

# AZB ARIZONA BUSINESS

ARIZONA STATE UNIVERSITY'S MONTHLY NEWSLETTER ON THE ARIZONA ECONOMY

## Forecast adjustment reflects slow-paced job growth

The third-quarter economic forecast at both the national and local levels has changed only slightly. Industrial production is doing better on the national front and employment continues to grow, albeit slowly. Retail sales are increasing locally. Employment, meanwhile, is not improving as quickly as expected.

The Gross Domestic Product forecast remains the same because the rate of growth in the second quarter slowed, as expected by everyone except Wall Street commentators. Had the economy continued to expand at the first quarter pace, it would have been unhealthy. The biggest slowdown occurred in consumer spending, with auto sales a significant factor. The auto sales slump is likely the result of the increase in gasoline prices. American companies have been relying on the continued popularity of trucks and sport utility vehicles, and the increase in gas prices over the summer had to be causing some concern among consumers. Sales of large vehicles began to slump in April. However, manufacturers fought back with increased incentives for large vehicles, and July auto sales suggest the incentives were effective when combined with a decline in gas prices.

Industrial production performed a little better than expected in the second quarter, which effectively blunts some of the decline in consumer spending.

The biggest risk to consumer spending continues to be the jobs picture. The national economy has had approximately 30 months of negative job growth since the recession started, and the string was not broken until the beginning of this year. The net number of jobs added for July was 32,000 — far below expectations — and if the pause continues it will be a significant problem for the economy. Consumers tend to base their opinions of the economy's health primarily upon their view of how easy it is to get a job (which appears to be a function of their own experience and that of family and friends in the labor market). The economic numbers quoted in the news media do have an impact, but not nearly as much as direct experience. As the year began, there was concern that consumer spending would falter if the job outlook did not improve. The trend clearly has been positive (except for July) and while one month does not a trend make, consumers appear nervous — a string of weak numbers could well spook them.

The economic indicators prior to July's employment figures were good enough to cause the Federal Reserve to raise the federal funds rate a quarter of a percent. The Fed might have acted more forcefully if the economy had continued to grow at the pace seen in the first quarter. Alan Greenspan in particular, and the Open Market Committee in general, have favored gradualism in lowering rates. However, the Fed has been willing to abandon gradualism if economic conditions warrant. Greenspan also has favored openness — Fed-speak for being both clear enough and vague enough so an action (or inaction) won't be entirely unexpected. The Fed did a very good job of being open in advance of the recent move, although if the rate increase had been half a percent rather than a quarter percent, it probably would have spooked the markets. Analysts have suggested that the neutral federal funds rate is around 4 percent, which leaves a lot of room for the Fed to move up interest rates gradually. The Fed appears committed to continued rate increases, although it is not clear whether it will raise rates at every meeting.

The Federal Reserve is arguably the biggest single controlled influence on the economy, given that swings in government spending have had little or nothing to do with an explicit fiscal policy on the part of Congress and the executive branch for many years. The Fed has, in fact, acted to counter government spending swings in the past, and some of the impetus to raise rates may have come from the large spending increases and tax cuts enacted in recent years. The Fed has a direct influence on a shrinking portion of all the financial instruments that function as money. Financial innovations continue to shrink the role played by banks, which are the only intermediaries subject to Fed regulation. Yet Greenspan and the rest of the Fed continue to wield considerable influence because market participants act as if the Fed controls a greater slice of the pie

### Quarterly Economic Forecast

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than it actually does. The inflation-fighting credibility of the Fed established under Greenspan and his predecessor Paul Volker are the true source of its influence. Inflation will likely remain moderate (somewhere below 4.0 percent) as long as the public is convinced the Fed has not lost its nerve and is willing to act. Thus, it is often more useful to pay attention to the market's perception of the Fed and somewhat less attention on

what the Fed is actually doing.

It is not clear how much of an impact a gradually rising Federal funds rate will have on medium- to long-term interest rates, particularly given the other influences. Economic theory says the longer the term of a loan or bond, the greater the role expected inflation plays in setting the associated rate. The Federal Funds rate is the ultimate short-term rate because funds are borrowed for

24 hours. Increasing this rate will raise the prime rate and other short-term rates because the bank's cost of funds has increased. Adjustable-rate mortgages will respond to the rise in the prime rate because they are typically tied to either the prime rate or the London Interbank Offered Rate. Fixed-rate mortgages are more complicated because the lender is interested more in expected inflation over the term rather than the current cost of

