

# AZB ARIZONA BUSINESS

ARIZONA STATE UNIVERSITY'S MONTHLY NEWSLETTER ON THE ARIZONA ECONOMY

## Outlook brightens, but employment growth trails recovery

The forecast for Arizona suggests that while the economy definitely is on the upswing — performing better than expected from previous forecasts — it will be late in the year before that improvement is reflected in the employment numbers.

It seems odd to say that the economy is in danger of “doing too well” or, in this case, coming out of the recession too quickly — but that is precisely what has been worrying many economists. If the economy improves too rapidly, the Federal Reserve would have to slow things down to prevent inflation, thus forcing the economy back into recession.

Federal Reserve chairman Alan Greenspan has indicated that there are still enough signs of weakness in the economy that the Federal Funds rate is not likely to rise until after the June meeting of the Open Market committee. The Fed eventually will have to start raising interest rates from the historic lows we have seen recently, but a more gradual approach is less likely to derail the economy.

Business spending has been the major weakness during the recession, and large firms continue to face a higher effective cost of funds than they did during much of the last expansion. The bullish stock market meant that firms were more often approaching the equity markets for funding, rather than corporate bond markets or banks. The stock market correction eliminated that source of funds, which contributed to the decline in spending and increased the competition for funds from lenders. Also, lenders have become less willing to part with their money in the wake of the Enron scandal amid doubts about the reliability of corporate financial statements. The last thing the Fed wants to do is choke off a recovery in business spending by raising rates too soon.

The consumer continues to be sensitive to interest rates. As of fourth quarter 2001, the ratio of consumer debt service payments to disposable income was close to the all-time high. The peak came in fourth quarter 1986 when the ratio hit 14.4 percent and mortgage rates averaged above 10 percent for the year. In fourth quarter 2001 the ratio hit 14.3 and mortgage rates for the year averaged close to 7 percent. Interest rate increases would make it less likely that consumers will continue to spend at the same levels. The interest rates on revolving credit tend to increase quickly in a rising interest rate environment, causing an expanding debt service burden on consumers even

without further borrowing. The debt service burden of current conventional mortgages and other closed-end loans (such as auto loans) does not change, but consumers would be strongly discouraged from making additional purchases.

The economy is likely to continue along the path to recovery as long as interest rates do not rise too high or too fast. Based on current data, it appears that the economy is on track to expand by 2.2 percent in 2002, rather than the 1.0 percent that seemed likely at the beginning of the year. The difference is due primarily to a jump in industrial production, which now appears likely to grow at a 2.0 percent pace during the year. Indications from surveys of purchasing managers, both nationally and locally, suggest that conditions are improving in manufacturing faster than in non-manufacturing. The bright spot for manufacturing may be the result of a rapid inventory correction, which means there is a need to restock depleted shelves. The outlook for housing also has improved from a modest decline to almost flat.

The improvement in the economy so far has not been accompanied by a worsening of inflation. There is some anecdotal evidence that firms have been more successful in making some price increases stick, but that has not yet been reflected in the overall numbers. The two areas where inflation has worsened are petroleum prices and health care costs. The sustained decline in health care cost increases as a result of the switch to managed care has come to an end. HMO and other managed care options tilted the negotiating

### Quarterly Economic Forecast

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balance in their favor because they represented large numbers of people in each market. The success of managed care in reducing health cost inflation encouraged consolidation by health care providers, which has increased their bargaining power and led to price increases. The rise in oil prices is understandable since the global economic recovery is increasing demand, and the crisis in the Middle East is making everyone nervous.

The international trade picture continues to deteriorate: the negative factor of higher oil prices has overcome the positive factor of increased growth by our trading partners. Most of our trading partners are expected to improve in 2002 with the exception of the United Kingdom, Japan and France. China and Germany will remain about the same in terms of economic growth. Asia, particularly important to the high-tech industry, is expected

to do quite well with the exception of Japan. The worldwide economic rebound is expected to continue into 2003, when even Japan is expected to post some gains.

