

AZB ARIZONA BUSINESS

Arizona State University's Monthly Newsletter on the Arizona Economy

Phoenix housing market remains strong; affordability slips

Home Sales and Affordability

The Greater Phoenix housing market continued its ongoing trends of strong sales, higher prices and declining affordability during the first quarter of 2000. The local housing market set a record for first quarter activity with a total of 22,430 recorded sales, in comparison to the 21,515 recorded a year ago and 23,570 sales recorded in fourth quarter 1999. The first quarter is typically the slowest quarter, with slightly under 20 percent of annual sales activity. Thus, its strong performance was unexpected, particularly given that higher mortgage interest rates and home prices are so adversely impacting affordability.

AFFORDABILITY

The primary consideration for most homebuyers is the monthly payment, which reflects both the interest rate and the home price. During the quarter, the Federal Reserve Board continued to raise interest rates; the quarterly average interest rate for 30-year mortgages increased from 7.4 percent in fourth quarter 1999 to 7.8 percent — well above the 6.5 percent recorded a year ago. Further, the median resale home price set another record at \$124,400, surpassing the previous record of \$122,000 set in second quarter 1999. This combination of higher interest rates and higher prices pushed the monthly payment from \$820 in second quarter 1999 to \$915 (see Table 1).

Increasing home costs together with fairly stable monthly income drove the resale affordability index to 109 — its lowest level since third quarter 1990, at which time the median sales price was \$81,000, the effective interest rate 10.3 percent and the monthly household income \$2,730. The median resale home price of \$124,400 would require only an 8.9 percent effective interest rate to yield an index value of 100. Although the median new home price of \$148,075 was slightly below the record \$148,150, higher interest rates negatively impacted the new home affordability index. It moved from 94 in fourth quarter 1999 to 91, in contrast to last year's 107. This is the lowest level since it fell to 85 in first quarter 1995, when the interest rate was 8.9 percent, income \$3,125 and price \$128,800.

Because monthly household income is fairly stable, affordability is heavily influenced by changes in interest rates and/or home prices. For example, at current

income and interest rate levels, the resale home affordability index would be 167 if the home price had remained at the third quarter 1990 figure of \$81,000. Most households do not earn the median income — half earn more and half earn less. In second quarter 1999, a household earning an annual income of \$35,040 could afford the median-priced resale home, but now it takes an annual income of \$39,300. In the new home market, the annual income required has increased from \$43,200 to \$46,800. Since home prices and incomes vary throughout the Valley, so does the affordability index. In the resale sector, for example, the index ranges from 75 in Scottsdale to 126 in Glendale and 127 in Chandler.

RESALE SINGLE-FAMILY HOMES

With 12,370 recorded sales, the resale market had a record first quarter, besting the 12,035 homes sold in first quarter 1999 (see Table 2). However, the quarter was down from the 12,740 homes recorded sold in fourth quarter 1999 and the record 16,040 sales of second quarter 1999. Although these numbers might portend another record year, there are some concerns: only January sales were higher than a year ago (3,170 to 4,300 sales) while February (3,465 to 3,335 sales) and March (5,400 to 4,735 sales) were appreciably lower. Further, the January numbers might be slightly misleading, as some home sales that should have been recorded in December were delayed due to the high volume of transactions and the year-end holidays.

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Thus, no clearly discernable trend can be fathomed from the first quarter.

Although the median home price rose to another record at \$124,400, some of the increase can be attributed to the pressures of growing market demand restricted by a consistent supply of listings (approximately 16,000 homes). However, other factors also are contributing to the rise in median sales price. As the housing cycle ages, more expensive homes sell in greater proportions as buyers trade up, taking advantage of the improved economy and lower interest rates to satisfy their housing dreams. In first quarter 1996, 25 percent of resale homes sold for less than \$70,000. Currently, that figure is down to 8 percent. The upper end of the housing spectrum (\$200,000 or more) has moved from 10 to 19 percent of the market since first quarter 1996.

Median resale home prices varied greatly throughout the Valley, from a high of \$725,000 (135 sales) in Paradise Valley to \$65,000 (180 sales) in Central West Phoenix. Active areas included Mesa, with 1,415 sales and a median price of \$116,000, Glendale with 1,065 sales (\$113,000), Deer Valley with 818 sales (\$132,000), North Scottsdale with 840 sales (\$280,000), Maryvale with 620 sales (\$77,175) and Mountain Park with 440 sales (\$168,500).

