

AZB ARIZONA BUSINESS

ARIZONA STATE UNIVERSITY'S MONTHLY NEWSLETTER ON THE ARIZONA ECONOMY

State's 'snowbird' count estimated at 300,000 or more

Approximately 150,000 winter residents — popularly known as “snowbirds” — were living in mobile homes and RV/travel trailer parks throughout Arizona at the height of the 2002-03 winter season, according to a survey conducted by the Center for Business Research. Unfortunately, no equivalent estimate exists for the number of snowbirds staying in other types of accommodations. However, the size of the snowbird population in the state’s RV/travel trailer/mobile home parks implies that Arizona may have been the temporary home to a total winter resident population of 300,000 or more during the past season.

trailer/RV spaces, occupancy rates, and numbers of winter resident households, as of the first week of February 2003. Parks for which no phone number was available or who requested it were sent a mail survey. The Center ultimately obtained information from 429 parks, representing approximately 60 percent of total spaces in the database.

The data provided by the responding parks was tabulated and used to produce the estimates of the winter resident population and the other statistics reported in this article. For non-responding parks, counts of the number of mobile home and travel trailer/RV spaces from the ASU database were combined with the survey information to estimate the number of occupied spaces and of spaces occupied by winter residents.

THE SURVEY

The Center for Business Research has conducted an annual survey of mobile home/RV/travel trailer parks in the Phoenix area for the past 19 years. In 1990 the study was expanded to include areas outside the Phoenix/Apache Junction area. Since 1991-92, the survey has included parks in an 11-county region (previous research indicated few winter residents in the four northern/eastern counties of Apache, Coconino, Navajo, and Greenlee).

The purpose of the annual winter resident study is to estimate the size and the economic contribution of the large number of part-time residents who spend the winter season in Arizona. While some consider these winter residents to be part of the overall tourist population, it is more correct to consider them as one segment of the flow of retirement migration to Arizona — retired or semi-retired persons who spend their winters enjoying the state’s warm winter weather and outdoor lifestyle, but who have chosen not to relocate permanently from other parts of the nation where they spend the rest of the year.

There is no universally accepted definition of a winter resident. For this study, the term refers to a person who is not a year-round resident but who lives in Arizona for at least one month during the winter season. This distinguishes them from the broader term of “winter visitor” who comes to the state during the winter season but stays for a shorter period of time.

Mobile home and RV parks in the 11-county study area were surveyed by telephone during February and March. Owners/managers of the parks were asked about numbers of mobile home and travel

SURVEY RESULTS

The 541 Phoenix/Apache Junction area parks included in the study’s database had a total of 102,500 spaces [Table 1]. Valleywide occupancy rates during February 2003 were 93 percent — about the same as reported in recent years.

An estimated 41,900 winter resident households were living in Phoenix area parks in February 2003. Assuming two persons on average in each winter resident household (as indicated by previous research), about 84,000 winter residents lived in area RV/ travel trailer/mobile home parks at the height of the 2002-03 season.

The 466 parks in the study’s database for the survey area outside of the Phoenix/Apache Junction area contained a total of 74,600 spaces [Table 2]. Occupancy rates in February 2003 averaged 88 percent, slightly lower than reported in recent years. Overall occupancy rates varied across the state, with

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Annual Winter Residents Study

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the highest in Tucson area parks and the lowest for parks in the southeastern region.

Based on the survey results, an estimated 33,800 snowbird households were living in parks outside of the Phoenix/Apache Junction area in February 2003. The percentage of spaces occupied by winter residents varied widely across the state. The highest proportion was found in the Yuma area and the lowest in the Tucson area.

Again assuming approximately two persons per household, about 68,000 winter residents were living in RV/travel trailer/mobile home parks outside the Phoenix/Apache Junction area at the height of the 2002-03 winter season.

Statewide, the 1,000-plus parks included in the study contained more than 177,000 spaces with an overall occupancy rate during February 2003 of 89 percent. Even though the greatest concentration of snowbirds was in the Phoenix/Apache Junction area, many park winter residents also stayed in other communities in southern Arizona.

ECONOMIC CONTRIBUTION

Spending by winter resident households provides a major stimulus to the economies of many Arizona communities. The results of a 1995 *Arizona Republic* survey of Phoenix area winter residents indicated the typical seasonal household stayed four months and spent an estimated \$1,600 per month in Arizona during their stay. Based upon these figures (adjusted for inflation), seasonal residents staying in area RV/travel trailer/mobile home parks in the Phoenix/Apache Junction area spent approximately \$340 million during the 2002-03 winter season.