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

	<i>Actual</i> 2000	<i>Actual</i> 2001	<i>Actual</i> 2002	<i>Actual</i> 2003	<i>Forecast</i> 2004	<i>Forecast</i> 2005
<b>Gross Domestic Product</b>						
Billions of 1996 Dollars .....	9,817.0	9,890.7	10,074.8	10,381.3	10,796.6	11,185.2
Percent Change .....	3.7	0.8	1.9	3.0	4.0	3.6
Industrial Production (Percent Change) .....	4.3	(3.4)	(0.5)	0.3	4.2	4.0
Net Exports (Billions of 1996 Dollars) .....	(379.5)	(399.1)	(472.1)	(518.5)	(541.0)	(525.0)
<b>Housing Starts</b>						
Number in Thousands .....	1,592.3	1,636.7	1,747.7	1,862.4	1,707.8	1,625.8
Percent Change* .....	(4.5)	2.8	6.8	6.6	(8.3)	(4.8)
Unemployment Rate (Percent) .....	4.0	4.8	5.8	6.0	5.8	5.5
Consumer Price Index (Percent Change) .....	3.4	2.8	1.6	2.3	1.8	2.2
Three-Month Treasury Bill Rate (Percent) .....	5.8	3.4	1.6	1.0	1.5	2.4
10-Year Treasury Note Rate (Percent) .....	6.0	5.0	4.6	4.0	4.8	5.2

\*Calculated prior to rounding

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

	<i>Actual</i> 2000	<i>Actual</i> 2001	<i>Actual</i> 2002	<i>Actual</i> 2003	<i>Forecast</i> 2004	<i>Forecast</i> 2005
<b>Personal Income</b>						
Millions of Current Dollars .....	132,558	138,029	143,429	149,888	159,481	170,326
Percent Change .....	9.7	4.1	3.9	4.5	6.4	6.8
<b>Retail Sales</b>						
Millions of Current Dollars .....	43,940	44,833	45,425	47,818	50,687	54,032
Percent Change .....	7.8	2.0	1.3	5.3	6.0	6.6
Unemployment Rate (Percent) .....	3.9	4.7	6.2	5.6	5.0	4.5
<b>Wage and Salary Employment</b>						
Number in Thousands .....	2,242.7	2,265.0	2,265.1	2,289.3	2,346.0	2,424.9
Percent Change .....	3.7	1.0	0.0	1.1	2.5	3.4
<b>Population</b>						
Number in Thousands .....	5,169	5,321	5,469	5,621	5,767	5,923
Percent Change .....	3.0	2.9	2.8	2.8	2.6	2.7
<b>Single-Family Units Permitted</b>						
Number .....	48,846	50,930	55,649	65,649	62,367	61,119
Percent Change .....	(5.6)	4.3	9.3	18.0	(5.0)	(2.0)
<b>Multifamily Units Permitted **</b>						
Number .....	10,920	10,414	8,830	7,135	6,707	6,774
Percent Change .....	(9.5)	(4.6)	(15.2)	(19.2)	(6.0)	1.0

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

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

funds. The rising Federal funds rate (other factors being equal) implies lower future inflation, which should tend to restrain mortgage rates. The impact of increased federal borrowing as a result of deficits also must be taken into account. The Treasury's main borrowing instrument is the 10-year T-note, its longest-term regular security issue. The increased borrowing by the Fed puts upward pressure on mortgage rates which has nothing to do with the housing market.

It is not clear how high a particular interest rate has to get before it is "too high." Auto companies can and did offer significant incentives to buyers when low interest rates meant that a no-interest loan was equivalent

to a \$3,000 dollar price reduction. Rising interest rates make incentives more expensive and will likely reduce profit on a per-car basis. Mortgage rates could rise to the 7-8 percent range before owner-occupied housing demand would be significantly squeezed. Unfortunately, there is significant evidence that an increasing share of housing demand is investment-related, and that demand will evaporate as rates increase.

#### ARIZONA

Arizona continues to do better than most other states. Job growth here is stronger and has been going on longer than is true for the national economy. However, job growth is

slower than normal for this point in a recovery, and the state may well be more sensitive to mortgage rate increases than some other parts of the country.

The employment numbers were revised downward modestly during the second quarter, primarily because the performance to date has been slower than expected. These forecasts are at the low end of the range for other Arizona employment forecasts. The wide range of current forecasts probably is due to estimates of the revisions to be made next spring. The survey employment numbers will be benchmarked to the unemployment insurance program numbers after the end of the year, and historically the revisions