## ARIZONA

The signs of economic recovery are clearly evident in some of the data, but there is unlikely to be a recovery in employment until late in the year. The best news for Arizona is that

**TABLE 1**  
**2002 AND 2003 ECONOMIC FORECASTS: UNITED STATES**

	Actual 1998	Actual 1999	Actual 2000	Actual 2001	Forecast 2002	Forecast 2003
Gross Domestic Product						
Billions of 1996 Dollars .....	\$8,508.9	\$8,856.5	\$9,224.0	\$9,333.8	\$9,539.1	\$9,844.4
Percent Change .....	4.3	4.1	4.1	1.2	2.2	3.2
Industrial Production (Percent Change) .....	5.2	3.7	3.6	4.5	(3.6)	2.0
Net Exports (Billions of 1996 Dollars) .....	(\$221.1)	(\$316.9)	(\$399.1)	(\$408.7)	(\$460.0)	(\$500.0)
Housing Starts						
Number in Thousands .....	1,616.9	1,666.5	1,593.5	1,610.8	1,612.4	1,633.4
Percent Change** .....	9.7	3.1	(4.5)	1.2	0.1	1.3
Unemployment Rate (Percent) .....	4.5	4.2	4.0	4.8	5.9	5.4
Consumer Price Index (Percent Change) .....	1.6	2.2	3.4	2.8	1.9	2.6
Three-Month Treasury Bill Rate (Percent) .....	4.8	4.6	5.8	3.4	2.3	3.7
10-Year Treasury Note Rate (Percent) .....	5.3	5.6	6.0	5.0	5.0	5.9

\*\*Calculated prior to rounding

**TABLE 2**  
**2002 AND 2003 ECONOMIC FORECASTS: ARIZONA**

	Actual 1998	Actual 1999	Actual 2000	Actual 2001	Forecast 2002	Forecast 2003
Personal Income						
Millions of Current Dollars .....	\$112,910	\$119,354	\$129,133	\$136,623	\$144,000	\$152,640
Percent Change .....	8.9	5.7	8.2	5.8	5.4	6.0
Retail Sales						
Millions of Current Dollars .....	\$37,071	\$40,769	\$43,940	\$44,833	\$46,268	\$48,581
Percent Change .....	7.2	10.0	7.3	2.3	3.2	5.0
Unemployment Rate (Percent) .....	4.1	4.4	3.9	4.7	5.0	4.5
Wage and Salary Employment						
Number in Thousands .....	2,074.7	2,163.1	2,242.8	2,265.7	2,289.5	2,357.8
Percent Change .....	4.5	4.3	3.7	1.0	1.1	3.0
Population						
Number in Thousands .....	4,864	5,017	5,169	5,324	5,462	5,588
Percent Change .....	3.3	3.2	3.0	3.0	2.6	2.3
Single-Family Units Permitted						
Number .....	50,997	51,764	48,846	50,930	45,837	45,379
Percent Change .....	18.6	1.5	(5.6)	4.3	(10.0)	(1.0)
Multifamily Units Permitted **						
Number .....	13,218	12,067	10,920	10,613	9,021	8,570
Percent Change .....	1.3	(8.7)	(9.5)	(2.8)	(15.0)	(5.0)

\*\* Apartment complexes of three or more units

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

the economy is not seriously out of balance as it has been during past recessions, so that improvement is likely to come sooner.

The best indicators of future improvement come from the Business Conditions Survey and the Arizona Leading Index. The outlook from both of these measures has improved significantly in the last few months. The Business Conditions Index further indicates that manufacturing is faring better than non-manufacturing at present.

It is normal for employment gains to lag general economic improvement. Historically, firms have delayed layoffs, preferring to cut back overtime and make other adjustments. They were less resistant to the idea of layoffs

during the current recession. This may be because during the expansion they had become used to laying off workers in one area while aggressively hiring in another. Most firms facing an increase in demand respond by having current employees work overtime, hiring more workers only after it is clear that the upturn is sustained. That tendency may be even more pronounced this time around.

The state can also expect to have a further decline in population growth. Population growth lags economic growth, first because it takes time for information about changes in the economy to travel between regions, and second because it takes time to change

relocation plans. Apparently, people are continuing to move to Arizona even though job creation has slowed significantly. Population growth will slow, before picking up later in the recovery; however, it seems likely that the slowing will not match the severity of past cycles.

The best news is that construction is not overbuilt to the extent it has been in the past. This is due primarily to the caution of lenders burned by the construction overhang from the late 1980s.