Using the same assumptions, consumer spending by snowbird households living in parks in the rest of the study area would have been about \$270 million. Overall, park snowbirds throughout the state injected more than \$600 million into the Arizona economy during the 2002-03 winter season.

COMPARISONS WITH 2002 SURVEY

The Center for Business Research had conducted an annual census similar to this year's study every winter season since 1984 until last year. But over the years, it had become much more time-consuming and expensive. With fewer resources available to devote to the project, a decision was made to cut back on the scope of the study for the 2001-02 season. Rather than a complete census, only a sample of parks across the state was surveyed. Responses from the 60 parks

that participated indicated that the number of park snowbirds in the Phoenix/Apache Junction area was about the same as the year before, but that the rest of the state suffered a decline in 2001-02.

Unfortunately, the CBR analysts felt that the data from the sample survey were not sufficient for the kind of numerical estimates of the winter resident population that had been produced in previous years. Even though no population estimates were prepared for 2001-2002, the issue of how the current winter season compares with previous years is always of interest. So, responses from the participating parks from the 2002-03 census were matched with the results of last year's sample survey, and a set of 40 parks that provided data for both years were identified. The results of

this matching process show that overall occupancy rates were very similar — slightly less than 90 percent for both winter seasons — but larger numbers of winter resident households were living in Phoenix/Apache Junction area parks, while there were fewer snowbirds in the parks in the other communities. However, closer inspection of the data indicated that this apparent decline was due to the fact that many parks were reporting more short-term visitors rather than a drop in the overall numbers of non-resident households staying in the parks during the winter season.

Comparison of the 2002-03 results with those from the 2000-01 park census show a similar shift in the mix of short-term versus long-term residents, and the overall number of winter resident households were down

TABLE 1
WINTER RESIDENTS IN MOBILE HOME AND RV/TRAVEL TRAILER PARKS
PHOENIX-APACHE JUNCTION AREA
2002-2003 SEASON

	East Valley	Phoenix	West Valley	TOTAL
Total Spaces.....	66,500	18,100	17,900	102,500
Number of Occupied Mobile Home Spaces.....	39,100	15,300	12,200	66,600
Percent Occupied by Winter Residents.....	46	11	15	32
Number of Occupied RV/Travel Trailer Spaces.....	21,400	1,900	5,400	28,700
Percent Occupied by Winter Residents.....	71	38	81	71
Total Number of Occupied Spaces.....	60,500	17,200	17,600	95,300
Percent of All Occupied Spaces				
Occupied by Winter Residents.....	55	14	35	44
Number of Spaces Occupied.....	33,300	2,400	6,200	41,900

TABLE 2
WINTER RESIDENTS IN MOBILE HOME AND RV/TRAVEL TRAILER PARKS
OUTSIDE THE PHOENIX-APACHE JUNCTION AREA
2002-2003 SEASON

	Yuma Area	Tucson Area	Western Region	Central Region	Southeast Region	TOTAL
Total Spaces.....	20,500	23,200	13,000	11,600	6,300	74,600
Number of Occupied Mobile Home Spaces.....	4,000	15,400	1,400	3,500	2,600	26,900
Percent Occupied by Winter Residents.....	69	26	18	33	37	34
Number of Occupied RV/Travel Trailer Spaces..	14,300	5,900	9,800	6,300	2,200	38,500
Percent Occupied by Winter Residents.....	69	54	64	63	63	64
Total Number of Occupied Spaces.....	18,300	21,300	11,200	9,800	4,800	65,400
Percent of All Occupied Spaces.....						
Occupied by Winter Residents.....	69	34	58	52	49	52
Number of Spaces Occupied.....	12,600	7,200	6,500	5,100	2,400	33,800

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

Note: Western Region: La Paz and Mohave counties. Central Region: Gila, Pinal (not including Apache Junction) and Yavapai counties. Southeast Region: Cochise, Graham and Santa Cruz counties.

compared to two years ago. The winter resident population in Phoenix/Apache Junction area parks was up somewhat — an estimated 41,900 households versus 40,400 in 2000-01 — but declined in the rest of the study area (33,800 versus 36,800 households). But again the drop was the result of a big increase in short-term visitors in the parks. In the 2002-03 survey, RV/travel trailer park owners and managers of parks outside the Phoenix area reported that the proportion of short-term visitors jumped to 17 percent versus 10 percent in 2000-01, while the share identified as winter residents dropped from 71 to 64 percent. Thus it appears that a trend may be developing away from a sedentary population of winter residents who return each year to spend the winter in the same park toward a more mobile lifestyle where snowbird households travel around in their RVs during the winter staying in multiple locales for shorter periods of time.

