the early 1960s, advances averaged 120,000 per month for 44 months.

As of February 2004 (the latest data available), 24 months had elapsed since the end of the employment recession. An average of 10,000 jobs per month were lost over these two years. In the first 18 months of this period, the nation lost an additional 615,000 jobs, an average drop of 34,000 jobs per month. In only six of these 18 months did employment rise, never by even 100,000. A period of six consecutive months of job growth began in September 2003. In all of these months, however, job gains were less than 100,000; the average was only 61,000 per month.

A case could be made that the employment recession lasted an unusually long 29 months from April 2001 through August 2003. Since then, there has been a somewhat weak period of recovery.

The discrepancy between employment and other economic measures since the end of 2001 has been unusually large. Growth in real GDP and other output-based measures have been fueled by substantial advances in productivity, which have pushed these measures higher despite the drag created from continued declines in employment.

## ARIZONA ECONOMIC CYCLE

Most of the economic measures available nationally are either not available for Arizona

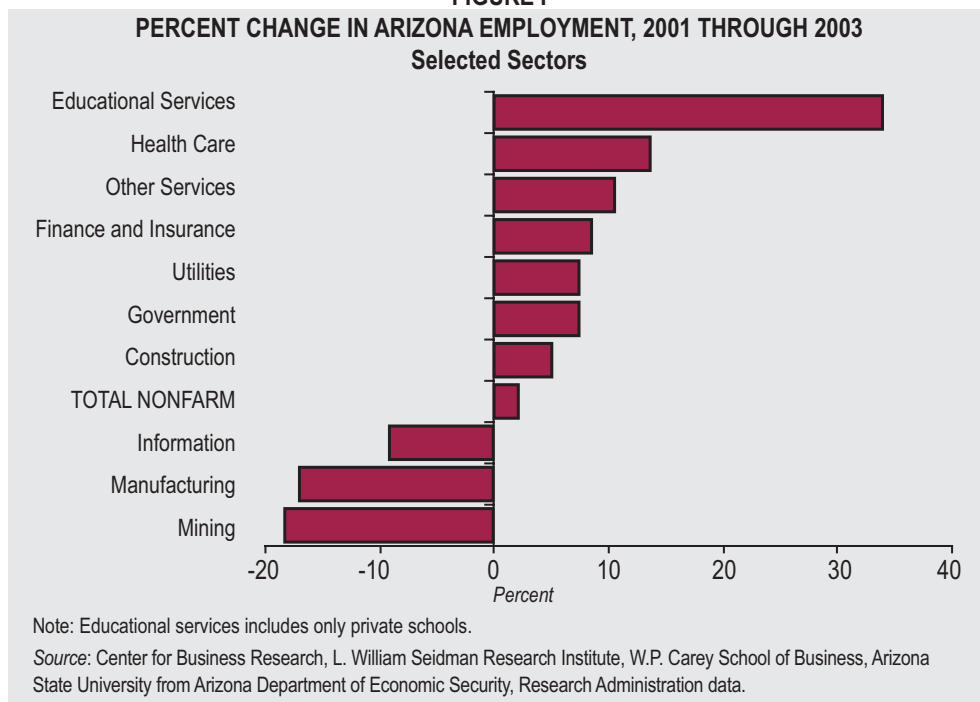
or are produced less frequently and with a longer lag. Much of the available data display erratic changes from period to period. Thus, it is difficult to date the state's economic cycle.

The one economy-wide series available monthly on a timely basis is payroll employment (produced by the Arizona Department of Economic Security, in conjunction with the U.S. Bureau of Labor Statistics). Month-to-month fluctuations in this series are much greater than those nationally, and the estimates are subject to potentially large revision. However, the latest benchmarking process, completed in early 2004, did not result in substantial changes to the monthly estimates.

Like the nation, Arizona's employment recession began in April 2001. It was over at the end of 2001, two months earlier than the national average. Growth was erratic and weak throughout 2002 and early 2003, but unlike the nation, net increases were registered during this period. Stronger and more consistent gains began during the summer of 2003, again a little earlier than the national improvement.

The year-over-year employment change in Arizona was negative from October 2001 through July 2002, compared with national losses from July 2001 through January 2004. The deepest year-over-year decrease was 1.3 percent in Arizona, similar to the national figure of 1.5 percent. The latest figures, through February 2004, show an annual increase of 2.2 percent (nearly 50,000 jobs) in Arizona,

FIGURE I  
PERCENT CHANGE IN ARIZONA EMPLOYMENT, 2001 THROUGH 2003  
Selected Sectors



compared to 0.1 percent (just over 100,000 jobs) nationally. At the same point of the prior economic cycle, annual job growth exceeded 60,000 in Arizona; in the cycle of the 1980s, it was more than 100,000.