— Tracy Clark  
Senior Economist

Bank One Economic Outlook Center

**TABLE 3**  
**2002 AND 2003 ECONOMIC FORECASTS: MARICOPA COUNTY**

	Actual 1998	Actual 1999	Actual 2000	Actual 2001	Forecast 2002	Forecast 2003
<b>Retail Sales</b>						
Millions of Current Dollars.....	\$25,207	\$27,825	\$30,167	\$30,605	\$31,676	\$33,292
Percent Change.....	8.7	12.0	7.1	3.3	3.5	5.1
<b>Unemployment Rate (Percent).....</b>	2.7	3.0	2.6	3.9	4.2	3.7
<b>Wage and Salary Employment</b>						
Number in Thousands.....	1,418.8	1,487.0	1,544.6	1,557.2	1,575.9	1,620.0
Percent Change.....	5.5	4.8	3.9	0.8	1.2	2.8
<b>Population</b>						
Number in Thousands.....	2,890	2,995	3,097	3,196	3,285	3,371
Percent Change.....	4.0	3.6	3.4	3.2	2.8	2.6
<b>Single-Family Units Permitted</b>						
Number in Thousands.....	35,603	35,430	33,107	33,239	29,251	29,836
Percent Change.....	16.9	(0.5)	(6.6)	0.4	(12.0)	2.0
<b>Multifamily Units Permitted **</b>						
Number in Thousands.....	10,529	9,524	9,490	8,446	7,264	6,973
Percent Change.....	(2.4)	(9.5)	(0.4)	(11.0)	(14.0)	(4.0)

\*\* Apartment complexes of three or more units

**TABLE 4**  
**ARIZONA EMPLOYMENT FORECASTS: 2002 and 2003**  
**(In Thousands)**

	Actual 1998	Percent Change	Actual 1999	Percent Change	Actual 2000	Percent Change	Actual 2001	Percent Change	Forecast 2002	Percent Change	Forecast 2003	Percent Change
Manufacturing.....	216.0	4.1	211.7	(2.0)	215.4	1.7	209.6	(2.7)	210.0	0.2	212.1	1.0
Mining.....	13.0	(5.8)	11.4	(12.3)	9.7	(14.9)	9.5	(2.1)	9.5	0.0	9.5	0.0
Construction.....	143.8	9.1	154.7	7.6	161.6	4.5	164.6	1.9	151.6	(7.9)	151.6	0.0
TCPU*.....	100.9	4.5	104.2	3.3	109.8	5.4	111.3	1.4	112.4	1.0	115.8	3.0
Trade.....	498.0	3.2	509.7	2.3	526.9	3.4	533.3	1.2	542.9	1.8	560.3	3.2
FIRE**.....	135.6	6.2	139.6	2.9	144.4	3.4	150.4	4.2	153.4	2.0	158.8	3.5
Services.....	626.1	4.9	677.8	8.3	708.5	4.5	710.6	0.3	724.8	2.0	761.1	5.0
Government.....	341.5	4.1	354.1	3.7	366.7	3.6	376.6	2.7	384.9	2.2	388.7	1.0
<b>Total Wage and Salary Employment.....</b>	2,074.7	4.5	2,163.1	4.3	2,242.8	3.7	2,265.7	1.0	2,289.5	1.1	2,357.8	3.0
<b>Unemployment Rate.....</b>	4.1%		4.4%		3.9%		4.7%		5.0%		4.5%	

\*Transportation, Communications and Public Utilities      \*\*Finance, Insurance and Real Estate  
Source (Tables 3 and 4): Bank One Economic Outlook Center, L. William Seidman Research Institute, College of Business, Arizona State University.

# Arizona Leading Index continues to rise in March

The Bank One Arizona Index of Leading Economic Indicators rose in March to 115.8. The index was 1.0 percent above the revised 114.7 number for the previous month and 4.8 percent above the March 2001 number of 110.5 (1987 = 100).

Sensitive materials prices, materials inventories, new orders, production, employment from the Business Conditions Survey, hours worked in manufacturing, delivery times and the inflation-adjusted value of Maricopa County residential building permits were positive. The inflation-adjusted value of the M2 money supply was negative.

The Leading Index has been positive for five months in a row, which is a very strong signal that the economy is about to turn the corner. The index typically turns up six to nine months before the general economy.

The index turned positive despite the weakness of the signal coming from residential construction, which has had a net -.03 contribution over the five months. Single-family permits were down 11.2 percent year-to-date through March in Maricopa County.

Single-family permit growth had to slow eventually, given the weakness in the job market, but so far it has not slowed nearly as much as in past downturns. The tie between the job market and single-family construction is twofold: (1) economic uncertainty discourages current homeowners from trading up in the market, and (2) jobs are the primary reason for immigration.

The picture for commercial construction is not nearly as bright. It is not surprising that a recession in which the biggest declines occurred in business spending has seen significantly lower commercial activity. Still, Arizona is in better shape than in the late '80s when vacancy rates were even higher over a longer period of time before construction slowed. Commercial construction often is referred to in terms of "pipelines" because it takes time for projects to be approved, financed, and constructed. The pipeline at present is either empty or nearly so, and it will take time to refill the pipeline once conditions improve.

The state will have to wait until later this year to see an improvement in employment, since job growth tends to lag the general

economy — particularly during recoveries. It is encouraging that the employment component of the Arizona Business Conditions Survey has been at least mildly positive during four of the last five months. Employment is likely to turn around sooner in goods-related industries — they have been suffering for a longer period than have other sectors of the economy.