TOTAL WINTER RESIDENT POPULATION

The annual ASU survey enumerates winter resident households in the state's mobile home/travel trailer/RV parks, the single largest group. However, snowbirds also stay in single-family homes, townhouses, condominiums, apartments, hotels and motels, with friends and relatives, and on public lands. Surveys of winter residents conducted several years ago by the Center for Business Research indicated that approximately 50 percent of the respondents were staying in mobile home/travel trailer/RV parks at the time of the survey. Assuming that this ratio is still valid and extrapolating from this year's estimate of 41,900 park households in the Phoenix/Apache Junction area implies a total of about 84,000 winter resident households at the peak of the 2002-03 season.

Information is even more limited for the winter resident population outside the Phoenix area. However, surveys of Yuma

seasonal households by Norton Consulting found about three-quarters of winter residents living in mobile homes/travel trailers/RVs. Using the proportion from the Phoenix area household surveys for Tucson and the proportion found in the Yuma area for the other communities, this year's estimate of 33,800 winter resident households in parks outside the Phoenix area implies a total population of approximately 50,000 households. The statewide household figure of 134,000 park households implies a total population of approximately 270,000 winter residents in Arizona at the height of the 2002-03 season.

Unfortunately, this approach may no longer be providing even a good guess at the total snowbird population. While the results differed a little for this year's survey, a clear trend has been observed in recent years. While the number of parks and the snowbird population are still in a growth mode in some communities outside the state's two major metro areas, the numbers of snowbird households have been declining in big-city parks.

Part of the explanation lies in the sharply rising rents and leases for mobile home and RV spaces in the Phoenix area as permanent population growth has converged on the parks and made land more valuable. Some parks have disappeared entirely as the land has been converted to other residential or commercial uses.

Many other factors also are affecting the number of winter residents coming to Arizona in recent years. For example, fewer Canadians have been coming because of their depreciated dollar and tighter restrictions on their health care plans. However, a great deal of the explanation seems to lie in changing attitudes towards housing by the snowbirds. There is anecdotal information that more snowbirds have apparently moved into second homes, condominiums, and apartments in large numbers. Nationwide there are now

3.6 million seasonal homes — up from 3.1 million in 1990 and 1.7 million in 1980, according to 2000 Census figures — and second homes comprised 6 percent of home sales in 2001. In the Phoenix area the proportion is much higher — local real estate analysts estimate that as many as one-fourth of home sales in 2001 were not primary residences.

Purchases of motor homes and other RV's also have increased in recent years, according to the Recreational Vehicle Industry Association. Evidence of this trend on the Arizona snowbird industry may be the jump in the proportion of short-term stays reported in this year's park census.

Increasing RV ownership may also be contributing to another Arizona snowbird-related phenomenon not captured in our winter resident population estimates. Each winter, thousands descend on public lands near the small community of Quartzsite, 100 miles west of the Phoenix area. The visitors camp in long-term visitor areas, overseen by the Bureau of Land Management, for varying lengths of stay from October to April. Between 1995 and 2002, the number of LTVA permits issued averaged 8,650 per year.

For all these reasons, estimates of the total snowbird population based upon the methodology used in the past are suspect. Without much more extensive survey work, an accurate count of the total number of winter residents is impossible, but taking these kinds of anecdotal information into account, a guess of "more than 300,000" might be a speculative but reasonable estimate of the overall snowbird population.

— Timothy Hogan

Director, Center for Business Research

— Stephen K. Happel

Professor of Economics

— Katrina S. Walls

Research Analyst

Net migration likely bottomed out in first quarter

Net migration to the Phoenix area slipped further during first quarter 2003, totaling just 9,500 — the lowest figure since mid-1992, but not as low as experienced during the 1990-91 recession. This probably will be the lowest figure of this economic cycle, given that employment began to rise in spring 2002 and the typical one-year lag between employment growth and net migration.

In Maricopa County, the population at the end of the first quarter is estimated to have been 3,346,500, an annual increase of 80,900 (2.5 percent). Net natural increase (more births than deaths) continued to rise slightly and accounted for 42 percent of the annual change. Net migration slowed over the four quarters, from 15,100 in the second quarter of 2002 to 12,500 (Q3) to

9,900 (Q4) to 9,500 in first quarter 2003.

Pima County's population reached 896,900 during the first quarter, a gain of 16,100 over the year (1.8 percent). Growth was fastest in the balance of the state, with the population up 2.8 percent (36,500) to 1,322,500.