NEW SINGLE-FAMILY HOMES

The new home market also established a first quarter record with 6,690 sales, compared to 7,435 sales in fourth quarter 1999 and last year's 6,230 sales. January was the best month of the quarter, with 2,660 sales,

while February was lowest at 1,815, compared to January 1999 (1,765 sales) and February 1999 (1,900 sales). The median sales price of \$148,075 was close to the record of \$148,150, with 25 percent of the recorded sales exceeding \$200,000. Among the more active new home markets, the highest median price was again in North Scottsdale, with 430 homes sold at a median price of \$329,385. The lowest median sales price was \$122,800 in Avondale (255 sales). Other active markets were: Deer Valley with 1,175 sales (\$151,060), Superstition Springs with 880 sales (\$135,410), Gilbert with 580 sales (\$161,975) and Mountain Park with 100 sales (\$182,480).

TOWNHOUSE/CONDOMINIUMS

This market segment tends to attract empty-nesters and seasonal visitors, who like the low maintenance, recreational facilities and security offered by this housing style. Although frequently perceived as a source of low-priced housing, many of the recent new townhouse/condo projects are at the high end of the market. The median price of a new unit is now higher than that of a single-family home, at a record \$150,145, up substantially from \$127,185 for a year ago. New unit sales were 445 homes, compared to last year's 405 sales and 460 sales in fourth quarter 1999. The leading areas of new unit development were North Scottsdale with 205 sales (\$170,355), South Scottsdale with 30 sales (\$132,400), Mountain Park with 34 sales (\$146,170), Superstition Springs with 45 sales (\$134,780), and Union Hills with 25 sales (\$128,700).

The resale townhouse sector had a good first quarter with 2,925 sales, down very slightly from the 2,935 sales recorded in fourth quarter 1999, but ahead of the 2,845 sales of a year ago. The median sales price for a resale unit increased from \$82,150 in fourth quarter 1999 to \$85,000, which was 68 percent of the median sales price for a resale home (\$124,400). In the resale market, the median square footage is 1,165 (\$74.85 per square foot), in contrast to 1,600 (\$80.80 per square foot) in the single-family market. The most active resale areas were North Scottsdale with 355 sales and a median price of \$150,000, South Scottsdale with 310 sales (\$108,950), Sun City/Peoria with 230 sales (\$70,500) and South Mesa with 190 sales (\$73,850).

NATIONAL HOUSING MARKET

Much like the local housing market, the national housing market provides support for optimists and pessimists alike. After a weak start this year, the resale market has shown some strengthening, but still remains lower than a year ago. The basic reason is the same as in the local market — declining affordability due to higher interest rates and home prices. Because interest rates are expected to increase, the fundamental expectation is that both the new and resale home markets will continue to lose momentum and will end the year with sales activity around 10 to 15 percent below the record levels of 1999. The overall strength of the national market is really dependent on several key states: California typically represents 12 percent of the resale market and 8 percent of the issued

TABLE 1

HOUSING AFFORDABILITY INDEXES

Year: Qtr.	Median Gross Monthly Income	Effective Interest Rate	Resale Homes			New Homes		
			Median Sales Price	Monthly Housing Payment	Affordability Index	Median Sales Price	Monthly Housing Payment	Affordability Index
1998: 1	\$3,470	7.0	\$110,000	\$730	133	\$137,210	\$910	106
1998: 2	3,470	7.0	114,000	760	128	140,000	930	104
1998: 3	3,490	6.8	113,900	740	132	138,600	905	108
1998: 4	3,490	6.6	115,000	735	133	140,000	895	109
1999: 1	3,500	6.7	115,000	740	132	142,060	920	107
1999: 2	3,500	7.1	122,000	820	120	147,930	995	99
1999: 3	3,535	7.7	122,000	870	114	148,150	1,055	94
1999: 4	3,545	7.7	121,715	870	114	147,745	1,055	94
2000: 1	3,550	8.0	124,400	915	109	148,075	1,090	91

Source: Arizona Real Estate Center, L. William Seidman Research Institute, College of Business, Arizona State University.

single-family permits, Texas has 10 percent and 8 percent shares respectively, and Florida accounts for 9 percent and 8 percent. Strong metropolitan areas include Atlanta, Dallas, Chicago, Washington D.C. and Houston.

Although the national resale median home price declined slightly from \$133,100 to \$132,300 in first quarter 2000, higher interest rates forced the affordability index down from 107 to 105 — it was 118 a year ago. The same pattern was evident in the national new home market, as the median home price declined from \$162,430 to \$161,670, and the affordability index declined from last quarter's 88 to 86, in contrast to last year's 99.