The rate of increase of sensitive materials prices continues to accelerate. Manufacturing was expected to show some rebound in activity during the first quarter because of inventory rebuilding, but the sensitive material index seems to indicate that manufacturers anticipate a more

sustained increase in demand. Economic activity appears to be picking up worldwide, which should mean an increase in exports. However, the boost in exports will not be enough to counterbalance the impact of rising oil prices on imports. Thus the net export picture is expected to get worse, rather than better, over the next two years. A bright spot for Arizona is that Asia will be in good shape (with the exception of Japan) and Mexico is expected to improve along with the U.S.

— Tracy Clark

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TABLE 1

## NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS

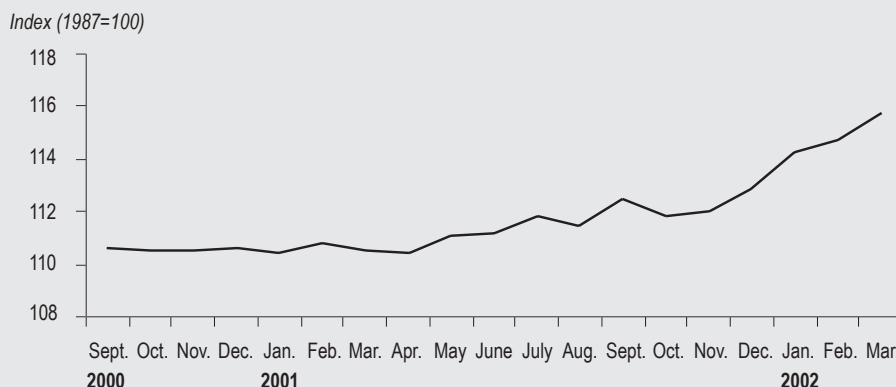
	Net Contribution*			
	December	January	February	March
Delivery Time* .....	0.00	0.16	-0.02	0.06
Inventory Levels* .....	-0.12	0.28	-0.04	0.25
New Orders* .....	0.11	0.18	-0.04	0.20
Production* .....	0.09	0.15	0.10	0.10
Employment* .....	0.12	0.29	0.12	0.08
Residential Building Permits .....	-0.02	0.13	-0.20	0.02
Average Workweek, Manufacturing .....	0.04	-0.11	-0.04	0.07
Money Supply .....	0.46	0.02	0.23	-0.13
Change in Sensitive Materials Prices .....	0.09	0.16	0.27	0.32

\* 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 (Table 1 and Figure I): Bank One Economic Outlook Center, L. William Seidman Research Institute, College of Business, Arizona State University.

# Recession nationally and in Arizona likely ended early in 2002

With the data that were available at the end of March, it is not possible to conclusively state that the recession is over, but many indications of a recovery can be seen. If the recession indeed ended early in the year, it will have been quite an average recession both in length and magnitude of decline in economic activity, at least as measured by employment and retail sales. However, construction — especially residential — did not decline as severely as in the past. This contributed to the national gross domestic product hardly declining, which has caused some analysts to question whether the economy really was in recession. Other indicators, however, clearly indicate that a recession began in April 2001 and lasted through at least January 2002.

## EMPLOYMENT

The national recession that began in April 2001 ended the longest economic expansion on record. Two aspects of this expansion were unusual. First, it began with an unusually long recovery period of nearly two years in which modest employment growth was realized, with some months of declines mixed in. Most post-World War II recoveries were brief, less than five months in length, though an even longer period of slow growth occurred in the early 1960s. The average monthly employment gain during the 1991-93 recovery of 75,000 was typical of prior recoveries.

As in some previous expansionary periods, especially those of long length, the rapid growth that followed the recovery was split into two parts, with a slower period of growth coming at a time when some prior expansions may have ended with a recession. The first of the fast-growth periods, from 1993 into 1995, lasted 23 months, with average monthly employment gains of 295,000. Both the length and magnitude of the gains were characteristic of prior rapid-growth periods. The slower period of growth in 1995, averaging 137,000 net monthly employment gain, lasted 11 months, also representative of prior slow growth periods in length and magnitude of gains. The second fast-growth period began in early 1996 and lasted through May 2000, a span of time much longer than any prior fast-growth period (52 months versus the prior post-war record of 32 months) — the second aspect in which the recent expansion

was unusual. Average monthly employment increases of 258,000 during this period were like those of other fast-growth periods.