— Tom R. Rex

Research Manager

Home sales, affordability continue strong in first quarter

Despite widespread anxiety about the war and the economy, the Greater Phoenix housing market set a record for first-quarter activity with 25,725 recorded sales — well over the 21,955 sales recorded for the same period last year. The previous record was set in first quarter 2001 with 22,430 recorded sales. The strength of the housing market, both in number of sales and the strong appreciation in prices, continues to be one of the few bright points for the economy.

While people remain concerned about the economy, the employment outlook, and the international situation, they appear to be confident about the long-term expectations for their housing investment. While the first-quarter recorded sales activity represents decisions made several months earlier, the housing market continues to offer benefits of low interest rates, rapid appreciation and investment opportunities. Analysts expect that the market is likely to retain its strength for the remainder of 2003, even if the interest rates rise as the economy recovers.

AFFORDABILITY

The ever-present economic concerns have benefited home buyers, because funds have flowed from the uncertain equity market to the bond market, driving down interest rates. The average 30-year mortgage rate declined from 6.7 percent in first quarter 2002 to 5.5 percent (it stood at 5.8 percent in the final quarter of 2002).

In the resale home market, the median home price rose to \$148,750, compared to the previous record of \$147,000 set in fourth quarter 2002. Last year, the median resale home price was \$139,700. For new homes, the median price decreased from \$164,540 to \$163,545, but was ahead of last year's \$158,015. The slower rise in new home

median price is primarily due to the increasing role of the lower-priced housing market in the West Valley.

With lower interest rates and a slightly higher median household income offsetting a higher median resale home price, the resale affordability index increased from 128 in fourth quarter 2002 to 131 — much improved from the 122 reported a year ago. However, the resale affordability index remains below the record level reported in first quarter 1999 (139). With the decline in new home median prices, the new home affordability index value improved slightly from 115 to 119, which is well above last year's 108.

An index value of 100 means that the typical home buyer would be able to afford a median-priced home at an effective interest rate of 8.4 percent, based on the current median resale price and household income. Since home prices and incomes vary throughout the Valley, so does the affordability index. For example, in the resale sector, the third-quarter 2002 index ranged from 93 in North Scottsdale to 142 in the Glendale area, to 149 in the Maryvale area to 165 in the West Valley communities.

RESALE SINGLE-FAMILY HOMES

With 15,030 recorded sales, the Greater Phoenix resale home market set a record for first-quarter activity, easily surpassing the previous record set in first quarter 2001 (13,275 homes). For first quarter 2002, only 12,655 resale homes were recorded sold. This year, resale activity was appreciably stronger with 4,215 sales in January, 4,090 sales in February and very strong March with 6,725 sales.

The median home price can be driven by the appreciation in home prices and by the

change in the respective market shares of the homes being sold. In first quarter 2001, only 10 percent of the resale market was for homes sold in the \$250,000 to \$499,999 range, while it was 14 percent for the first quarter 2003. In first quarter 2001, 21 percent of the resale homes sold were priced under \$100,000, while it was 12 percent for the same period this year.

The median resale home price ranged greatly across the metro area, from a high of \$772,525 (90 sales) in Paradise Valley to \$74,750 (100 sales) in the Sky Harbor housing area. Active areas were: Mesa with 1,915 sales (\$134,900 median price), Glendale with 1,290 (\$136,200), Deer Valley with 1,205 (\$162,000), North Scottsdale with 1,040 (\$340,000), Maryvale with 535 (\$100,000) and Mountain Park with 500 (\$193,950).

NEW SINGLE-FAMILY HOMES

The new home market had its strongest start ever, with 7,125 recorded sales, up from 6,015 a year ago and 5,120 in first quarter 2001. Monthly activity was strongest in March (2,680 sales), with 2,050 sales posted in January and 2,395 in February.

Over the last few years, new home activity has become much more important in the West Valley communities of Avondale, El Mirage, Goodyear and Surprise. Currently, these communities represent 25 percent of the Greater Phoenix new home market. A fundamental motivation for this growth is the greater affordability of new homes in the West Valley. In the East Valley, the median new home prices were for \$214,740 in Chandler, \$192,140 in Gilbert and \$162,700 in Mesa. In the West Valley, the median home prices were \$132,000 in Avondale, \$123,740 in El Mirage, \$159,140 in Goodyear and \$145,180 in Surprise.