In first quarter 1994, the median resale home price in the Phoenix metropolitan area was 79 percent of the national median price — it is currently 94 percent. In the new home market, the relationship increased from 90 percent to 92 percent of the national level.

LOOKING AHEAD

The local housing market is not driven by a single type of homebuyer but by a diverse group of individuals seeking to satisfy their respective housing dreams. Many of these buyers belong to groups that traditionally

tend to rent rather than buy, such as seasonal visitors, young married couples, minority households and single females. They have been enticed into the market by the lure of affordability that has made buying cheaper than renting. Further, the strong job market has given them sufficient confidence in their economic futures to make the long-term commitment of purchasing a home. These same factors also have encouraged many current homeowners to trade up to better homes or to buy a second home for retirement or seasonal visits.

Such "non-traditional homebuyers" have added additional strength to the market. Because their involvement is dependent on low interest rates, rising mortgage rates (and the resulting decline in affordability) will progressively drive them from the market. Thus, future activity increasingly will rely on more traditional types of buyers, such as people moving into the area.

Although rising home prices reduce affordability, they also increase the wealth base of homeowners, which can be borrowed against with equity credit lines or can assist in moving up the housing chain. Hence, the increase in home prices is a double-edged sword, benefiting some households while

adversely affecting others, especially those trying to enter the owner-occupied market for the first time.

Declining affordability not only may dampen the current "hot" housing market, it has long-term implications as well. A key element in the economic development of the Phoenix area has been housing affordability, especially in comparison with California. Although local home prices are still well under California levels, they have become less competitive with other areas, especially in the southern (median resale price \$119,000) and midwestern (median resale price \$118,000) regions. Thus, a major attraction of the Phoenix area is rapidly eroding. This not only will impact those moving here; many current residents also will find the goal of home ownership becoming more elusive — especially young and minority households, which have benefited greatly from the current market. Thus, as rates and prices increase, declining affordability will pose an ever increasing threat to the sustainability of the local economy and current housing market conditions.

— Jay Q. Butler
Director

Arizona Real Estate Center

TABLE 2

METROPOLITAN PHOENIX HOME SALES

	Single-family			Townhouse/Condominium			Grand Total
	Resale	New	Total	Resale	New	Total	
<i>Median Sales Price</i>							
First Quarter 1998	\$110,000	\$137,210	\$120,000	\$77,000	\$118,000	\$81,500	\$115,290
Second Quarter 1998	114,000	140,000	121,500	77,500	117,935	82,500	116,500
Third Quarter 1998	113,900	138,600	121,940	75,000	124,925	80,000	117,410
Fourth Quarter 1998	115,000	140,090	124,060	79,900	119,230	85,000	118,900
First Quarter 1999	115,000	142,060	124,940	81,370	127,185	85,500	119,900
Second Quarter 1999	122,000	147,930	129,900	82,000	134,600	86,000	124,940
Third Quarter 1999	122,000	148,150	131,000	81,000	138,070	85,000	125,600
Fourth Quarter 1999	121,715	147,745	132,000	82,150	142,400	88,000	127,500
First Quarter 2000	124,400	148,075	133,095	85,000	150,145	90,000	128,140
<i>Number of Sales</i>							
First Quarter 1998	10,470	5,775	16,245	2,520	330	2,850	19,095
Second Quarter 1998	15,075	6,895	21,970	3,500	440	3,940	25,910
Third Quarter 1998	14,575	7,225	21,800	2,850	465	3,315	25,115
Fourth Quarter 1998	12,955	7,705	20,660	2,880	490	3,370	24,030
First Quarter 1999	12,035	6,230	18,265	2,845	405	3,250	21,515
Second Quarter 1999	16,040	7,080	23,120	3,485	470	3,955	27,075
Third Quarter 1999	15,550	7,370	22,920	3,220	420	3,640	26,560
Fourth Quarter 1999	12,740	7,435	20,175	2,935	460	3,395	23,570
First Quarter 2000	12,370	6,690	19,060	2,925	445	3,370	22,430

Source: Arizona Real Estate Center, L. William Seidman Research Institute, College of Business, Arizona State University.

1997 Economic Census: construction above average in AZ

Indicators of construction activity in Arizona were higher than the national average in 1997. This higher activity resulted from the state's net-in-migration of people and companies.

Data from the 1997 economic census for construction have been released for Arizona and the United States. Construction data are available only at the national, regional and state level. Results for 16 NAICS (North American Industry Classification System) sectors were available in early May 2000. Only the mining and manufacturing sectors remained to be released by the U.S. Bureau of the Census.