The recession that began in April 2001 was ushered in by a slow-growth period of 10 months, in which employment rose an average of 75,000 a month. The length and strength of this period were similar to those of prior slow-growth periods that ended in a recession. Assuming that the recession ended in January 2002 (based on employment growth being registered in February and other signs of recovery), the period of contraction lasted 10 months, during which employment decreased at a average monthly pace of 146,000. Both the length and intensity of the declines were typical of prior postwar recessions.

Nationally, the average monthly change in employment was negative during 2001 for the first time since 1991. As of the latest estimates for February 2002, national employment was off 1.0 percent on a year-over-year basis. The total decline from

the peak in March 2001 to the trough in January 2002 was 1.1 percent.

In Arizona, the recent economic expansion was much like that of the nation, except for much faster percentage employment growth throughout. The fast-growth period began a couple months earlier in 1993, with the second fast-growth period ending at the same time as the nation in May 2000. The main difference from the national experience is that employment growth did not slow in Arizona during 1995. Like the nation, Arizona experienced slower growth from June 2000 through March 2001, with the recession beginning in April 2001 — all of the dates matching the national average. The latest employment estimate for February 2002 still showed a monthly decline, thus the timing of the recovery cannot yet be ascertained. The magnitude of the employment decline from the March 2001 peak through February 2002 was 1.8 percent, slightly deeper than the national average.

FIGURE I  
ANNUAL CHANGE IN ARIZONA EMPLOYMENT

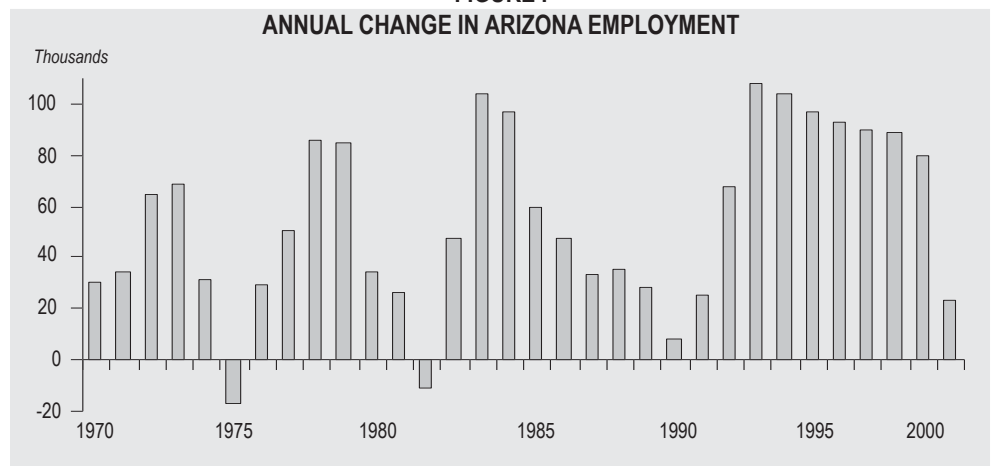
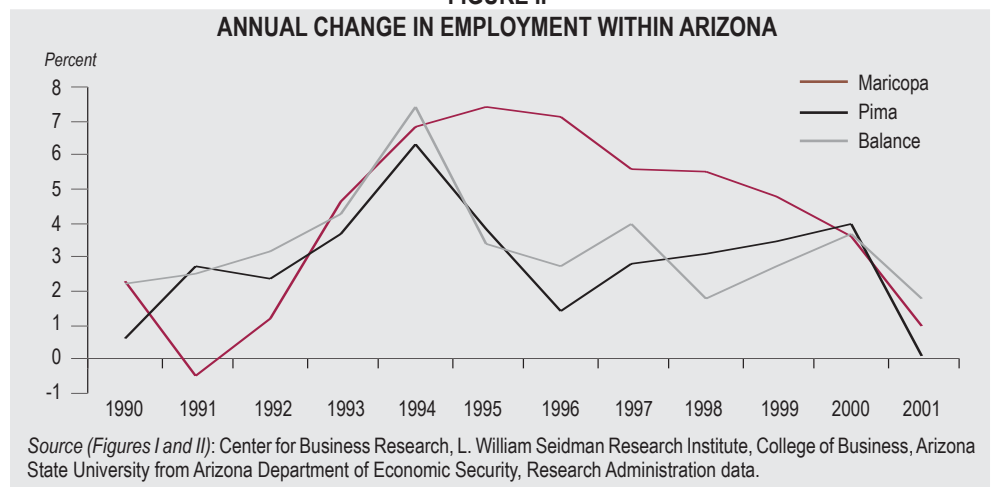


FIGURE II  
ANNUAL CHANGE IN EMPLOYMENT WITHIN ARIZONA



Source (Figures I and II): Center for Business Research, L. William Seidman Research Institute, College of Business, Arizona State University from Arizona Department of Economic Security, Research Administration data.