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

	<i>Actual</i> 2000	<i>Actual</i> 2001	<i>Actual</i> 2002	<i>Actual</i> 2003	<i>Forecast</i> 2004	<i>Forecast</i> 2005
<i>Retail Sales</i>						
Millions of Current Dollars.....	30,167	30,605	30,690	32,371	34,410	36,785
Percent Change.....	8.4	1.5	0.3	5.5	6.3	6.9
Unemployment Rate (Percent).....	2.7	3.9	5.6	4.9	4.8	4.5
<i>Wage and Salary Employment</i>						
Number in Thousands.....	1,541.0	1,559.5	1,556.9	1,576.6	1,628.6	1,697.0
Percent Change.....	3.6	1.2	(0.2)	1.3	3.3	4.2
<i>Population</i>						
Number in Thousands.....	3,097	3,194	3,290	3,387	3,478	3,576
Percent Change.....	3.4	3.1	3.0	2.9	2.7	2.8
<i>Single-Family Units Permitted</i>						
Number in Thousands.....	33,107	33,428	35,360	41,056	38,182	38,182
Percent Change.....	(6.6)	1.0	5.8	16.1	(7.0)	0.0
<i>Multifamily Units Permitted **</i>						
Number in Thousands.....	9,490	8,964	7,268	5,407	5,083	5,159
Percent Change.....	(0.4)	(5.5)	(18.9)	(25.6)	(6.0)	1.5

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

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

	<i>Actual</i> 2000	<i>Percent</i> <i>Change</i>	<i>Actual</i> 2001	<i>Percent</i> <i>Change</i>	<i>Actual</i> 2002	<i>Percent</i> <i>Change</i>	<i>Actual</i> 2003	<i>Percent</i> <i>Change</i>	<i>Forecast</i> 2004	<i>Percent</i> <i>Change</i>	<i>Forecast</i> 2005	<i>Percent</i> <i>Change</i>
Manufacturing.....	209.9	1.2	201.7	(3.9)	183.5	(9.0)	174.0	(5.2)	174.9	0.5	178.0	1.8
Mining.....	9.8	(11.7)	9.6	(2.0)	8.7	(9.4)	8.0	(8.0)	8.0	0.5	8.1	0.5
Construction.....	168.1	4.5	173.6	3.3	172.2	(0.8)	176.6	2.6	180.1	2.0	165.7	(8.0)
TWU*.....	74.3	1.0	76.6	3.1	76.0	(0.8)	76.6	0.8	78.1	2.0	80.5	3.0
Information.....	54.4	15.5	53.9	(0.9)	51.7	(4.1)	49.4	(4.4)	47.4	(4.0)	48.6	2.5
Trade.....	363.5	3.8	364.0	0.1	364.9	0.2	368.2	0.9	379.2	3.0	396.3	4.5
Financial Activities.....	151.0	2.4	153.4	1.6	155.1	1.1	159.3	2.7	162.5	2.0	169.0	4.0
Services.....	845.0	4.2	854.5	1.1	862.5	0.9	883.7	2.5	917.3	3.8	972.3	6.0
Government.....	366.7	3.6	377.8	3.0	390.4	3.3	393.7	0.8	398.4	1.2	406.4	2.0
Total Wage and Salary Employment.....	2,242.7	3.7	2,265.0	1.0	2,265.1	0.0	2,289.3	1.1	2,346.0	2.5	2,424.9	3.4
Unemployment Rate.....	3.9%		4.7%		6.2%		5.6%		5.0%		4.5%	

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

have followed a certain pattern. Revisions tend to be upward after a recovery is under way, because the survey misses new firms moving into the area and can underestimate new hiring trends. The differences tend to be in the opposite direction when the economy is slowing down. The question is the degree to which new business creation and renewed hiring has improved. The employment forecast assumes little revision will occur for 2004.

Anecdotal evidence indicates that a significant portion of current single-family housing demand is investment-related. Our population growth is extensive enough to justify strong single-family permit activity, although probably not at the recent record levels. Investors are taking out interest-only loans with the expectation that housing appreciation will earn them a handsome return in three to five years. Already there are investors who rent out houses for less than the mortgage

payment, on the assumption that appreciation will make it worthwhile. It seems clear that even modest increases in interest rates will rapidly choke off investment demand, and if everyone tries to unload their properties in three to five years, the housing market could be in for a bumpy ride.

— Tracy Clark  
Associate Director  
Bank One Economic Outlook Center

## Arizona Leading Index increases in June

The Bank One Arizona Index of Leading Economic Indicators rose slightly in June to 124.8, which is 0.2 percent above the previous month's revised 124.5 and 3.4 percent above the June 2003 level of 120.7 (1987 = 100).

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

Residential building permits continue to defy expectations. Mortgage rates have not risen high enough to put a damper on the pace of construction, and population growth is strong enough to sustain a fairly high level of activity — but it seems doubtful that the current pace is sustainable in the face of higher interest rates. Anecdotal evidence indicates that a significant fraction of current activity is being driven by investors with no place else to put their money. This is the segment of the market most sensitive to rising interest rates and a recovering stock market.

Material inventories, new orders and production all were in positive territory, which has not occurred since last October. This is a positive indicator for business activity in general, and is consistent with what is happening nationally. Business spending was the primary weak spot during the recession and the continued evidence of strengthening in the business sector suggests that the economy is, or soon will be, hitting on all cylinders.

