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Wages and incomes still low in most of Arizona

County Economic Review

In most Arizona counties, per capita personal income and the average wage — the most common measures of prosperity — were far below average in 2001. Moreover, comparisons to national norms were worsening over time in most counties.

The U.S. Bureau of Economic Analysis (BEA) annually releases estimates of personal income and employment by county. The latest estimates, through 2001, were released in May. In this article, they are compared to figures in 1990, a similar year in the prior economic cycle: a recession began in each of these years.

AGGREGATE GROWTH

Personal income, a broad measure of growth, includes earnings of employees and proprietors, transfer payments such as food stamps, and dividends, interest and rent. Due to the state's rapid population growth, personal income rose much more than the national average between 1990 and 2001 [see Table 1].

Personal income growth in metropolitan areas between 1990 and 2001 was greater than in nonmetropolitan areas nationally and in Arizona. Gains in Maricopa County (the Phoenix area) were nearly twice the national metropolitan average of 42 percent (all percent changes in this article are inflation-adjusted), but the 56 percent advance in Pima County (the Tucson area) was not as far above average. The federal government defines Coconino (Flagstaff), Mohave (Las Vegas), Pinal (Phoenix) and Yuma (Yuma) counties as metropolitan, though in most regards they are more similar to the nonmetropolitan Arizona counties than to Maricopa and Pima counties. Mohave had the third greatest gain in personal income in the state, while advances in the other metropolitan counties were similar to Pima County at between 50 and 59 percent.

Among Arizona's nine nonmetropolitan counties, increases in personal income over the 1990-to-2001 period exceeded the national nonmetro average of 33 percent in all but La Paz County, though the increase was only a little above the national average (less than 40 percent) in Cochise, Graham, and Greenlee counties. The growth rate in Yavapai County nearly matched that in Maricopa County.

Nationally, earnings (the largest component of personal income) rose slightly faster than personal income between 1990 and 2001. In nonmetropolitan areas, however, earnings growth was slower than personal income growth. In these less populous areas, gains from transfer payments and/or dividends, interest and rent were greater than the increase in earnings. In most of Arizona's counties, earnings grew less than personal income, in some cases by wide margins. The exceptions were Greenlee, Maricopa, Pima and Yavapai counties.

Earnings accounted for 72 percent of personal income nationally in 2001; the proportion was a little less in Arizona. In metropolitan areas, the proportion was near 75 percent, but in nonmetropolitan areas it was less than 60 percent. In Arizona, earnings' share exceeded 70 percent in only three counties: Greenlee, Maricopa and Yuma. The proportion was less than 50 percent in several counties, mostly those with high shares of retirees: Gila, Graham, La Paz, Mohave and Yavapai.

Wage and salary disbursements account for most of earnings. Proprietors' income contributed about 12 percent of earnings nationally in 2001; the share was a bit lower in Arizona. Proprietors' income was a larger than average share of earnings in La Paz, Mohave, Yavapai and Yuma counties, but a lower than average proportion in Apache, Cochise, Graham, Greenlee and Navajo counties. Most of the latter group of counties have significant government employment; in Greenlee County a high proportion of workers are employed by one mining company.

The increase in proprietors' income between 1990 and 2001 was greater than that of wage and salary disbursements nationally. The increase in proprietors' income was much in excess of wage and salary disbursements in metropolitan areas, but quite small in nonmetropolitan areas. In Arizona, proprietors' income rose substantially more than wage

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and salary disbursements in Cochise, Gila and Maricopa counties, but fell in Graham, Greenlee, La Paz and Pinal counties and rose much less than disbursements in most of the other counties.

Total employment reported by the BEA includes proprietors as well as wage and salary workers. Most other employment measures are limited to the latter. Like the other employment measures, the BEA figures do not distinguish between part-time and full-time jobs. Proprietors accounted for 17 percent of total employment in 2001 nationally and in Arizona. The proportion was less than 15 percent in Greenlee and Yuma counties, but more than 20 percent in several counties.

From 1990 to 2001, the rise in employment among proprieters was faster than wage and salary workers, nationally and in Arizona. The differential in growth rates was especially large in Apache, Cochise, Coconino, Gila and Santa Cruz counties.

Total employment in Arizona rose two and a half times as fast as the national average over the 1990-to-2001 period, a differential greater than that of personal income or earnings. Nationally, employment growth was a little higher in metropolitan areas than in nonmetro areas, but the differential was greater in Arizona. Employment gains between 1990 and 2001 were considerably greater than the national average in most Arizona counties, though only a little more in Cochise, La Paz and Pinal counties and a bit lower in Santa Cruz County.