The annual average change in employment in Arizona in 2003 was 24,200 (1.1 percent), following no change in 2002. In comparison, between 1994 and 2000, employment rose at least 80,000 in each year. Nationally, the annual average change was a loss of more than 400,000 jobs during 2003, following a decrease of nearly 1.5 million in 2002. Gains had been at least 2.4 million per year between 1994 and 2000.

Most sectors of the Arizona economy experienced minimal employment gains or losses from 2001 through 2003, a period in which the state added about 47,000 jobs, a cumulative increase of 2 percent. Six of the 19 sectors posted a cumulative rise of more than 5 percent over these three years, led by educational services (which includes only private schools) at 34 percent and health care and social assistance at 14 percent (see Figure I). These two sectors also led the growth in 2003, with the health care category accounting for more than 40 percent of the total employment growth. "Other

services," finance and insurance, utilities, and government had three-year increases between 7 and 10 percent. Numerically, government and health services and social assistance created the most jobs over the three years (more than 50,000 combined). The increase in government employment primarily was at public schools and other local governments. State government employment fell.

In contrast, three sectors had significant decreases in employment over the three years: natural resources and mining (-18 percent), manufacturing (-17 percent), and information (-9 percent). Each experienced a significant decline in 2003. Numerically, manufacturing had by far the largest decrease at 36,000. Each of the components of the manufacturing sector experienced job losses in 2003 and over the three years. Drops were especially severe in the computer and electronic products category.

More than 80 percent of the state's job growth in 2003 was in Maricopa County, which experienced a 1.3 percent (20,100 jobs) increase. In 2002, a small number of jobs had been lost in Maricopa County. The latest estimates for February 2004 indicate that job growth was up to 35,000 (2.2 percent) year-over-year. In Pima County, employment

was flat in 2003 following two straight years of small losses. However, the latest estimates indicate that job growth has returned to the Tucson area, with year-over-year gains of 5,700 jobs (1.6 percent).

In the state's 13 less populous counties as a whole, employment continued to rise throughout the recession and the subsequent period. Gains were between 1 and 2 percent in each year from 2001 through 2003. The latest figures show a year-over-year growth rate of 2.3 percent (8,500 jobs). Most of the job growth in these 13 counties occurred in six counties; six other counties experienced a net loss of jobs from 2001 through 2003. Mohave County posted the fastest growth in each of the three years, with Pinal and Yavapai counties also generally experiencing more growth than the other counties. Other counties with a numeric increase included Cochise, Navajo and Yuma. According to the latest estimates, nine of the 13 counties had year-over-year employment growth, with advances of more than 3 percent in Yuma, Yavapai, Pinal, Mohave and La Paz counties.

— Tom R. Rex  
Research Manager

## Business Conditions Index takes a tumble in March

The seasonally adjusted Arizona Business Conditions Index fell to 62.8 in March from 67.5 the previous month. An index reading over 50 indicates that the local economy is growing; below 50 suggests a slowdown in the overall level of economic activity in the near term.

### ANALYSIS

All the components of the Arizona Business Conditions Index lost strength in March. The largest decline occurred in the production component, which fell 8.6 points to reach 66.7. In February, the production index had reached its highest level in the history of the index, so a retracement was not unexpected. The new orders component fell slightly to 64.7, but it remains well within the range of growth.

The falloff in local economic activity appears to be coming mostly from manufacturing sectors, which have been suffering for years, so this is not unusual during an economic recovery period. Even with the slight decline in March, manufacturing has gained a great deal of strength since mid-2003. This is reflected nationwide, according to the Institute for Supply Management's Purchasing Managers Index.

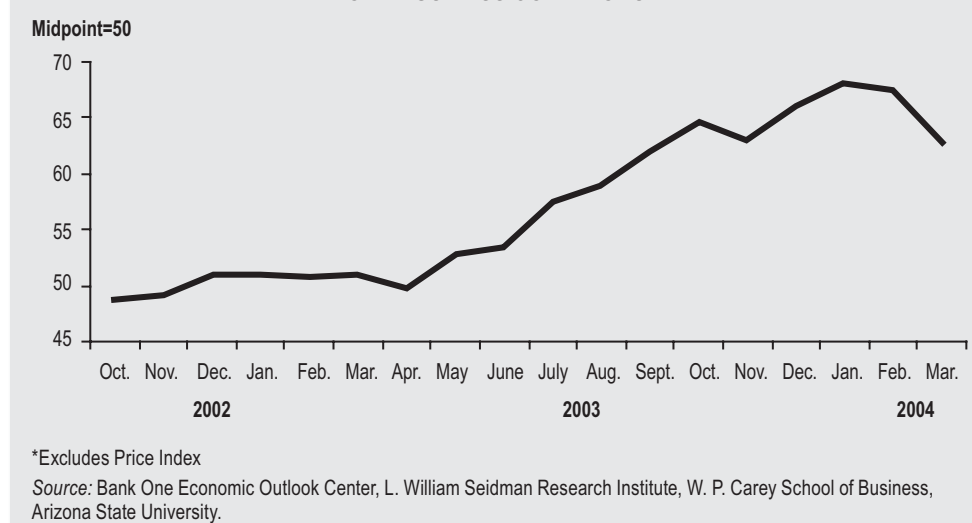
The Price Index remained well above neutral,