Two of the three negative factors are related to employment, which will be a real source of concern if it continues on

the downward trend. Consumer spending comprises about two-thirds of annual Gross Domestic Product, and if it falters, the economy could be in real trouble. Consumer spending is, for the most part, a function of consumer confidence, which is in turn largely a function of people's perceived difficulty in finding and obtaining a new job. If the rally in job creation continues to weaken, consumers may pull back on spending. Arizona has done better in job creation than the nation as a whole during most of the recovery — the state's only weak spots have been manufacturing and information services. It would be premature to worry, but if the job growth picture continues to weaken either locally or nationally, it is sure to spell trouble for the economy.

The last negative index component is the money supply, which fell in June after rising for four months. The anticipation surrounding the rise in the federal funds rate may have been a factor in the drop of the money supply, because it seems unlikely that there would have been any real impact yet. It does suggest that as interest rates

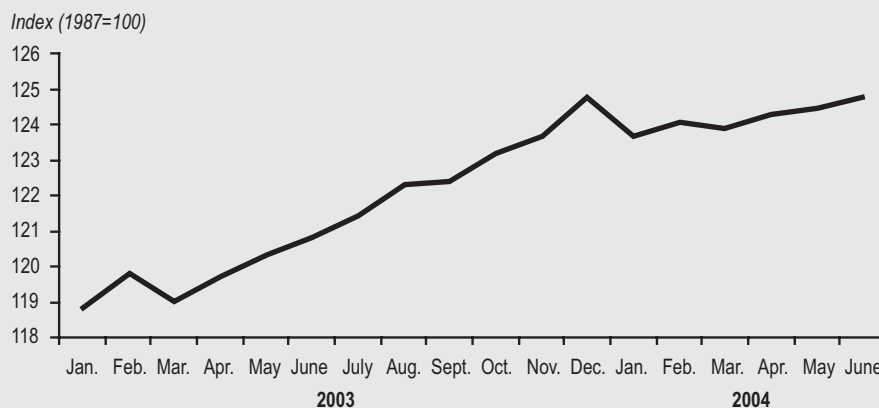
rise we will be seeing the money supply fall over the next year.

Arizona should be receiving a boost from the devaluation of the dollar and the resulting increase in export sales, although the economies of some of its trading partners are lagging a little.

China in particular has some very difficult decisions to make. China is behind many of the worldwide shortages in raw materials because its economy has been growing so fast lately. China is trying to meet both domestic demand by the emerging middle class and foreign demand for cheap goods produced in its factories. However the Chinese economy has been growing too quickly, and the government is actually trying to slow things down. The rest of our trading partners may have improving economies, but their growth rate is below the United States. Nationally the net impact is that both imports and exports are growing but imports are still growing faster than exports.

— Tracy Clark  
Associate Director

FIGURE I  
ARIZONA INDEX OF LEADING ECONOMIC INDICATORS



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

# AZ per capita personal income still far below average

Arizona continues to lag behind other western states and the national average on such measures as average wage per job and per capita personal income. Both metropolitan and nonmetropolitan areas in Arizona compare unfavorably.

Personal income and employment data through 2002 by county and metropolitan area recently were released by the U.S. Department of Commerce's Bureau of Economic Analysis. This article focuses on two measures: average wage per job and per capita personal income (PCPI).

The average wage per job and PCPI are considerably higher in metropolitan areas than in nonmetropolitan areas nationally and in Arizona. Nationally, the average wage in metro areas in 2002 was 44 percent higher than in nonmetro areas. The PCPI differential was 39 percent.

The federal government designates six counties in Arizona to be metropolitan: Maricopa and Pinal (the Phoenix-Mesa-Scottsdale metro area), Pima (Tucson), Yuma (Yuma), Coconino (Flagstaff), and Yavapai (Prescott). Arizona's five micropolitan areas include six other counties, which are considered to be nonmetropolitan.

## AVERAGE WAGE PER JOB

The average wage per job is calculated as total wages and salaries divided by wage and salary employment. The number of hours worked is not taken into consideration. Those working for themselves and certain other members of the work force are not included. A person working more than one job is counted more than once in the employment figures.

Several factors affect the average wage of an area, including industrial mix, occupational mix, work force demographics (such as educational attainment and years of experience), the number of hours worked, and the cost of living. A mid-1990s CBR study indicated that all of these factors contributed slightly to Arizona's low average wage. However, the largest impact came from what has been termed the "sunshine factor:" the willingness of workers to accept a lower wage in Arizona than they would in many places because of perceived qualitative advantages of living in the state, such as climate.