Nationally, annual employment growth was relatively stable between 1993 and 2000, following the recession of 1990-91 and the slow recovery in 1992. Growth slipped to near zero in 2001 as the U.S. economy fell into recession. In nonmetropolitan areas nationally, employment rose fastest between 1993 and 1995, then advanced at slower rates than in metro areas. In Arizona, employment growth peaked in 1994 then gradually slowed. Outside of Maricopa County, growth was fastest in 1994, but otherwise fluctuated from year to year. In most of the less populous counties, annual growth rates are highly variable.

The ratio of total employment to population was less in Arizona than the national average in 2001. Arizona's figure of 54 workers per 100 residents compared to 59 nationally. Over the 1990-to-2001 cycle, this ratio rose 2 percentage points in Arizona and 3 points nationally [see Table 2].

The employment-to-population ratio was higher nationally in metropolitan areas than in nonmetro areas; the differential was greater in Arizona. Among the metro counties, the employment-to-population ratio in Coconino and Maricopa counties equaled or slightly exceeded the national metropolitan average of 60 workers per 1,000 residents in 2001. Pima County's ratio only equaled the national nonmetro average. Greenlee County was the only Arizona nonmetropolitan county with a ratio greater than the national nonmetro norm. Gains in the ratios between 1990 and 2001 were quite high in Coconino and Greenlee counties. In contrast, five Arizona counties, including three classified as metropolitan, experienced a decline in the ratio over the 11 years.

In most Arizona counties, a higher than national average proportion of children and/or senior citizens explains part of the low employment-to-population ratios relative to the nation. However, even among the working-age population (defined as 18 to 64), employment is quite low in most counties relative to the U.S. average. Using decennial census data, the employment-to-working-age-population ratio in 2000 was above the national average only in Greenlee and Maricopa and counties and was at least 20 percent below the U.S. average in all of the other counties except Coconino and Pima. The change in the ratio from 1990 to 2000 was greater than the national average only in Coconino, Greenlee and (marginally) Pima counties.

PER PERSON MEASURES

Aggregate economic advances in Arizona exceed the national average because of the state's much faster population growth. Employment and personal income growth reveal little about changes in prosperity, but per capita personal income and average wage per job provide insight into personal economic well-being.

Nationally, the average wage of wage and salary employees was $35,550 in 2001. Arizona's average wage of $33,018 was 7 percent less than the national average. A gradual deterioration in Arizona's average wage relative to the national average has occurred since the early 1970s, when the Arizona figure was only 2 percent less than the national average. From 1969 (the first year of average wage data) through 1987, Arizona's average wage as a ratio to the U.S. average was not less than 94 percent in any year; it has not been as high as 94 percent in any year since then. While the ratio in 2001 of 92.9 percent was up from the lowest point of 90.2 percent in 1993, this represents only modest improvement, not back up to the historical norm.

The cost of living in Arizona is close to the national average and has not changed much over time relative to the U.S. figure. Thus, even on a cost-of-living-adjusted basis, Arizona's average wage is below average and declining slightly over time.

The average wage in 2001 was much (46 percent) higher nationally in metropolitan areas ($37,420) than in nonmetro areas ($25,589). The differential was not as great in Arizona ($33,631 v. 25,810) since the state's metropolitan average was well below the national metro average but the nonmetropolitan figure was about equal to the national nonmetro average. Part of the large difference between metropolitan and nonmetro areas nationally is mitigated by a lower cost of living in nonmetro areas. In Arizona, this lower cost of living is not found in all nonmetropolitan counties. A substantial difference in the rate of growth in the average wage between 1990 and 2001 also existed between metropolitan (21 percent) and nonmetro (13 percent) areas nationwide. The differential was greater in

TABLE 1
AGGREGATE ECONOMIC GROWTH
1990 to 2001

	*Personal Income**	*Earnings**	*Total Employ-ment*
United States	40%	41%	20%
Arizona	72	80	50
U.S. Metro	42	43	21
Arizona Metro	73	84	51
Maricopa	80	94	56
Mohave	70	63	52
Coconino	59	52	45
Pinal	57	27	25
Pima	56	60	38
Yuma	50	45	38
U.S. Nonmetro	33	26	18
Arizona Nonmetro	53	41	38
Yavapai	75	86	68
Santa Cruz	54	47	19
Apache	51	31	38
Navajo	49	30	28
Gila	45	26	36
Cochise	39	26	24
Graham	37	25	36
Greenlee	35	41	32
La Paz	29	9	21

*inflation-adjusted by U.S. GDP Implicit Price Deflator

Source: Center for Business Research, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University, from data of the U.S. Department of Commerce, Bureau of Economic Analysis.

Arizona (24 vs. 8 percent).