TABLE 1
HOUSING AFFORDABILITY INDEXES
Metropolitan Phoenix, Single-family Only

Quarter	Median Gross Monthly Income	Effective Interest Rate	Resale Homes			New Homes		
			Median Sales Price	Monthly Housing Payment	Affordability Index	Median Sales Price	Housing Payment	Monthly Affordability Index
First Quarter 2002	\$4,000	6.9%	\$139,700	\$920	122	\$158,015	\$1,040	108
Second Quarter 2002	4,020	6.6	144,000	920	122	155,250	995	114
Third Quarter 2002	4,030	6.2	146,000	895	126	159,535	975	115
Fourth Quarter 2002	4,040	6.0	147,000	880	128	164,540	990	115
First Quarter 2003	4,050	5.7	148,750	865	131	163,545	950	119

Source: Arizona Real Estate Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

With 34 percent of the 160 recorded new home sales priced in excess of \$500,000, North Scottsdale had a median sales price of \$381,060; the lowest was \$123,740 in El Mirage, based on 300 sales. Other active markets were: Deer Valley with 940 sales (\$210,105 median price), Superstition Springs with 290 (\$162,525) and Union Hills with 140 (\$286,445).

The median square footage for a single-family home recorded sold in first quarter 2003 was 1,640, larger than the 1,610 square feet reported a year ago.

TOWNHOUSE/CONDOMINIUMS

In recent years, the townhouse-condominium sector has been receiving greater attention from investors and owners who appreciate the low maintenance, recreational facilities and security offered by this housing style. The negative aspect of this popularity is that the median sale price for resale units increased from \$85,000 in first quarter 2000 to \$101,000 in first quarter 2003, with a resulting decline in sales activity from the record high in second quarter 2002 (3,685 units) to 3,215 units. However, even with the rapid increase in the median price, it remained at 68 percent of the median price for single-family homes.

Many of the newer developments are at the high end of the market; the median price of \$180,000 for new units actually exceeds the \$163,545 for new single-family homes. The primary reason for this is that 24 percent of the 355 recorded sales were in North Scottsdale, with a median sales price of \$238,180. Other active areas were East Mesa (30 sales, \$167,000), Superstition Springs (40 sales, \$128,950), and North Mesa (10 sales, \$156,175).

In the townhouse/condominium sector, the median square footage was 1,185, compared to 1,160 square feet reported a year ago. The most active resale areas were North Scottsdale with 455 sales (\$164,800 median price), South Scottsdale with 345 (\$120,000), Sun City/Peoria with 280 (\$75,000) and South Mesa with 185 (\$85,500).

NATIONAL HOUSING MARKET

The national resale market slowed during the quarter while the new home market improved, but both are performing above the levels of a year ago. The demonstrated strength of the market supports the opinion that housing will have another good year. The key issue will be whether continued economic uncertainty takes a further toll on consumer confidence and, in turn, dampens the potential of the market.

The national resale median home price rose from \$161,000 in the fourth quarter to \$161,500, well above last year's \$150,900. Lower interest rates tended to offset the higher median price, so the resale affordability index improved from 128 to 133 compared to 123 a year ago. In the new home market, the median price decreased from \$190,000 to \$180,200, resulting in the national new home affordability index improving from 108 to 119, compared to last year's 98.

LOOKING AHEAD

For the past few years, both the local and national economies have been struggling in a troublesome context of unstable international events, a volatile stock market, low consumer confidence and the absence of any real job growth. Although the war in Iraq is over and there are promising signs that a weak recovery could be underway, there is

uncertainty about the strength and duration of the potential recovery, and now there is a possibility of deflation or falling prices.

Given the continuing economic uncertainty, the Federal Reserve again lowered interest rates in May. Although lower rates could prolong the strong housing market, there is increasing concern that the weak economic environment or deflation could finally impact the market. The result could be lower prices and/or reduced rates of appreciation.

This falling market scenario has the potential to adversely impact two groups of people. One group consists of those who have become increasingly reliant on refinancing or home equity lines of credit to sustain their current lifestyle or even business operations. Lower prices will not allow these people to continually tap the increasing equity in their homes. The other group includes those who have purchased investment properties, with the intent to tap this equity source or sell them in a few years for a profit.

The continued weakness of the economic environment is not the only factor with the potential of hurting the Greater Phoenix housing market. Additional local factors include the continuing fiscal concerns for cities and state alike, the quality and availability of water, weak job growth and the absence of any pent-up demand to stimulate the housing market during a future economic recovery. Although the local housing market could someday be in the eye of a storm, it is likely to sustain good levels of activity for the coming months.