The average wage per job in Arizona in 2002 was \$33,704, an inflation-adjusted 24 percent higher than at the same point in the prior economic cycle in 1991. The national increase over the same period was slightly

less at 21 percent, but Arizona's average wage still was 7 percent lower than the U.S. average in 2002.

Metropolitan areas recorded slightly higher increases in the average wage between 1991 and 2002: 25 percent in Arizona (an average of 2.0 percent per year) and 22 percent nationally (1.8 percent per year). As seen in Figure I, the slightly greater increase in Arizona did not offset the state's inferior performance from the early 1980s through the early 1990s. From the first year of data in 1969 through 1987, Arizona's metropolitan average wage ranged from 4.9 to 8.6 percent below the national metropolitan average. It dropped as low as 12.5 percent below average in 1993 and still

was 9.4 percent below average in 2002.

The average wage in Arizona's nonmetropolitan areas rose only 11 percent between 1991 and 2002, considerably less than the metro average and the national nonmetro average (16 percent). As a ratio to the national nonmetropolitan average, Arizona's nonmetro average generally declined from the early 1970s (when it was 24 percent higher) to 2002, when it was 3 percent higher [see Figure II]. The high average wage in the mining industry is one reason for the higher overall average wage in Arizona.

Among 10 western states, Arizona's average wage per job in 2002 was sixth highest: slightly higher than Oregon and quite a bit more than Utah, New Mexico and Idaho. The

FIGURE I

### METROPOLITAN AREAS IN ARIZONA

Average Wage and Per Capita Personal Income: Ratio to National Metropolitan Average

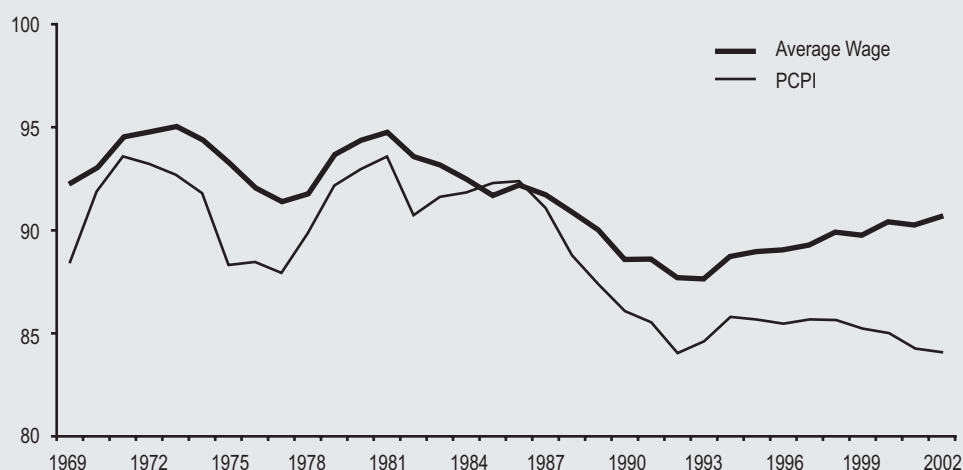
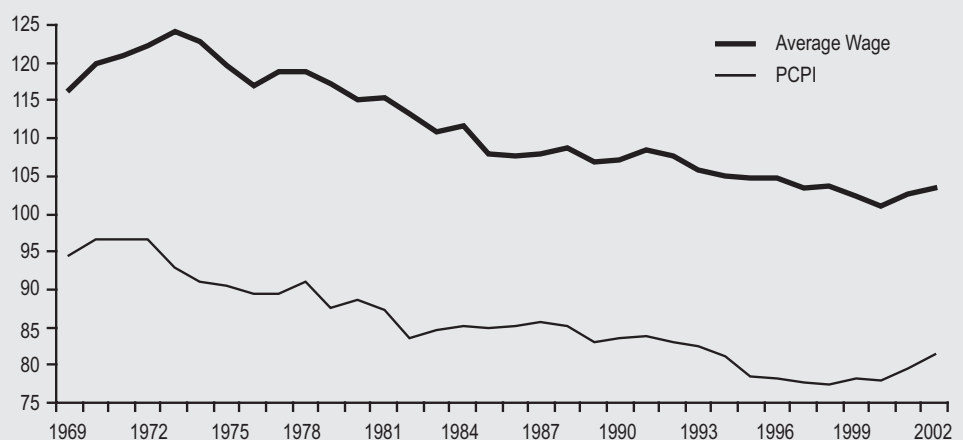


FIGURE II

### NONMETROPOLITAN AREAS IN ARIZONA

Average Wage and Per Capita Personal Income: Ratio to National Nonmetropolitan Average



Source (Figures 1 and 2): 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.

increase between 1991 and 2002 tied for third highest with Texas, less than Washington and Colorado. Arizona's average metropolitan wage ranked seventh in the West in 2002 [see Figure III]. The 11-year advance was third greatest. The situation is reversed among the nonmetropolitan areas: Arizona's average wage was third highest in the West in 2002 (less than Nevada and Colorado), but the 1991-to-2002 gain was eighth highest, more than only Nevada and Utah.