The average wage in 2001 in five of the six Arizona metropolitan counties was less than the national metro average by at least 20 percent; in Maricopa County, the differential was only 5 percent. While the cost of living in the Phoenix area is a little low for a major metropolitan area, it is typical of all metro areas. Even in Pima County the average wage was much lower than the metropolitan (or U.S.) average in 2001, despite a cost of living not much less than the national metro average. Increases in the average wage from 1990 to 2001 exceeded the national metropolitan average in Maricopa County, and matched it in Pima County, but gains in Arizona's other metro counties fell far short.

In three (Cochise, Greenlee and Santa Cruz) of nonmetropolitan counties, the average wage exceeded the national nonmetro average in 2001, and in three counties it was roughly equal, but in two of the metro counties (Mohave and Yuma) it was less than the nonmetro figure. The only nonmetropolitan counties with a 1990 to 2001 increase in excess of the national nonmetro average were Santa Cruz and Yavapai (marginally).

At $25,699, the average income of proprietors nationally was considerably less than the average wage of wage and salary employees. Arizona's average proprietors' income was 18 percent less than the national average; the ratio to the national average in most years since 1990 has been between 81 and 84 percent. The 1990 ratio was lower; the increase in average proprietors' income between 1990 and 2001 was a little higher in Arizona than the national average.

The larger than average increase in average proprietors' income in Arizona entirely resulted from a large increase of 43 percent in Maricopa County. The average income fell in 13 Arizona counties, precipitously in some. Yuma County posted a small increase and is the only county to have an average figure in 2001 in excess of the national average.

In each Arizona county except Coconino, per capita personal income (PCPI) as a ratio to the national average was further below average than the average wage in 2001. While an important component, average wage is just one of many factors that affect PCPI. The employment-to-population ratio is another important factor.

Per person personal income was $30,413 nationally in 2001. At $25,878, Arizona's figure was 15 percent less. The 19 percent gain in the state's figure between 1990 and 2001 was short of the national average of 23 percent. As a ratio to the national average, Arizona's PCPI has been cyclical, reaching 94 to 95 percent at the peaks of the economic cycles of the early 1970s, late 1970s, and 1980s and dropping a few percentage points during recessions. However, the decrease during the economic slump of the late 1980s and early 1990s was more severe, with the ratio falling from 94 percent in 1986 to 85.4 percent in 1992. Almost no recovery in the ratio occurred during the economic expansion of the 1990s, with the peak ratio only 86.5 percent in 1994. Slight declines in the ratio since then left the ratio in 2001 at 85.1 percent, nearly the lowest level since the beginning of the data in 1929. (The lowest was just over 84 percent in 1966; preliminary data for 2002 show a ratio of less than 85 percent). Thus, a substantial deterioration has occurred in Arizona since the mid-1980s in the broadest measure of prosperity relative to the national average. Substandard performance in the average wage, the employment-to-population ratio, and other factors led to the decrease in the PCPI ratio.

Like the average wage, PCPI is much higher nationally and in Arizona in metropolitan areas than in nonmetro areas. The increase in metro areas was greater during the latest economic cycle. Coconino County's advance exceeded the national metropolitan average, but gains in Maricopa and Pima counties fell short. PCPI in 2001 was 10 percent less than the metro average in Maricopa County and 23 percent lower in Pima County. PCPI fell between 1990 and 2001 in La Paz, Pinal and Yuma counties and rose less than 10 percent in Mohave and Graham counties.

The 2001 PCPI did not exceed the national nonmetropolitan average in any of the nine nonmetro counties; it was highest in Greenlee and Yavapai counties. (The figure in Coconino County slightly exceeded the nonmetropolitan figure, but PCPI was less than the nonmetro average in the metro counties of Mohave, Yuma and Pinal.) Only Apache and Greenlee counties experienced a gain greater than the nonmetro average from 1990 to 2001.