The Arizona employment figures reflect the annual benchmarking performed by the Arizona Department of Economic Security. Most of the monthly estimates for 2000 and all estimates for 2001 were revised. Employment estimates for 2000 were revised down significantly in the business services category, but changes in most of the other categories were slight. The decrease in overall growth rate occurred across the state, though only marginally in the Tucson area.

The revision to the overall 2001 estimates lowered the figures in the first five months of the year, but raised the estimates for the rest of the year slightly so that the effect on the annual average change was a small downward correction. Employment was revised up in some industries, but down in others; the most significant change was to lower business services employment early in the year. Estimates for the Phoenix area were recast down early in the year, but revised up moderately in the second half of the year. Downward corrections were made throughout the year for the rest of the state.

The annual average increase in employment in Arizona in 2001 was 22,900, well below the gains of the prior several years (see Figure I). The gains during these years were not much different than at the peak of the 1980s expansion, but the number of years of strong advances in the 1990s was greater.

At the beginning of 2001, the annual increase was nearly 60,000 but by December an annual decrease of nearly 29,000 was registered. The average annual increase in 2001 was close to that for 1990, when the prior recession began. As in 1991, the annual average figure in 2002 likely will be less than in the prior year, even though month-to-month employment gains are likely across most of the year. On a percentage basis, employment gains started 2001 at close to 3 percent, but ended the year at -1 percent. The annual average for 2001 was 1.0 percent.

Although most industries experienced a slowdown in growth during 2001, some continued to post gains in employment while the number of jobs in others decreased. The strongest percentage gains in 2001 were in finance, insurance and real estate (with a growth rate higher than in 1999 or 2000); local government; and health services, all near 4 percent. Employment fell more than 5 percent in manufacturing of non-durable

goods and 4 percent in business services, with the latter far below the strong growth rates posted in 2000 and earlier years. Other industries with a drop in employment included mining, durable-goods manufacturing, wholesale trade, lodging places, and the federal government.

Nearly 70 percent of the state's employment is in Maricopa County. Between 1994 and 1999, its share of the state's employment gain ranged from 77 to 87 percent, but the share was near 70 percent in 2000 and 2001. Of the state's 22,900 increase in employment in 2001, Maricopa County was responsible for 16,100; the county's percentage gain was 1.0 from 2000. Pima County's employment hardly rose in 2001, up just 300 (0.1 percent). The percent change (1.8) was highest in the balance of the state, which added 6,500 jobs. A comparison of growth rates is shown in Figure II.

### RETAIL SALES

Retail sales in Arizona were weak throughout 2001, continuing the slump that began in November 2000. Adjusting for inflation, retail sales dropped marginally in 2001, the first decline since 1991. Gains from 1992 through 2000 had been at least 4 percent in every year, mostly exceeding 5 percent (see Table 1).

Retail sales in Arizona totaled \$44.8 billion in 2001. Among the categories shown in Table 2, sales volumes were greatest for motor vehicles and restaurants and bars, though the not-categorized sales nearly

equaled the sum of these two categories. The growth rate was lower in 2001 than in 2000 in most categories, with inflation-adjusted declines in 2001 in half of the categories. In comparison, sales of building materials were up 6 percent and motor vehicle sales rose 8 percent on an inflation-adjusted basis, the fourth straight year of gains exceeding 7 percent. Auto sales were extremely strong in October and November, in response to lucrative deals being offered following the events of September. In contrast, sales in several categories, including general merchandise and furniture, slumped badly during these months.

Between 1991 — the end of the last recession — and 2001, retail sales climbed the most by far in the motor vehicles category. Strong gains also were recorded by companies whose primary business is

**TABLE 1**  
**ARIZONA RETAIL SALES**  
**(Percent Change)**

	<i>Nominal</i>	<i>Real</i>	<i>Real per Capita</i>
1992.....	7.7%	5.1%	2.3%
1993.....	9.0	6.4	3.3
1994.....	12.0	9.8	6.1
1995.....	8.8	6.5	2.5
1996.....	5.9	3.9	0.1
1997.....	7.0	5.0	1.4
1998.....	7.2	5.9	2.5
1999.....	10.0	8.5	5.1
2000.....	7.8	5.3	2.3
2001.....	2.0	-0.2	-3.1