Construction ranked fifth among the 16 sectors in employment in Arizona, with 131,871 workers in 1997. The number of establishments (see Table 1) ranked second. Employment per establishment ranked 12th and payroll per employee ranked eighth. The Census Bureau provides different dollar measures by sector, with construction's being net value of construction work (the value of construction work less the cost of construction work sub-contracted out to others). While not directly comparable to the sales, receipts or revenue figures produced for other sectors, construction's net value ranked fourth among the dollar measures of the 16 sectors. Construction ranked seventh on dollars per employee.

Arizona's share of the nation's construction activity in 1997 was greater than its share of the nation's population (1.7 percent), which ranked 21st. The state's construction establishments employed 2.3 percent of the nation's construction employees, ranking 16th, and produced 2.1 percent of the nation's net value of construction work, ranking 19th. Including out-of-state firms doing construction work in Arizona, 2.3 percent of the nation's construction work was done in the state, 14th in the nation.

Arizona's average establishment size of 11.9 employees was 38 percent higher than the national average. Net value per employee and

average payroll per employee both were 10 percent below average. Per resident, net value was 21 percent above the national average and employment was 35 percent above average.

Single-family detached housing accounted for 41 percent of the state's value of construction work. Office buildings provided the next highest share at just 7 percent. The next highest types of construction were highways and streets, apartments, manufacturing and light industrial buildings, educational buildings, and single-family attached housing.

SUBSECTORS

The construction sector consists of three subsectors: building, developing and general contracting; heavy construction; and special trade contractors. The latter subsector by far was Arizona's largest in 1997, accounting for 64 percent of establishments, 67 percent of employment, and 54 percent of the net value of construction work. However, the special trade contractors subsector had the lowest net value per employee and lowest payroll per employee of the three subsectors. The building, developing and general contracting subsector was highest on these measures.

The building, developing and general contracting subsector consists of three industry groups: land subdivision and land development, residential building construction, and non-residential building construction.

Residential building was responsible for nearly 60 percent of the subsector's employment and net value, while the land industry group was relatively small. However, land subdivision and development produced the highest net value per employee of any industry group in the construction sector and had one of the higher payroll per employee figures at \$34,400. In addition, land subdivision and development in Arizona accounted for 3.7 percent of the nation's total, ranking eighth.

Most of the state's residential construction consisted of single-family homes. The state's share of the nation's employment ranked 15th, while its multifamily rank was 26th, accounting for just 1.1 percent of the nation's employment. Arizona ranked similarly low in the construction of manufacturing and industrial buildings and was about average in the construction of commercial and institutional buildings.

Highway and street construction was the largest component of the heavy construction subsector. Its per capita activity was slightly above the national average. Further above average was the water, sewer and pipeline construction industry. Arizona also was above average in the smaller industry of construction of power and communication transmission lines.

The special trade contractors subsector consists of 10 industry groups. None produced net value per employee equal to the state's sectoral average of \$96,800 in 1997. The largest of the industry groups were plumbing, heating and air conditioning contractors and masonry, dry-wall, insulation and tile contractors. The latter group, along with painting and wall covering contractors, had the lowest net value per employee and the lowest payroll per employee.

Employment in the carpentry and floor contractors industry group was considerably above the national average. Arizona's employment in the carpentry industry ranked fourth nationally, accounting for 4.7 percent of the national total. Similarly, the masonry, drywall and tile industry group was quite large in Arizona. The drywall, plastering, acoustical and insulation industry ranked fourth nationally with 5.2 percent of the nation's employment. The tile, marble, terrazzo and mosaic industry ranked fifth with 4.0 percent of the nation's employment. Also ranking high was the concrete contractors industry group.

—Tom R. Rex
Research Manager

TABLE 1

CONSTRUCTION, ARIZONA, 1997

	Number of Establishments	Net Value in Millions	Payroll in Millions	Employment	Employment per Establishment	Net Value per Employee	Payroll per Employee
CONSTRUCTION TOTAL	11,058	\$12,762	\$3,621	131,871	11.9	\$96,800	\$27,500
Building, Developing and Contracting	3,408	3,998	850	26,933	7.9	148,400	31,600
Heavy Construction	587	1,846	509	16,652	28.4	110,800	30,600
Special Trade Contractors	7,063	6,918	2,261	88,286	12.5	78,400	25,600

Source: Center for Business Research, L. William Seidman Research Institute, College of Business, Arizona State University using data from the U.S. Department of Commerce, Bureau of the Census, 1997 Economic Census, Construction, Arizona.