recording a level of 68.3 in March. Steel and fuel prices continue to be the impetus for this. The highest level reached by the Price Index was 95.5 in December 1973, the time of the OPEC oil embargoes and subsequent gasoline crisis. In 1988, monetary and fiscal policy problems caused inflation, and the Price index recorded

levels in the low to mid-70s. Given this, it is evident that inflation need not be a concern now, but might be if the trend continues.

— Dawn McLaren  
Research Economist  
Bank One Economic Outlook Center

FIGURE I  
ARIZONA BUSINESS CONDITIONS INDEX\*





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AZB/ARIZONA BUSINESS (ISSN 1079-4255) is published monthly by the Center for Business Research, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University, PO Box 874011, Tempe, AZ 85287-4011; phone (480) 965-3961. Annual rate: \$24 per year to Arizona residents, \$30 per year out-of-state, \$36 per year foreign. Checks must be made payable to ASU Foundation, a separate non-profit organization which exists to support ASU. Your payment is not considered a charitable contribution. Fees will be applied to the printing and mailing of AZB/ARIZONA BUSINESS, which is not printed or mailed at state expense. Periodicals postage paid at Tempe, Arizona. POSTMASTER: Send change of address to AZB/ARIZONA BUSINESS, Center for Business Research, W. P. Carey School of Business, Arizona State University, P.O. Box 874011, Tempe, AZ 85287-4011.

AZB/ARIZONA BUSINESS is also available online at:  
[www.wpcarey.asu.edu/seid/cbr/](http://www.wpcarey.asu.edu/seid/cbr/)

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## ARIZONA ECONOMIC INDICATORS

	Month or Quarter	Current Value	Previous Value	Percent Change Previous Period	Percent Change from Year Ago	Year-to-Date	
						Value	Percent Change from Year Ago
<b>LEADING ECONOMIC INDEX (1987 = 100)</b>							
Arizona .....	March	124.0	124.3 r	-0.2	4.1	NA	NA
<b>BUSINESS CONDITIONS INDEX</b>							
Arizona .....	March	62.8	67.5	-6.9	23.5	NA	NA
<b>BUILDING PERMITS (Thousands of \$)</b>							
Maricopa County .....	February	823,562	758,395	8.6	13.1	1,581,957	15.0
Pima County .....	February	142,389	125,888	13.1	30.7	268,277	15.0
Balance of State .....	February	237,605	222,831	6.6	19.3	460,436	11.2
Arizona .....	February	1,203,556	1,107,114	8.7	16.2	2,310,670	14.2
<b>TOTAL HOUSING UNITS AUTHORIZED</b>							
Maricopa County .....	February	3,657	3,259	12.2	9.6	6,916	14.0
Pima County .....	February	719	810	-11.2	0.0	1,529	16.0
Balance of State .....	February	1,645	1,626	1.2	7.5	3,271	2.3
Arizona .....	February	6,021	5,695	5.7	7.8	11,716	10.7
<b>HOME SALES</b>							
Maricopa County – Number.....	February	9,240	8,610	7.3	23.4	17,850	21.2
Maricopa County – Median Price(\$).....	February	160,000	159,000	0.6	7.4	159,575	10.6
<b>HOUSING AFFORDABILITY INDEXES</b>							
Metropolitan Phoenix – New Homes .....	4th Quarter	111	110	0.9	-3.5	NA	NA
Metropolitan Phoenix – Resale Homes .....	4th Quarter	126	120	5.0	-1.6	NA	NA
<b>MORTGAGE RATES (30-year Fixed)</b>							
Maricopa County .....	March	5.1	5.2	-1.9	-5.6	NA	NA
<b>POPULATION ESTIMATES (Thousands)</b>							
Maricopa County .....	4th Quarter	3,439	3,412	0.8	3.0	NA	NA
Pima County .....	4th Quarter	913	907	0.6	2.1	NA	NA
Balance of State .....	4th Quarter	1,353	1,342	0.9	3.1	NA	NA
Arizona .....	4th Quarter	5,704	5,660	0.8	2.9	NA	NA
<b>RETAIL SALES (Millions of \$)</b>							
Maricopa County .....	Data Unavailable						
Arizona .....	Data Unavailable						

Note: The above figures reflect the latest data available as of date of publication and are subject to revision.

NA = Not Applicable r = Revised

Source: Center for Business Research, Arizona Real Estate Center, and Bank One Economic Outlook Center, affiliates of the L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University. Retail sales data are from the Arizona Department of Revenue.