— Tom R. Rex
Research Manager

TABLE 2
OTHER ECONOMIC MEASURES

	Per Capita Personal Income			Average Wage			Employment-to-Population Ratio	
	2001	*1990-2001 Change**	*Ratio to U.S.***	*2001*	*1990-2001 Change**	*Ratio to U.S.***	*2001*	*1990-2001 Change*
United States	$30,413	23%		$35,550	21%		59	3
Arizona	25,878	19	85	33,018	23	93	54	2
U.S. Metro	32,336	23		37,420	21		60	3
Arizona Metro	26,845	19	83	33,631	24	90	56	2
Maricopa	29,117	20	90	35,503	25	95	60	2
Pima	24,767	21	77	30,108	21	80	52	3
Coconino	23,238	31	72	25,587	12	68	61	10
Mohave	19,369	2	60	24,626	15	66	35	-4
Yuma	16,839	-1	52	23,268	8	62	43	-4
Pinal	15,028	-3	47	27,205	8	73	28	-8
U.S. Non-metro	22,472	20		25,589	13		52	4
Arizona Non-metro	18,460	16	82	25,810	8	101	39	2
Greenlee	21,549	30	96	37,875	11	148	57	12
Yavapai	21,189	10	94	24,280	14	95	41	2
Cochise	20,279	14	90	27,772	8	109	42	1
Gila	19,382	14	86	25,810	0	101	40	3
La Paz	18,375	-8	82	21,888	4	86	36	-6
Santa Cruz	17,964	17	80	28,000	29	109	41	-4
Navajo	14,934	17	66	25,501	5	100	35	0
Apache	14,802	37	66	25,218	0	99	36	7
Graham	14,144	9	63	21,984	4	86	32	2

*inflation-adjusted by U.S. GDP Implicit Price Deflator
** in 2001; Arizona compared to national average; Maricopa, Pima, Coconino, Mohave, Yuma and Pinal counties compared to metropolitan average; and other counties compared to nonmetropolitan average

Source: Center for Business Research, L. William Seidman Research Institute, W. P. Carey School of Business, Arizona State University, from data of the U.S. Department of Commerce, Bureau of Economic Analysis.

Single-family sector boosts permit activity in first quarter

The single-family sector continues to dominate the Arizona construction market, with over 65 percent ($2.1 billion) of the state's $3.2 billion construction activity in first quarter 2003. This pattern has been consistent over the last year: The single-family share was 63 percent in first quarter 2002 and 66 percent in fourth quarter 2002.

Total construction activity in Arizona has increased to $3.2 billion from last year's $2.8 billion, with some improvement in the other sectors [see Table 2].

Maricopa and Pima counties accounted for 67 percent and 12 percent, respectively, of the state's activity. Pinal County had 6 percent, followed by Yavapai and Mohave counties each at 4 percent. Phoenix was the most active area of development, with 21 percent of Arizona's construction market; the 12 communities listed in Table 1 represented 71 percent. Lake Havasu made the list based on a strong single-family market combined with retail and apartment projects. Other areas of significant development included Tempe ($73 million, including a $45 million apartment project), Goodyear ($71 million), Peoria ($65 million), Marana ($54 million), unincorporated Yavapai County ($47 million) and Prescott ($43 million).

RESIDENTIAL

The single-family housing market continues to be the only bright spot of an otherwise dismal economy. Leading areas of single-family development in Maricopa County were Phoenix (2,141 permits), Gilbert (862), Chandler (780) and Mesa (588). The West Valley communities of Surprise (879), Goodyear (373), El Mirage (199) and Avondale (189) now account for 20 percent of the new home market.

The single-family housing market in Pima County has remained stable [see Table 2]. Tucson authorized 600 homes; unincorporated Pima County, 615; Marana, 305, and Oro Valley, 107. The average permit value in Pima County increased from last year's $142,980 to $166,355, while in Maricopa County it rose from $153,565 to $160,810.

Pinal County (1,418 permits) accounted for 10 percent of the state's new home market, while Mohave (610) and Yavapai (588) each had 4 percent. In these counties the unincorporated areas are important markets, with 1,177 permits in unincorporated Pinal County, 243 in Yavapai and 158 in Mohave. Specific communities included Lake Havasu City (314), Prescott (171), Prescott Valley (144) and Casa Grande (109). The highest average permit value ($1,431,150) was in Paradise Valley. Others were: $196,685 in Prescott, $193,810 in Sedona, $154,040 in Flagstaff, $118,520 in Casa Grande, and $107,000 in Lake Havasu City.

COMMERCIAL

The commercial sector has been impacted by the double whammy of a weak economy and low market demand leading to higher vacancy rates and limited rental growth. The apartment sector has been especially hard hit, with only 650 authorized units in first quarter 2003. Tempe reported 483 units and Phoenix, 131. The decline in the office building sector has been precipitous, with Phoenix issuing a single permit for $11.5 million of the total $29 million, followed by Scottsdale at $25

TABLE 1
REPORTING UNITS WITH GREATEST TOTAL VALUE OF BUILDING PERMITS
First Quarter 2003

Reporting Unit	*Value (in millions)*
Phoenix	$651
Unincorporated Maricopa County	221
Unincorporated Pinal County	197
Chandler	193
Gilbert	192
Scottsdale	150
Tucson	150
Unincorporated Pima County	150
Mesa	131
Surprise	118
Glendale	81
Lake Havasu City	75