The average wage in Maricopa County in 2002 was \$36,047 — 5 percent less than the national metropolitan average. In the other metro counties, the average wage ranged from 17 percent less than the U.S. metro average in Pima County to 36 percent lower in Yuma County (see Table 1). The 1991-to-2002 increase was greater than the national metro average in Maricopa County and equal to the average in Pima County, but noticeably less in the other metro counties.

Among the state's nine nonmetropolitan counties, the average wage exceeded the national nonmetro average in four and was just 1 percent less in three others. However, the 1991-to-2002 increase was greater than the U.S. nonmetro average only in Santa Cruz and Mohave counties. Six of the counties had real gains of less than 10 percent.

### PER CAPITA PERSONAL INCOME

Per capita personal income is a division of total income from all sources by population. Among the sources of income are wages and salaries, proprietors' income, "other labor income" (mostly employer contributions to private pension funds and insurance), property income (dividends, interest and rent), and transfer payments (retirement payments, Medicaid, food stamps and other programs).

Arizona's low average wage is a significant contributor to its low PCPI, but per capita income from each of the other sources also is below the national average. In addition, demographics of Arizona's population — such as the proportion of the population who are of working age, the proportion of the working-age population who are part of the labor force, and the unemployment rate — have a negative effect on PCPI.

Per capita personal income in Arizona in 2002 was \$26,360 — 15 percent less than the U.S. average, an inflation-adjusted 24 percent higher than in 1991 (the same increase as the average wage). The national PCPI rose 26 percent between 1991 and 2002. The PCPI advanced nearly as much in the nonmetro areas as in the metro areas, both

in Arizona and nationally.

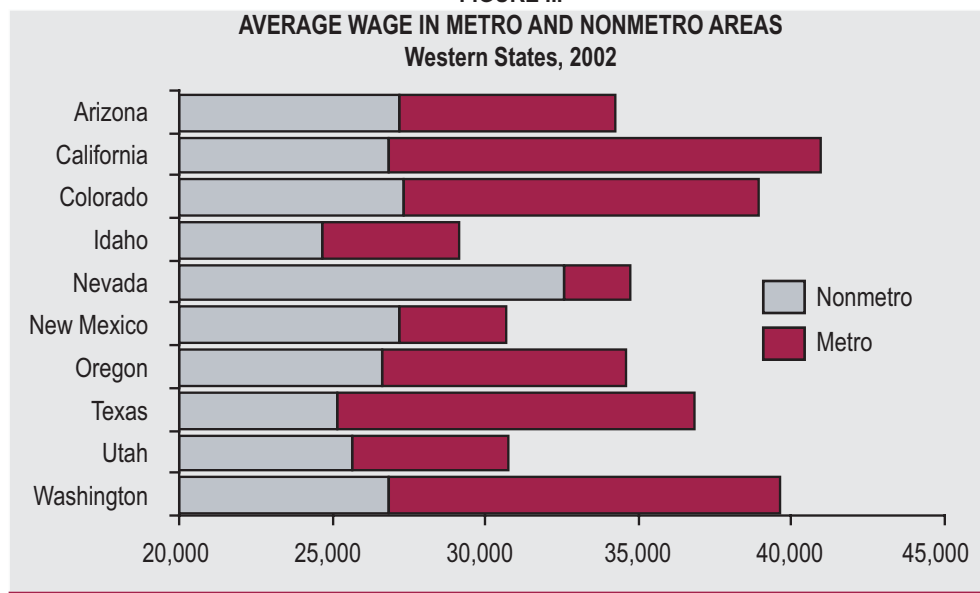
The 1991-to-2002 PCPI increase in metropolitan areas in Arizona was slightly less than the national metro average. The 2002 metro area PCPI in Arizona was 16 percent less than the national metro average, matching the lowest historical differential (in 1992), a considerably larger differential than those measured from 1969 through the mid-1980s. As seen in Figure I, Arizona's low average wage accounts for much of the differential in PCPI between the national and Arizona metro areas. Since about 1990, however, factors other than average wage have had an increasing importance in explaining the differential.