Federal expenditures about average in Arizona in 1999

Federal funds distributed in Arizona in fiscal year 1999 totaled \$27 billion, or \$5,642 per Arizona resident. The per capita figure was 3 percent above the national average. Arizona ranked 21st among the 50 states. Among 10 western states, Arizona's figure was second to New Mexico's \$7,805.

Nationally, inflation-adjusted (real) per capita federal spending rose only 3 percent between 1993 and 1999, following a 16 percent surge from 1989 to 1993. Gains in Arizona lagged far behind the national average from 1989 to 1997, but a large 12 percent increase between 1997 and 1999 put the 10-year gain in Arizona slightly ahead of the national average and was the greatest among the western states.

Federal spending is important because it represents a net infusion of money into Arizona. However, since Arizonans contribute a roughly equivalent amount in the form of tax payments by Arizona households and businesses, federal expenditures largely represent a redistribution of funds rather than a net economic impact. Federal expenditures are classified into five broad categories (see Table 1).

Maricopa County's per capita receipt of federal funds in 1999 was 12 percent less than the state average, with the figure in each category at least 5 percent below average. In contrast, Pima County's overall figure was 36 percent above average, with per capita procurements more than twice the state average. Pima County was above average in each of the other four categories as well. Cochise, La Paz and Apache counties had the highest overall per capita figures. Cochise was especially high in the salaries and wages category, mostly related to Fort Huachuca. La Paz County was far above average in the procurements category while Apache County received many grants.

RETIREMENT AND DISABILITY

Retirement and disability outlays accounted for 35 percent of all federal spending in Arizona in 1999. The state's per capita receipts were slightly above the national average and ranked second in the West. From 1993 through 1999, real per capita retirement and disability funding increases averaged less than 1 percent per year nationally. The gain in Arizona was less than the national average in each year from 1991 through 1999.

Three-fourths of this category consisted of Social Security payments. Outlays in Arizona were slightly higher than the national average in the retirement portion, but less in each of the

TABLE 1

FEDERAL EXPENDITURES IN ARIZONA, FISCAL YEAR 1999

	Millions of Dollars	Per Capita	Percent of U.S. Average	State Rank
TOTAL	\$26,959	\$5,642	103%	21
Retirement and Disability	9,473	1,983	104	22
Other Direct Payments	5,506	1,152	96	27
Procurements	4,782	1,001	144	8
Grants	4,537	950	90	33
Salaries and Wages	2,661	557	88	26

Source: Center for Business Research, L. William Seidman Research Institute, College of Business, Arizona State University from the U.S. Department of Commerce, Bureau of the Census, *Consolidated Federal Funds Report for Fiscal Year 1999*.

other components of Social Security. Federal retirement and disability benefits made up most of the rest of this category, with Arizona far above average, especially in the military component.

OTHER DIRECT PAYMENTS

Other direct payments accounted for one-fifth of federal expenditures in Arizona in 1999. Following a very large increase in 1999, per capita spending was only 4 percent below the national average, compared to around 20 percent lower in each of the prior nine years. Nationally, real funding in this category decreased 5 percent in 1998 and 1999, while Arizona posted a two-year advance of 12 percent. Arizona ranked 27th nationally and first among the western states in 1999.

Medicare accounted for more than half of these other direct payments. Per capita spending on Medicare was 13 percent below the national average in Arizona in 1999. Arizona was below average in most of the other components as well, including agricultural assistance, housing assistance and unemployment compensation. Arizona's big rise in 1999 resulted from an eight-fold increase in federal employees' life and health insurance.

PROCUREMENTS

Procurement contracts accounted for 18 percent of the federal spending in Arizona in 1999. Very large increases in 1998 and 1999 pushed per capita spending levels in Arizona 44 percent above the national average—the state ranked eighth nationally and third in the West. Arizona's real per capita figure of \$1,001 was the highest since 1990, but was still well below the 1980s peak.

The Department of Defense was the source of 87 percent of Arizona's procurement contracts in 1999. Arizona's per capita figure was

2.1 times higher than the national average on defense contracts, but more than 50 percent below average on procurement contracts from federal non-defense agencies.

GRANTS

One-in-six dollars received in Arizona from the federal government came in the form of grants in 1999. Arizona's per capita figure was 10 percent below the national average, ranking the state 33rd. Arizona ranked fifth among the western states. Disbursements on grants rose an inflation-adjusted 10 percent nationally in 1998 and 1999. Arizona's gain was nearly as large.