TABLE 2
KEY SECTOR CONSTRUCTION ACTIVITY
First Quarter 2003, Fourth Quarter 2002 and First Quarter 2002

	Single-family		COMMERCIAL: Apartments[a]		COMMERCIAL: Office Buildings[b]		COMMERCIAL: Retail Stores[c]		Industrial	
	Number of Permits	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*
MARICOPA COUNTY										
First Quarter 2003	8,542	$1,373,668	650	$60,003	139	$79,987	162	$116,315	29	$34,195
Fourth Quarter 2002	8,631	1,390,148	1,350	74,318	144	93,366	147	120,468	13	17,949
First Quarter 2002	7,980	1,225,456	1,006	59,087	93	88,644	115	103,589	36	34,993
PIMA COUNTY										
First Quarter 2003	1,632	271,489	28	930	39	43,382	28	14,452	14	2,092
Fourth Quarter 2002	1,522	238,277	450	23,649	35	11,212	15	5,561	17	4,548
First Quarter 2002	1,654	236,491	5	304	31	8,096	18	5,611	6	1,414
REST OF ARIZONA										
First Quarter 2003	3,736	430,860	140	15,093	46	8,091	49	36,463	12	4,953
Fourth Quarter 2002	3,109	349,158	170	11,151	39	7,262	47	17,169	10	706
First Quarter 2002	2,927	320,263	14	177	33	8,606	36	12,696	7	2,633
ARIZONA TOTAL										
First Quarter 2003	13,910	2,076,017	818	76,026	224	131,460	239	167,230	55	41,240
Fourth Quarter 2002	13,262	1,977,583	1,970	109,118	218	111,840	209	143,198	40	23,203
First Quarter 2002	12,561	1,782,210	1,025	59,568	157	105,346	169	121,896	49	39,040

[a] Five or more housing units [b] Office, bank, medical and professional buildings [c] Shopping centers and other mercantile buildings

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

million. Retail development activity showed some improvement over a year ago [Table 2] with $30 million in Glendale, $29 million in Phoenix and $18 million in Chandler. Remodeling of existing space totaled $41 million, with $12 million in Scottsdale and $14 million in Tempe.

The office and retail sectors showed considerable strength in Pima County [see Table 2]. Tucson issued office permits valued at $34 million, followed by unincorporated Pima County at $10 million. Only 28 apartment units were authorized in Tucson, while 80 were approved in Lake Havasu City and 40 in Payson. Retail development was evident in Casa Grande ($8 million), Lake Havasu City ($7 million), and Prescott ($7 million).

Commercial remodeling activity was strong in Tucson ($16 million), unincorporated Yavapai County ($5 million) and Flagstaff ($5.6 million). The hotel/motel sector continued in the doldrums with only 5 permits, valued at $2.6 million, for the entire state.

INDUSTRIAL AND OTHER

Although the largest industrial permit in Phoenix was for only $5.4 million (Safeway), Phoenix led the county to a stronger level with $34 million [see Table 2]. Outside Maricopa County, the primary areas of industrial development were unincorporated Yavapai County ($1.6 million), unincorporated Pima County ($1.4 million), and Flagstaff ($1.4 million).

Construction of educational and public facilities increased from $40 million in fourth quarter 2002 to $73 million, with $21 million in Phoenix and $6 million each in Chandler and Glendale. Gilbert issued a public works permit, valued at $10 million, for a waste water reclamation facility.

LOOKING AHEAD

Growth in construction activity is based on three fundamental factors: First, the economy must be able to sustain a recovery by strengthening throughout the year with the resultant increase in job growth and consumer confidence; second, the home buyer must remain in the market to sustain the residential sector, while the commercial sector must recover enough to contribute new levels of activity in the construction sector; third, world events must be limited in their impact on the economy and the consumer psyche.

Other issues include the fiscal uncertainty confronting all levels of government. Another is the availability and quality of water for the future population.

Even in the absence of a growing market, current activity shows that the market is changing. A key indicator is the emergence and growth of new market areas. Development in Pinal County is expected to continue active as an extension of the growth in Maricopa and Pima counties, especially in the areas of Apache Junction and Casa Grande. Buckeye represents one of the largest planning areas in Maricopa County and already has authorized some major developments. It will become a leading housing and commercial market over the next few years. In other areas of the state, people and businesses have been drawn to the quality of life in the smaller communities.