— Jay Q. Butler
Director,

Arizona Real Estate Center

TABLE 2
METROPOLITAN PHOENIX HOME SALES

Median Sales Price	Single-family			Townhouse/Condominium			Grand Total
	Resale	New	Total	Resale	New	Total	
First Quarter 2002	\$139,700	\$158,015	\$146,000	\$94,000	\$163,765	\$98,000	\$140,000
Second Quarter 2002	144,000	155,250	148,000	95,700	162,000	99,400	142,000
Third Quarter 2002	146,000	159,535	150,000	95,000	165,785	99,900	145,000
Fourth Quarter 2002	147,000	164,540	153,640	98,000	158,545	104,900	148,380
First Quarter 2003	148,750	163,545	153,610	101,000	180,000	107,000	148,380
<i>Number of Sales</i>							
First Quarter 2002	12,655	6,015	18,670	2,970	315	3,285	21,955
Second Quarter 2002	17,325	6,795	24,120	3,685	355	4,040	28,160
Third Quarter 2002	16,865	7,670	24,535	3,330	390	3,720	28,255
Fourth Quarter 2002	15,780	8,645	24,425	3,315	425	3,740	28,165
First Quarter 2003	15,030	7,125	22,155	3,215	355	3,570	25,725

Source: Arizona Real Estate Center, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University.

Economic growth still slow in 2003

Economic gains remained modest in early 2003. Employment markets continued to be weaker than other aspects of the economy, more so nationally than in Arizona.

Nationally, employment continued to fall through March 2003. Following four months of gains from May through August 2002, employment dropped in five of the next seven months, with an average monthly loss of 72,000. Employment levels in February and March were 0.2 percent less than 12 months earlier. Employment in Arizona continued to be modestly higher than 12 months earlier, with the February 2003 figure 1.1 percent (23,700) higher than in February 2002, the eighth consecutive month of higher year-over-year figures. Monthly, seasonally adjusted employment began to rise at the beginning of 2002, but acceleration in the growth rate has not occurred since then.

The national unemployment rate remained flat at 5.8 percent in March. The rate has been between 5.7 and 6.0 percent (mostly 5.8 percent) since February 2002. In contrast,

the unemployment rate in Arizona since December has been below 6 percent after holding at between 6.1 and 6.3 percent through the first 11 months of 2002.

Retail sales growth in Arizona early in 2003 was somewhat greater than during most of 2002. Following an annual average increase of just 1 percent in 2002 (before adjustment for inflation and population growth), the year-over-year gains in both January and February were 3 percent. Growth in Maricopa and Pima counties were near this rate, while advances in the balance of the state were twice as high.

Estimates of personal income are available through the end of 2002. Like the employment counts, the wages and salaries portion of personal income remained weak throughout 2002. Measured on a real per capita basis, wages and salaries rose marginally during the fourth quarter nationally and in Arizona after seven consecutive quarters of losses or no change. The year-over-year figure remained slightly negative. The growth in real per capita

earnings was a bit greater, also following seven straight flat or down quarters. Overall real per capita personal income did not fall much during the seven down quarters, but posted only a marginal gain during fourth quarter 2002.

Real per capita personal income growth in Arizona continues to be slightly less than the national average. Arizona's advances have lagged behind the nation almost continuously since 1995. As a ratio to the national average, Arizona's per capita personal income was 84.1 percent at the end of 2002, essentially equal to the low of the prior economic cycle (at the end of 1992). According to the Bureau of Economic Analysis, Arizona's annual average per capita personal income in 2002 was \$26,183. Only 12 states had a lower figure: eight southern states and the Rocky Mountain states of Idaho, Montana, New Mexico, and Utah.

— Tom R. Rex
Research Manager

Business Conditions Index declines in April

The seasonally adjusted Arizona Business Conditions Index declined to 50.1 in April from 51.3 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

While the national Purchasing Managers Index remained below the critical 50-point mark in April, Arizona's Business Conditions Index continued its run of neutrality. Since December 2002, the overall index has remained slightly above 50, indicating neither recession nor growth spurt on Arizona's horizon. Typically, the pace of the economy picks up quickly after a recession, but uncertainty in the nation's economy has hindered the usual post-recession growth and events such as the war in Iraq and corporate bankruptcies have contributed heavily to the problem. This is reflected in business's reluctance to invest, and this has kept employment in a contracting phase.

The employment component of the Business Conditions Index fell slightly to 44.7 in April from 44.8 the previous month. April marks the 27th consecutive month that the employment subindex has recorded a level

below 50. While year-over-year job growth figures are fairly neutral, this component of the index implies that no large-scale hiring will be taking place within the next six months, especially in the manufacturing sector.