Nationally, nearly 60 percent of the grants came from the Department of Health and Human Services. Real per capita outlays in Arizona from this agency were 25 percent below the national average in 1999. The Department of Transportation was the next largest sources of grants with Arizona's per capita figure matching the national average.

SALARIES AND WAGES

Wage and salary disbursements represented only one-in-ten dollars expended in Arizona by the federal government in 1999. The per capita level was 12 percent less than the national average, though the state's rank was 26th. Nationally, an increase in 1999 followed seven consecutive years of declines. Arizona's experience was similar.

Department of Defense personnel (both civilian and military) received close to 40 percent of Arizona's federal salaries and wages, though per capita defense expenditures were 15 percent below the national average. Postal service employees were the other major recipients of wages and salaries.

—Tom R. Rex
Research Manager

Population growth in Arizona remains strong

The population of Maricopa County rose 22,000 during first quarter 2000, the 18th consecutive quarter in which the increase was between 20,000 and 25,000. The number of Arizona residents advanced 33,000, the 19th straight quarter with a gain of between 31,000 and 35,000.

At the end of first quarter 2000 (corresponding to the decennial census date of April 1), the estimated population of Maricopa

County was 2,946,000. Arizona's population was around 4,933,000. During the four quarters through first quarter 2000, Maricopa County's population rose 87,000 (3.0 percent) and the state's population increased 130,000 (2.7 percent).

Net migration to Maricopa County during first quarter 2000 was 14,000 for the third consecutive quarter; the four-quarter gain was 58,000. Statewide, net migration was

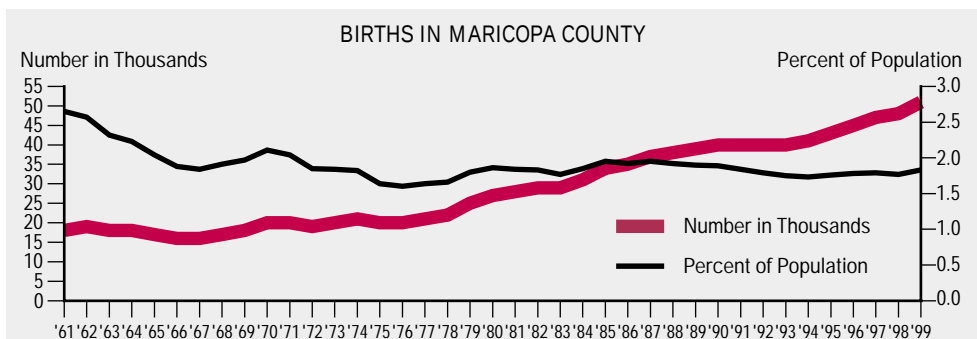
22,000 for the quarter and 89,000 over the last four quarters.

Net natural increase (the difference between births and deaths) continues at an annual figure of 29,000 in Maricopa County; the highest ever recorded and nearly triple the number in the late 1960s. The number of births has surged since 1993 while deaths continue to rise at a pace equal to that of the overall population. Despite the record number of births, births as a percentage of the population remain well below the level of the baby-boom generation, which lasted through 1964 (see Figure I).

In contrast to Maricopa County, net natural increase in the rest of the state did not climb over the last four decades. In Pima County, net natural increase has fluctuated mostly between 4,000 and 6,000 per year, with the current number near 5,000. In the 13 less populous counties, annual net natural increase has varied between 7,000 and 10,000, with the current figure at the bottom of this range.

—Tom R. Rex
Research Manager

FIGURE I



Source: Center for Business Research, L. William Seidman Research Institute, College of Business, Arizona State University using data from Arizona Department of Health Services.

AZ Purchasing Managers Index up sharply in April

The Arizona Purchasing Managers Index accelerated again in April. The seasonally adjusted index rose to 67.8, a substantial increase from March's 62.0. An Arizona Purchasing Managers Index reading of over 50 percent indicates that the local economy is generally growing, while a reading below 50 percent suggests a slowdown in the overall level of economic activity in the near term.

ANALYSIS

The state's economy continues to grow at a healthy pace in 2000 due to a rapid expansion of business activity. Purchasing managers expect this trend to continue, with key components such as the production index peaking at 71.8. In spite of critical labor shortages, more than one-third of purchasing managers noted employment gains compared to last month. Managers also are reporting strong increases in new orders and inventory levels.