**TABLE 2**  
**ARIZONA RETAIL SALES BY CATEGORY**  
**(In Millions)**

	2001	<b>Real Percent Change</b>			
	2001	2000	1999	1991-2001	
Not Categorized* .....	\$13,172	-2.3%	7.4%	10.3%	97%
Motor Vehicles.....	7,526	8.1	10.7	14.7	151
Restaurants and Bars.....	6,359	0.5	4.8	7.2	63
General Merchandise .....	3,645	-8.0	2.9	2.3	25
Food Stores** .....	3,014	0.3	-0.2	5.6	25
Miscellaneous.....	2,629	-3.7	0.7	7.2	28
Apparel and Accessories .....	2,426	4.4	3.6	3.6	40
Building Materials .....	2,204	6.0	3.0	9.1	86
Furniture Stores.....	1,971	-6.8	4.8	9.0	74
Miscellaneous Vehicles .....	1,895	-1.6	1.2	5.3	88
TOTAL .....	44,843	-0.2	5.3	8.5	74

\* Sales by companies whose primary business is not retail trade

\*\* Sales of non-food items only

Source (Tables 1 and 2): Center for Business Research, L. William Seidman Research Institute, College of Business, Arizona State University. Retail sales from Arizona Department of Revenue. Inflation adjustment uses the GDP Implicit Price Deflator of the U.S. Department of Commerce.

not retail sales and in the miscellaneous vehicles and building materials categories. Increases were less than half the overall figure in food stores, general merchandise stores and miscellaneous retail.

In Maricopa County, retail sales in 2001 reached \$30.6 billion, a little more than two-thirds of the state's total. Real retail sales decreased in Maricopa County by 0.7 percent in 2001, compared to marginal gains in Pima County (0.2 percent) and the balance of the state (1.9 percent). The growth rate in the two populous urban counties was much less than in 2000, while the slowing of growth was modest in the balance of the state. In the Phoenix area, the weakest sales of the year relative to the prior year came in the September through December period. Sales during this period also were weak in the Tucson area but slight real gains continued in the balance of the state, which had experienced its weakest sales during the fourth quarter of 2000.

Nationally, real retail sales (which are defined somewhat differently than in Arizona — see box) rose 1.2 percent in 2001. In 2000, the Arizona increase had only matched the national average following considerably more rapid growth in six

of the prior seven years. The cumulative inflation-adjusted gains over the last nine years (national data were revised back only to 1992) were 64 percent in Arizona and 43 percent nationally. However, Arizona's much more rapid population growth accounted for all of the state's greater advance in retail sales. Real per capita growth in Arizona between 1992 and 2001 was 22 percent, compared to the national average of 29 percent. The cumulative real per capita advance in Maricopa County also was less than the national average at 27 percent, but the advance was only 17 percent in Pima County and 7 percent in the balance of the state.

Arizona's per person loss in 2001 was 3 percent, the same as in the previous recessionary years of 1990 and 1991. In contrast, real per capita sales rose in each year between 1992 and 2000, by more than 2 percent in seven years, including 2000. Thus, a sharp swing in conditions occurred between 2000 and 2001. Nationally, a small rise in per capita retail sales occurred even in 2001.

Throughout the state, the decrease in real per capita sales in 2001 was similar to the declines during 1990 and 1991. The level

of per capita sales in 2001 was 19 percent higher in Maricopa County (\$9,576) than in Pima County (\$8,020). The per capita level in the balance of the state was far less at \$5,777.

— Tom R. Rex  
Research Manager

The retail sales data discussed in this article are derived from sales taxes collected by the Arizona Department of Revenue. This data source is limited in that it is designed to be an accounting series in which the emphasis is on collection of taxes, thus categorical and timing errors in the reports of retailers are not corrected. Information is available only for items subject to the general sales tax; food purchased to be consumed at home and gasoline are excluded. The categorical figures shown in Table 2 should be viewed as estimates. The Arizona data are not consistent with national data, which include food and gasoline but exclude sales made by companies whose primary business is not retail trade.

## Business Conditions Index surges ahead in March

The seasonally adjusted Arizona Business Conditions Index rose to 57.7 in March from 49.5 the previous month. An index reading over 50 indicates that the local economy is growing, while a reading below 50 suggests a slowdown in the overall level of economic activity in the near term.

### ANALYSIS

The index leapt by 8.3 points in March to the healthy level of 57.7, indicating that economic growth has returned to the Grand Canyon State. This is the highest level that the overall index has attained since October 2000, and the first time in over a year that it has risen above 50. The index had dropped below 50 in January 2001, foretelling the recession to come in Arizona later in the year. The expected level of growth in the economy rises in proportion to the overall index as it climbs above 50.