— Jay Q. Butler
Director
Arizona Real Estate Center

TABLE 3
ARIZONA HOUSING UNITS AUTHORIZED
First Quarter 2003

	One Family	*Mobile Homes*	*Duplex*	*3-4 Family*	*5 or More*	*Total*
MARICOPA COUNTY	8,542	265	22	30	650	9,509
% Change, Previous Year	7	-7	-27	-64	-35	1
% Change, Previous Quarter	-1	3	22	-62	-52	-8
PIMA COUNTY	1,763	293	62	3	28	2,149
% Change, Previous Year	7	75	19	-83	460	13
% Change, Previous Quarter	16	-5	82	0	-94	-7
REST OF ARIZONA	3736	881	112	43	140	4912
% Change, Previous Year	28	-6	47	-42	900	22
% Change, Previous Quarter	20	9	133	-52	-18	16
TOTAL, ARIZONA	14,041	1,439	196	76	818	16,570
% Change, Previous Year	12	4	24	-57	-20	8
% Change, Previous Quarter	6	5	96	-56	-58	-2

TABLE 4
ARIZONA BUILDING PERMITS
First Quarter 2003

	Residential*		**Commercial**		**Industrial**		**Other**		**Total**	
	Number of Permits	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*	*Number of Permits*	*Dollar Value (000)*
MARICOPA COUNTY	11,049	1,439,585	791	331,205	29	34,195	8,026	311,376	19,895	2,116,361
% Change, Previous Year	4	12	5	-4	-19	-2	1	-14	3	4
% Change, Previous Quarter	0	-1	-5	-17	123	91	12	25	4	0
PIMA COUNTY	2,993	301,582	282	81,471	14	2,092	1,634	12,202	4,923	397,347
% Change, Previous Year	16	22	-4	116	133	48	13	-40	14	29
% Change, Previous Quarter	13	19	-50	38	-18	-54	-5	-56	-1	16
REST OF ARIZONA	6,925	508,091	494	96,271	12	4,953	1,994	63,801	9,425	673,116
% Change, Previous Year	18	34	15	47	71	88	1	24	14	35
% Change, Previous Quarter	11	26	2	36	20	602	9	-14	10	23
TOTAL, ARIZONA	20,967	2,249,258	1,567	508,947	55	41,240	11,654	387,379	34,243	3,186,824
% Change, Previous Year	10	18	6	14	12	6	3	-11	7	12
% Change, Previous Quarter	5	7	-17	-4	38	78	9	10	5	6

* Includes mobile homes

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

Legal immigration was higher in 2001

Documented immigration to Arizona and the nation was higher in fiscal year 2001 than in the several prior years, according to the *2001 Statistical Yearbook* of the Immigration and Naturalization Service. The number of immigrants counted by the INS is a fraction of total immigration, especially in a state like Arizona noted for a large number of people crossing the border illegally.

More than 16,000 immigrants to Arizona were counted in 2001, compared to 12,000 in 2000 and less than 10,000 in each of the several prior years. Close to three-fourths of the immigrants to Arizona settled in the Phoenix area in 2001. In neighboring California, the close to 300,000 immigrants in 2001 also was higher than in prior years. Nationally, the number of immigrants exceeded 1 million in 2001 after fluctuating between about 650,000 and 900,000 in the preceding years.

More than 200,000 Mexican immigrants accounted for nearly 20 percent of the national total in 2001. India sent the second most immigrants at 70,000, followed by China and the Philippines. The remainder of the top-10 list of sources of immigrants consisted of Vietnam, El Salvador, Cuba, Haiti, Bosnia-Herzegovina, and Canada.

The profile of immigrants to Arizona in 2001 was considerably different. Nearly half of the total came from Mexico. Bosnia-Herzegovina ranked second with 7 percent of the total (more than 1,100 immigrants). The rest of the top 10 were Canada, India, Vietnam, China, the Philippines, United Kingdom, Germany, and Russia. The Phoenix area ranked third among the nation's metropolitan areas in the number of immigrants from Bosnia-Herzegovina, eighth from Canada, and ninth from Mexico.

Among the 25 nations with the largest number of immigrants to the United States in 2001, Arizona received a disproportionately large share from Mexico, Bosnia-Herzegovina, and Canada. The share was below average from several Caribbean and Latin American countries, and a few countries in East Europe and Asia. California also received a high share of Mexicans, and had a disproportionately large share from the Philippines, El Salvador, Guatemala, Taiwan, and Iran. California received relatively few from the Caribbean and a few other countries.

Not quite 40 percent of Mexican immigrants in 2001 were males, compared to males accounting for 45 percent of all immigrants. Mexican immigrants were concentrated among those 10-to-29 years old, with relatively few between 35 and 54. Given the higher percentage of women and children, the workforce participation rate of Mexican immigrants was lower than that of other immigrants. Among those working, nearly half of the Mexicans worked in operator/fabricator/laborer occupations, compared to only 14 percent of all immigrants. The proportion in agricultural occupations also was higher among Mexicans. Few of the Mexican immigrants worked in professional, administrative, sales or administrative support occupations.