In nonmetropolitan areas, the gain in PCPI between 1991 and 2002 also was slightly less

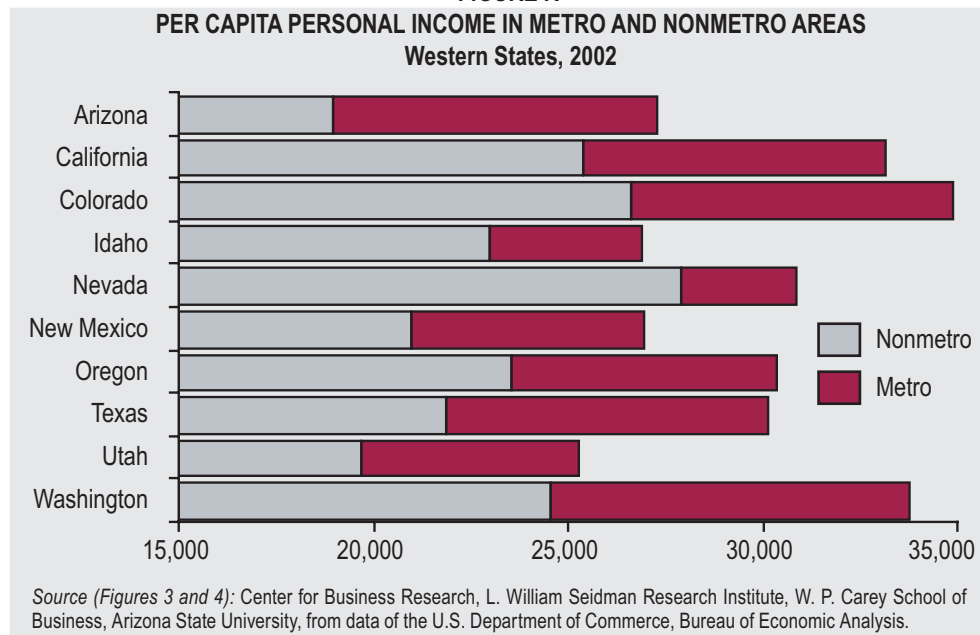
in Arizona than in the nation. The differential from the national average was 19 percent in 2002, slightly more than the metropolitan shortfall. As seen in Figure II, the PCPI ratio has declined in tandem with the drop in the average wage ratio since the early 1970s. Since Arizona's average wage still was slightly higher than the national average in 2002, other factors are solely responsible for the nonmetro PCPI being so far below the national nonmetro average.

Among the 10 western states, Arizona's PCPI in 2002 was seventh highest, greater than in Idaho, New Mexico and Utah. The increase between 1991 and 2002 was greater than only California and Nevada. Arizona's average metropolitan PCPI also ranked

**FIGURE III**  
AVERAGE WAGE IN METRO AND NONMETRO AREAS  
Western States, 2002



**FIGURE IV**  
PER CAPITA PERSONAL INCOME IN METRO AND NONMETRO AREAS  
Western States, 2002



Source (Figures 3 and 4): 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.

seventh in the West in 2002 [see Figure IV]. The 11-year increase also was greater than only California and Nevada. Among the nonmetropolitan areas, Arizona's PCPI was the lowest in the West in 2002 and the 1991-to-2002 gain was more than only Nevada.

Per capita personal income in Maricopa County in 2002 was \$29,020 — 11 percent less than the national metropolitan average. The next highest figure was \$25,278 in Pima County, 22 percent below the U.S. metro average. The 1991-to-2002 real increase was 24 percent in Maricopa and Pima counties; it ranged from 15 percent in Yuma County to 39 percent in Coconino County.

Cochise County had the highest PCPI among the state's nonmetropolitan counties, 5 percent less than the national nonmetro average. The figures in Apache, Graham and Navajo counties were about 30 percent below average. Apache County posted a strong 1991-to-2002 advance while the gain in Mohave County was small. The other counties had real gains between 16 and 24 percent.

— **Tom R. Rex**  
Research Manager

**TABLE 1**  
**PER CAPITA PERSONAL INCOME AND AVERAGE WAGE BY COUNTY**

	Per Capita Personal Income			Average Wage		
	2002	1991-2002 Change*	Ratio to U.S.**	2002	1991-2002 Change*	Ratio to U.S.**
United States .....	\$30,906	26%		\$36,167	21%	
Arizona .....	26,360	24	85	33,704	24	93
<i>Metropolitan</i>						
United States .....	32,459	26		37,777	22	
Arizona .....	27,285	22	84	34,240	25	91
Maricopa .....	29,020	24	89	36,047	26	95
Pima .....	25,278	24	78	31,308	22	83
Coconino .....	24,543	39	76	26,943	16	71
Yavapai .....	21,936	16	68	25,230	18	67
Yuma .....	20,561	15	63	24,088	13	64
Pinal .....	19,356	22	60	28,667	13	76
<i>Nonmetropolitan</i>						
United States .....	23,362	25		26,310	16	
Arizona .....	18,992	22	81	27,208	11	103
Greenlee .....	20,418	16	87	37,767	9	144
Mohave .....	19,914	10	85	25,230	22	96
Cochise .....	22,129	24	95	29,844	8	113
Gila .....	20,646	20	88	26,159	3	99
La Paz .....	18,943	18	81	22,198	7	84
Santa Cruz .....	17,902	20	77	28,789	32	109
Navajo .....	15,917	22	68	26,989	9	103
Apache .....	16,457	45	70	25,955	-1	99
Graham .....	16,046	22	69	23,337	11	89

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

\*\* in 2002; Arizona compared to national average; Coconino, Maricopa, Pima, Pinal, Yavapai and Yuma counties compared to national metropolitan average; and other counties compared to national nonmetropolitan average.