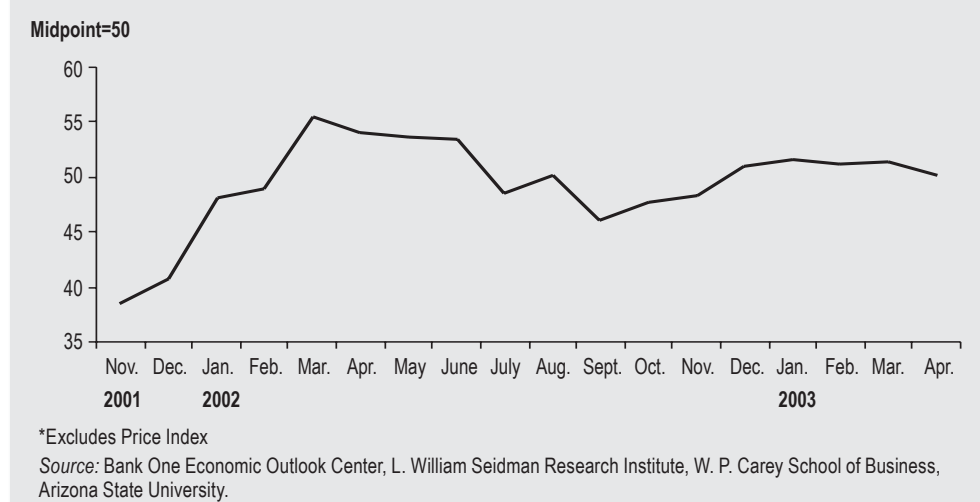
Also noteworthy is that the production subindex fell to 49.9 from 54.8, and the new orders subindex fell to 52.8 from 53.5. Changes in these two components tend to precede changes in broader indicators of

aggregate economic activity.

The Price Index fell to 56.8 in April from 62.5 in March. This suggests that the upward bump in recent months was influenced by the war in Iraq and concerns over disruption in the oil supply, rather than from an increase in economic activity.

— Dawn McLaren
Research Economist
Bank One Economic Outlook Center

FIGURE I
ARIZONA BUSINESS CONDITIONS INDEX*



Bank One Arizona Leading Index rises in April

The Bank One Arizona Index of Leading Economic Indicators rose in April to 118.8. This is 0.3 percent above March's revised figure and 2.5 percent above the April 2002 number of 115.9 (1987 = 100).

The Leading Index has been creeping upward since November 2002, whereas it had been showing some softness in prior months. This gradual upward trend indicates that the Arizona economy is slowly improving.

The M2 money supply, inflation-adjusted value of Maricopa County residential building permits, and materials inventories were a positive influence on the Leading Index. Because of the stock market's demand for low interest rates, and the fear of discouraging consumer spending, the Federal Reserve Bank has held interest rates to their historically low levels. If the money supply continues to increase rapidly, there may be some impetus to raise interest rates. Such a scenario is not yet visible, however. While there has been some concern that the demand for housing will soften, the low mortgage rates have encouraged single-family building permits to hold up firmly. Building permits have shown surprising strength, considering the sluggish economic conditions.

Other index components for April were as follows: Sensitive materials prices, production, and new orders served to offset any positive influence with their negative readings, while employment from the Business Conditions Survey remained neutral. Hours worked in manufacturing was slightly positive, but very close to neutral as well.

The service-providing sectors of Arizona's economy have begun to show strength, especially when it comes to employment. In the education and health services sector, Arizona has managed to show remarkable strength, which has served to overcome the losses that continue in the goods-producing sectors. While this is positive news, it is well known that demand for education rises during times of economic hardship. Also, the critical business services sector continues to show weakness, and there appears to be no movement by businesses to increase spending on either equipment or human capital.

Of the goods-producing sectors, construction and mining have fared better than the manufacturing sector. Since the beginning

of the most recent national recession, the semiconductor industry in Arizona has undergone a structural change, and that may be affecting year-over-year comparisons of industry data. Guidance from Intel provided stimulus for a rally on the stock market on June 5 when the company announced that it is seeing strength in orders of semiconductor chips — a firming that may be a positive indicator for the Arizona manufacturing sector. Local manufacturing has been in a slump for years. Along with semiconductors, Arizona's manufacturing relies on capital equipment expenditures which have not yet recovered from the recession of 2001.

On a positive note, the Leading Index rose during a month in which the country was at war in Iraq. This, along with the fact that the Index has been rising in

small increments over the last few months, indicates the likelihood that economic conditions in the state will continue to improve. Amid the disappointing national economic news of late, the Arizona economy appears to be improving at a faster rate than the national averages. Thus, while the local economy remains within the definition of sluggish growth, it is unlikely to slip into more severe economic conditions.