— Tom R. Rex
Research Manager

Business Conditions Index rises in May

The seasonally adjusted Arizona Business Conditions Index rose to 53.8 in May from 50.1 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

The May index reading was the highest in over a year. While this gives reason to hope for an upward trend, this won't become apparent for another month or two. Driving the 3.7 point rise in the overall index was a leap of 7.7 points in the new orders component, which reached 60.5 in May. The production component also rose significantly, climbing to 55.0 in May from 49.9 the previous month.

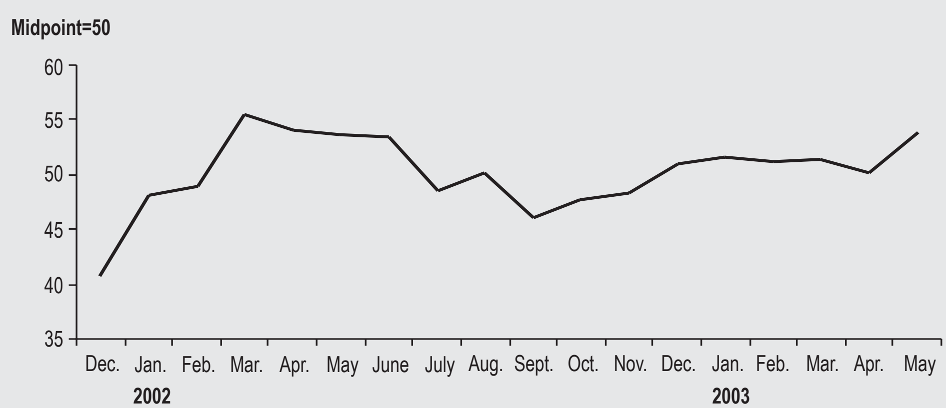
While the employment component also rose, it remains below the critical 50-point level. The employment subindex rose to 46.5 in May from 44.7 the previous month.

A sustained increase in new orders and production will be necessary before the employment component recovers. Productivity in Arizona has remained high, but has tapered off in recent months. It is high productivity levels nationwide that have contributed to the recovery lag in the employment situation.

The Price Index fell to 52.6 in May from 56.8 the previous month. This is further indication that the bump-up in prices seen during the first quarter of the year was related to fears of a possible disruption in the flow of oil. The current softness in prices may be a signal that bears watching. As supply rises against demand, prices are expected to drop in response. The most recent recession included a drop in prices as demand fell against supply. This is evident in the history of the Prices Index, and may be an indication of near-term demand softness against supply.

— Dawn McLaren
Research Economist
Bank One Economic Outlook Center

FIGURE I
ARIZONA BUSINESS CONDITIONS INDEX*



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

Arizona Leading Index continues slow rise in May

The Bank One Arizona Index of Leading Economic Indicators rose in May to 119.8, which is 0.8 percent above the revised 118.9 number for the previous month and 2.6 percent above the May 2002 index level of 116.8 (1987 = 100).

The inflation-adjusted value of the M2 money supply, hours worked in manufacturing, new orders, production and employment from the Business Conditions Survey were a positive influence on the Leading Index. The inflation-adjusted value of Maricopa County residential building permits, sensitive materials prices and materials inventories were negative. Delivery times were neutral.

The increase in the Arizona Leading Index can be attributed to the same factor that triggered the national leading index to rise significantly in May — the growth in the money supply exploded. The Federal Reserve manipulates the money supply indirectly by setting interest rate targets and controlling the reserves that influence the amount that banks can lend. It can cause very short-term movements in the money supply by itself, but sustained increases can only occur if the money is borrowed. It remains to be seen if the money supply increase was in anticipation of the Fed's rate cut in June — or it may reflect the beginnings of an increase in borrowing, primarily by businesses.

There was much discussion of the rate cut prior to the Fed meeting among economists as well as stock and bond analysts. There was little justification for the cut on purely economic grounds; the lack of borrowing by businesses was not due to high interest rates. Rather, it was a result of general uncertainty about the economy and, to a lesser degree, price deflation for goods producers. The primary justification for a 25-basis point cut (one-quarter of a percent) was the prior suggestion of the Fed that another cut would be made, and the signal this would send to the market suggesting that further rate increases would not be likely in the near future. However, the Fed could have strengthened the impact of the rate cut by explicitly changing the guidance that accompanies the announcement, but it left that largely unchanged. The case for a 50-basis point cut was extremely weak and such a bold move likely would have backfired. At the very least, it would have forced the liquidation of many money market funds as the cost of administration became higher than the interest rate they could offer.