Source: 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.

## June's Business Conditions Index on the upswing

The seasonally adjusted Arizona Business Conditions Index rose to 65.9 in June from 63.8 the previous month, a 3.3 percent increase. An index reading over 50 indicates the local economy is growing; below 50 suggests a slowdown in the overall level of economic activity in the near term.

### ANALYSIS

Since September 2003, the index has remained in the mid-60s, bouncing between 62.0 and 68.2. June's reading of 65.9 shows that the local economy has stabilized at a reasonable rate of growth.

Only one component of the overall index, the purchased materials inventory level, declined in June. All other components rose, with purchases showing the strongest gain. The purchases component rose by 9 points, to reach 68.9 in June. Employment also showed a strong gain of 7.2 points, leveling out at 60.4. All components registered levels over 60, showing the local economy now has a good foothold in economic growth.

Construction employment has shown considerable growth, but with mortgage rates inching upward and a high percentage of home ownership, this trend may slow over

the next few months.

The Price Index fell slightly, from 76.9 in May to 75.9 in June. High prices for fuels and metals have driven the Price Index up since January, but the upward pressure may be starting to ease. Between January and May, the Prices Index had risen by 31.6 percent. The rise in prices may help to put a

dampener on economic growth over the next few months, as both inputs and borrowing have become more expensive.

— **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.



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**ARIZONA ECONOMIC INDICATORS**

	Month or Quarter	Current Value	Previous Value	Percent Change Previous Period	Percent Change from Year Ago	Year-to-Date	
						Value	Percent Change from Year Ago
<b>LEADING ECONOMIC INDEX (1987 = 100)</b>							
Arizona .....	June	124.8	124.5	0.2	3.4	NA	NA
<b>BUSINESS CONDITIONS INDEX</b>							
Arizona .....	June	65.9	63.8	3.3	23.4	NA	NA
<b>BUILDING PERMITS (Thousands of \$)</b>							
Maricopa County .....	May	1,177,379	1,196,507	-1.6	42.9	5,109,241	34.4
Pima County .....	May	131,610	167,239	-21.3	-16.1	758,599	7.9
Balance of State .....	May	311,695	306,494	1.7	33.0	1,494,560	28.7
Arizona .....	May	1,620,684	1,670,240	-3.0	33.3	7,362,400	30.0
<b>TOTAL HOUSING UNITS AUTHORIZED</b>							
Maricopa County .....	May	4,928	6,159	-20.0	24.0	23,443	34.5
Pima County .....	May	738	994	-25.8	-19.5	4,282	6.7
Balance of State .....	May	2,418	2,404 r	0.6	35.8	11,377	28.4
Arizona .....	May	8,084	9,557 r	-15.4	21.1	39,102	29.1
<b>HOME SALES</b>							
Maricopa County – Number.....	May	15,290	11,750	30.1	64.1	58,980	30.3
Maricopa County – Median Price(\$).....	May	166,475	164,000	1.5	8.2	162,525	8.3
<b>HOUSING AFFORDABILITY INDEXES</b>							
Metropolitan Phoenix – New Homes .....	1st Quarter	113	111	1.8	-5.0	NA	NA
Metropolitan Phoenix – Resale Homes .....	1st Quarter	127	126	0.8	-3.1	NA	NA
<b>MORTGAGE RATES (30-year Fixed)</b>							
Maricopa County .....	June	5.9	5.9	0.0	13.5	NA	NA
<b>POPULATION ESTIMATES (Thousands)</b>							
Maricopa County .....	1st Quarter	3,476	3,444	0.9	3.4	NA	NA
Pima County .....	1st Quarter	918	913	0.6	2.3	NA	NA
Balance of State .....	1st Quarter	1,365	1,353	0.9	3.2	NA	NA
Arizona .....	1st Quarter	5,759	5,710	0.9	3.2	NA	NA
<b>RETAIL SALES (Millions of \$)</b>							
Maricopa County .....	April	2,984	3,160	-5.6	12.9	11,524	11.4
Arizona .....	April	4,213	4,629	-9.0	7.9	16,759	10.0

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.