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Research Economist

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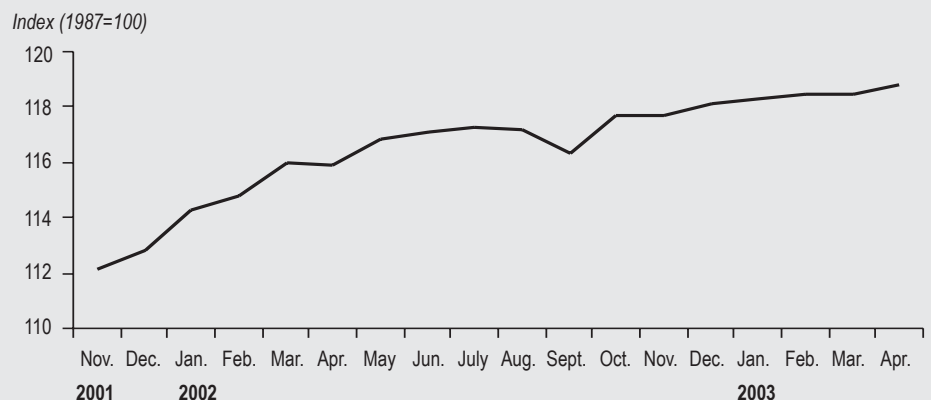
TABLE 1
NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS*

	January	February	March	April
Delivery Time*	-0.05	0.08	-0.06	-0.05
Inventory Levels*	-0.05	0.05	-0.04	0.04
New Orders*	-0.04	-0.03	0.03	-0.02
Production*	0.10	-0.07	0.00	-0.08
Employment*	0.04	0.05	0.02	0.00
Residential Building Permits	-0.11	0.00	-0.07	0.26
Average Workweek, Manufacturing	0.18	-0.28	0.25	0.04
Money Supply	0.17	0.24	0.27	0.27
Change in Sensitive Materials Prices	-0.01	0.05	-0.09	-0.16
OVERALL INDEX	0.23	0.09	0.00	0.30

* 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 1
ARIZONA INDEX OF LEADING ECONOMIC INDICATORS



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



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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
LEADING ECONOMIC INDEX (1987 = 100)							
Arizona	April	118.8	118.5 r	0.3	2.5	NA	NA
BUSINESS CONDITIONS INDEX							
Arizona	April	50.1	51.3	-2.4	-7.3	NA	NA
BUILDING PERMITS (Thousands of \$)							
Maricopa County	March	740,267	727,964 r	1.7	1.7	2,116,361	4.3
Pima County	March	156,056	101,698	53.5	46.2	382,028	24.5
Balance of State	March	262,186	195,844 r	33.9	40.5	673,116	35.1
Arizona	March	1,158,509	1,025,506 r	13.0	13.4	3,171,505	11.9
TOTAL HOUSING UNITS AUTHORIZED							
Maricopa County	March	3,440	3,338 r	3.1	-9.2	9,509	1.3
Pima County	March	742	670	10.7	16.9	2,011	6.1
Balance of State	March	1,744	1,501 r	16.2	21.6	4,912	22.0
Arizona	March	5,926	5,509 r	7.6	1.2	16,432	7.4
HOME SALES							
Maricopa County - Number	March	11,000	7,490	46.9	22.6	25,730	17.2
Maricopa County - Median Price(\$)	March	148,850	149,000	-0.1	6.5	148,375	6.0
HOUSING AFFORDABILITY INDEXES							
Metropolitan Phoenix - New Homes	1st Quarter	119	115	3.5	10.2	NA	NA
Metropolitan Phoenix - Resale Homes	1st Quarter	131	128	2.3	7.4	NA	NA
MORTGAGE RATES (30-year Fixed)							
Maricopa County	April	5.5	5.4	1.9	-17.9	NA	NA
POPULATION ESTIMATES (Thousands)							
Maricopa County	1st Quarter	3,347	3,329	0.5	2.5	NA	NA
Pima County	1st Quarter	897	894 r	0.4	1.8	NA	NA
Balance of State	1st Quarter	1,323	1,313 r	0.7	2.8	NA	NA
Arizona	1st Quarter	5,566	5,535 r	0.6	2.5	NA	NA
RETAIL SALES (Millions of \$)							
Maricopa County	March	2,797	2,478	12.8	2.1	7,701	2.6
Arizona	March	4,100	3,650	12.3	1.9	11,333	2.8

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.