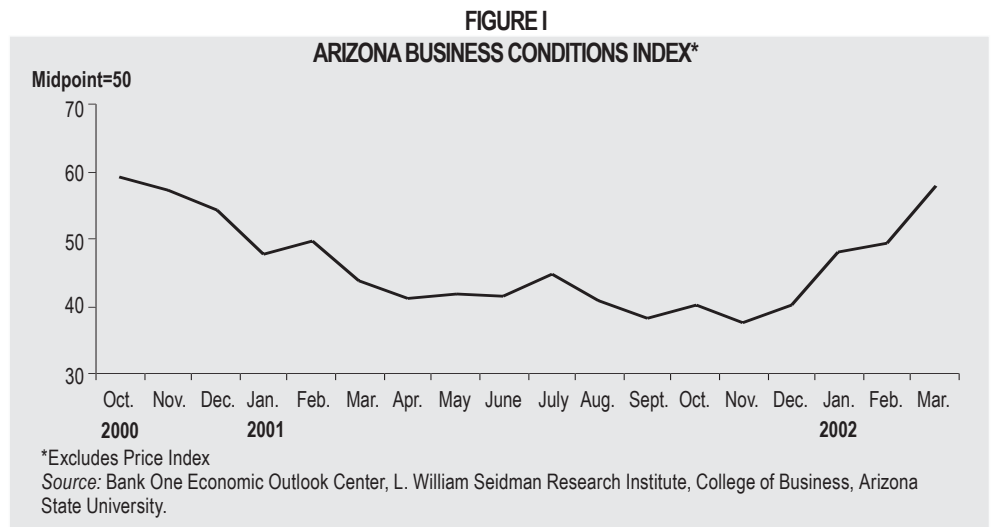
The subindex of new orders jumped by 15.7 points to reach 64.9 in March, and was the main reason for the high level of the overall index. The production subindex rose to 61.7 from 55.9 the previous month. The

employment subindex rose only by 2.5 points, however, to reach 46.2. This means that output in the state is higher, but employment, although much improved from a few months ago, is not yet growing again.

The Price Index rose 3.4 points to reach 56.1 in March, indicating upward pressure on prices in the local economy. This is to be expected at a time in which demand is

increasing rapidly. When demand fell away as the state found itself involved in the national recession, the Price Index dropped. Now that economic growth has returned to the local economy, the Price Index is rising.

— Dawn McLaren  
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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	115.8	114.7 r	1	4.8	NA	NA
<b>BUSINESS CONDITIONS INDEX</b>							
Arizona .....	March	57.7	49.5	16.7	32.2	NA	NA
<b>BUILDING PERMITS (Thousands of \$)</b>							
Maricopa County .....	February	629,475	667,509	-5.7	-32.0	1,296,984	-21.7
Pima County .....	February	98,181	94,925	3.4	-3.8	193,106	-3.2
Balance of State .....	February	153,785	154,524	-0.5	15.0	308,309	13.0
Arizona .....	February	881,441	916,958	-3.9	-24.1	1,798,399	-15.5
<b>TOTAL HOUSING UNITS AUTHORIZED</b>							
Maricopa County .....	February	2,825	2,770	2	-42.8	5,595	-35.6
Pima County .....	February	665	545	22	11.2	1,210	1.9
Balance of State .....	February	1,278	1,289	-0.9	10.1	2,567	4.6
Arizona .....	February	4,768	4,604	3.6	-28.8	9,372	-24.0
<b>HOME SALES</b>							
Maricopa County - Number .....	February	7,030	5,960	18	12.5	12,990	-4.3
Maricopa County - Median Price(\$)	February	140,000	141,100	-0.8	4.6	140,650	6.2
<b>HOUSING AFFORDABILITY INDEXES</b>							
Metropolitan Phoenix - New Homes .....	4th Quarter	103	100	3	7.3	NA	NA
Metropolitan Phoenix - Resale Homes .....	4th Quarter	117	113	3.5	2.6	NA	NA
<b>MORTGAGE RATES (30-year Fixed)</b>							
Maricopa County .....	March	6.7	6.6	1.5	0.0	NA	NA
<b>POPULATION ESTIMATES (Thousands)</b>							
Maricopa County .....	4th Quarter	3,245	3,221	0.8	3.1	NA	NA
Pima County .....	4th Quarter	877	874	0.4	2.3	NA	NA
Balance of State .....	4th Quarter	1,276	1,268	0.6	2.8	NA	NA
Arizona .....	4th Quarter	5,398	5,362	0.7	2.9	NA	NA
<b>RETAIL SALES (Millions of \$)</b>							
Maricopa County .....	February	2,425	2,341	3.6	6.2	4,766	1.1
Arizona .....	February	3,562	3,441	3.5	4.6	7,003	1.2

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, College of Business, Arizona State University. Retail sales data are from the Arizona Department of Revenue.