The price index dropped in April to 65.7 from a strong 70.4 in March. Despite the downward shift this month, the index displayed a much stronger reading than the previous year's 55.6.

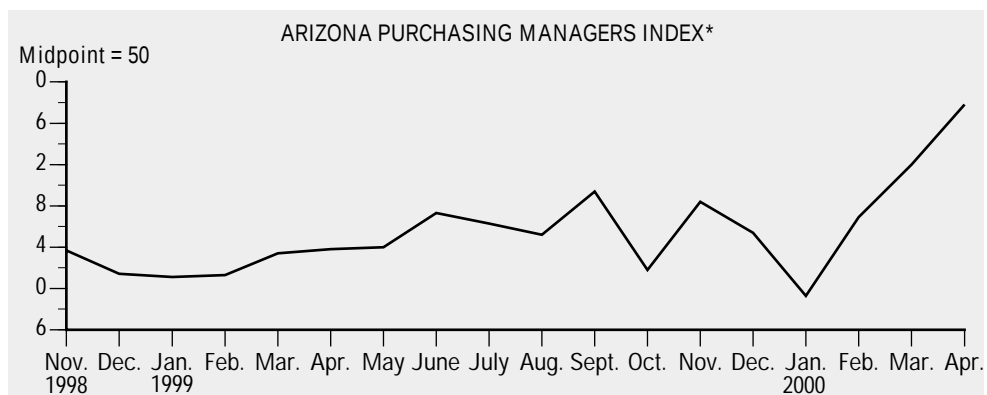
—Yolanda Strozier
Research Economist

Bank One Economic Outlook Center

TABLE 1

	April	Mar.	Feb.	Jan.	Dec.	Nov.
Overall Index	67.8	62.0	56.9	49.3	55.4	58.4
Delivery Times	68.9	64.8	67.4	60.0	62.7	68.6
Purchased Materials						
Inventory Level	60.8	51.3	52.8	42.8	44.8	51.0
New Orders	68.9	65.6	58.7	47.9	54.9	55.1
Production	71.8	63.2	56.3	47.3	60.6	66.0
Employment	63.7	58.2	49.5	49.2	49.6	50.2
Price Index	65.7	70.4	64.0	67.2	57.8	65.0

FIGURE I



* Excludes Price Index

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

Bank One Arizona Leading Index up in February

The Bank One Arizona Index of Leading Economic Indicators rose in February to 109.6. This was 0.6 percent above the revised 108.9 number for January 2000 and 2.2 percent above the February 1999 number of 107.2 (1987 = 100).

Delivery times, inventories, new orders, production, the inflation-adjusted value of Maricopa County residential building permits and hours worked in manufacturing were positive. The inflation-adjusted value of the money supply M2 and sensitive materials prices were negative. Employment from the Arizona Purchasing Managers Survey was neutral.

ANALYSIS

The five index components from the Arizona Purchasing Managers Survey were positive or neutral after all being negative last month. Their combined contribution this month more than made up for the decline last month. The index is still signaling continued growth for the Arizona economy.

Much of the strength seen in the national and local economies for the last few years has resulted from the very high level of consumer confidence. The drop in the value of technology stocks and the Federal Reserve Board's tightening of interest rates so far have had no impact on consumer confidence — the reason seems to be that the unemployment rate remains very low. Consumers appear to be more concerned with their personal experience than with news and other information about the economy in general. The individual experience of the majority of consumers is that the level of interest rates has not become painful yet, and that the tight job market makes it fairly easy to find another job after being laid off.

Rising interest rates have started to have an effect in the home building sector, particularly at the low end of the market, and further moves by the Federal Reserve could spread the pain further. The available evidence suggests that spending on big-ticket items like cars and home appliances has not slowed. Fed watchers expect further interest rate increases, intended to slow consumer spending without choking it off suddenly.

The job market is not expected to loosen in the near future, which is good news for consumer confidence. However, the methods employers use to manage staffing levels may be changing. The pattern in past cycles has been for employers first to add overtime hours during periods of economic expansion,

waiting until they felt sure that an increase in demand would be sustained before hiring new employees. During downturns they would initially cut back on hours worked before resorting to layoffs.

In the current expansion, overtime for the most part has stayed at very high levels, suggesting that hiring has been more restrained than in the past. As a result of this restraint, employers may have to lay off fewer employees during a future downturn. However, some employers have resorted to layoffs to reduce costs even in the face of rising demand, in an attempt to increase profits and boost stock prices. Employers have also been hiring and laying off at the same time, as they attempt to adjust to an economy on "Internet time."