The increase in hours worked in manufacturing is encouraging. This component typically moves up prior to an increase in employment in manufacturing, because firms prefer to extend overtime to the current work force before hiring more workers. Employment in manufacturing remains down, while there has been an improvement in the services sector. If the upward trend in hours worked continues, this may be a signal that manufacturing is on its way up — perhaps by the end of the year.

The one area where negatives likely will continue for a while is the inflation-adjusted value of Maricopa County residential building permits. Permit values have been a negative for seven out of the last 12 months, neutral for three and positive for two. The slowing of activity is no surprise, given the duration of the new-home market boom, but the slowing has been considerably milder than in past cycles. Thus, while residential activity won't be as positive as in the past, it is remains at high levels.

Some forecasters predicted that the economy would recover rapidly after the Iraq war, but the majority envisioned a resumption of the gradual recovery that had started last year. The economy has not rebounded sharply, but neither does it show signs of slipping back into recession. The biggest barrier to a more rapid recovery is the continued reluctance of businesses to resume spending. The nation will be stuck in an anemic recovery until this trend reverses.

— Tracy Clark
Associate Director
Bank One Economic Outlook Center

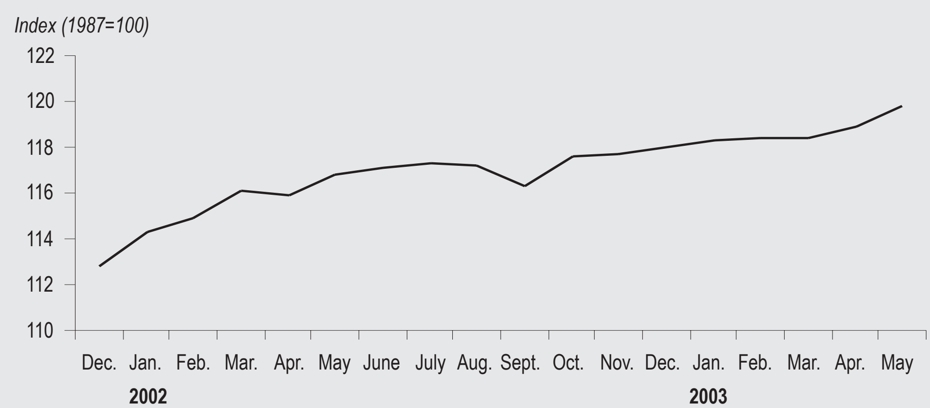
TABLE 1
NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS+

	February	*March*	*April*	*May*
Delivery Time*	0.08	-0.06	-0.05	0.00
Inventory Levels*	0.05	-0.04	0.04	-0.01
New Orders*	-0.03	0.03	-0.02	0.14
Production*	-0.07	0.00	-0.08	0.10
Employment*	0.05	0.02	0.00	0.05
Residential Building Permits	0.00	-0.07	0.27	-0.24
Average Workweek,Manufacturing	-0.28	0.25	0.11	0.17
Money Supply	0.26	-0.06	0.29	0.79
Change in Sensitive Materials Prices	0.04	-0.10	-0.16	-0.24

+ 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, 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	Year-to-Date Percent Change from Year Ago
LEADING ECONOMIC INDEX (1987 = 100)							
Arizona	May	119.8	118.9 r	0.8	2.6	NA	NA
BUSINESS CONDITIONS INDEX							
Arizona	May	53.8	50.1	7.5	0.5	NA	NA
BUILDING PERMITS (Thousands of $)							
Maricopa County	April	851,498	740,267	15.0	19.0	2,967,859	8.1
Pima County	April	154,857	156,056	-0.8	-7.1	536,885	13.4
Balance of State	April	227,181	262,186	-13.4	3.0	900,297	25.2
Arizona	April	1,233,536	1,158,509	6.5	11.9	4,405,041	11.9
TOTAL HOUSING UNITS AUTHORIZED							
Maricopa County	April	3,912	3,440	13.7	12.6	13,421	4.4
Pima County	April	981	742	32.2	1.3	2,992	4.5
Balance of State	April	2,001	1,744	14.7	12.1	6,913	19
Arizona	April	6,894	5,926	16.3	10.7	23,326	8.3
HOME SALES							
Maricopa County - Number	April	10,200	11,000	-7.3	-8.4	35,930	8.6
Maricopa County - Median Price($)	April	152,000	148,850	2.1	8.5	142,000	1.4
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	May	5.2	5.5	-5.5	-20.0	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	April	2,644	2,797	-5.5	1.0	10,345	2.2
Arizona	April	3,905	4,100	-4.8	1.4	15,238	2.4

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.