As long as unemployment rates remain low

layoffs are less of a problem, because most workers seem confident that they can find another job quickly. However, if employers resort to layoffs at the first sign of an economic downturn, consumer confidence — and consumer spending — could drop quickly.

Technology is impacting the way the economy reacts to different pressures. The economy seemed ripe for a slowdown in 1995–1996, but improved inventory management techniques turned it into a blip that only number-crunchers noticed. An increased willingness to lay off employees could operate in the other direction, creating a recession out of what otherwise would have been only a mild dip.

—Tracy L. Clark
Senior Economist

Bank One Economic Outlook Center

TABLE 1

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

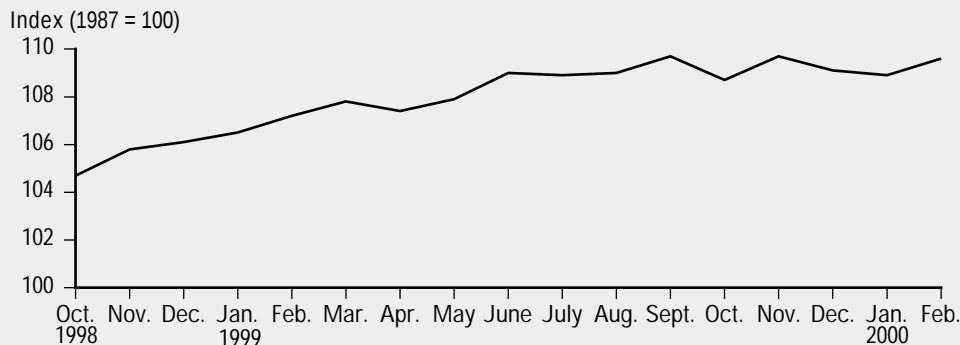
	Net Contribution*			
	Nov.	Dec.	Jan.	Feb.
Delivery Time*	0.17	-0.12	-0.10	0.20
Inventory Levels*	0.02	-0.11	-0.05	0.20
New Orders*	-0.02	0.01	-0.15	0.20
Production*	0.30	-0.10	-0.27	0.19
Employment*	0.24	0.00	-0.01	0.00
Residential Building Permits	0.18	-0.27	0.06	0.04
Average Workweek, Manufacturing	-0.17	-0.11	0.14	0.04
Money Supply	0.16	0.23	0.13	-0.12
Change in Sensitive Materials Prices	0.06	-0.01	0.02	-0.10

* 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, College 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	Feb.	109.6	108.9 ^r	0.6	2.2	NA	NA
PURCHASING MANAGERS INDEX							
Arizona	April	67.8	62.0	9.4	26.7	NA	NA
BUILDING PERMITS (Thousands of \$)							
Maricopa County	March	836,392	671,211 ^r	25	Ø	2,061,601	Ø
Pima County	March	147,001	118,226	24	36	342,534	25
Balance of State	March	139,613	113,953 ^r	23	Ø4	372,933	Ø5
Arizona	March	1,123,006	903,390 ^r	24	-4	2,777,068	-8
TOTAL HOUSING UNITS AUTHORIZED							
Maricopa County	March	4,984	4,216 ^r	18	7	12,173	Ø
Pima County	March	1,125	698	61	64	2,345	32
Balance of State	March	1,320	1,070 ^r	23	Ø1	3,444	Ø2
Arizona	March	7,429	5,984 ^r	24	6	17,962	Ø
HOME SALES							
Maricopa County - Number	March	8,210	6,070	35.3	Ø2.8	22,420	4.1
Maricopa County - Median Price(\$)	March	129,900	129,000	0.7	8.2	128,150	6.9
HOUSING AFFORDABILITY INDEXES							
Metropolitan Phoenix - New Homes	1st Qtr.	91	94	-3.2	Ø5.0	NA	NA
Metropolitan Phoenix - Resale Homes	1st Qtr.	108	114	-5.3	Ø8.2	NA	NA
MORTGAGE RATES (30-year Fixed)							
Maricopa County	April	7.7	7.8	-1.3	16.7	NA	NA
POPULATION ESTIMATES (Thousands)							
Maricopa County	1st Qtr.	2,946	2,924	0.8	3.0	NA	NA
Arizona	1st Qtr.	4,933	4,900	0.7	2.7	NA	NA
RETAIL SALES (Millions of \$)							
Maricopa County	March	2,545	2,392	6.4	4.3	7,184	9.4
Arizona	March	3,716	3,498	6.2	5.1	10,477	9.1

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.