

# YUMA

**EMPLOYMENT GROWTH**  
2001-03

**2.5**

2001-06

**3.3**

STANFORD 9  
2002

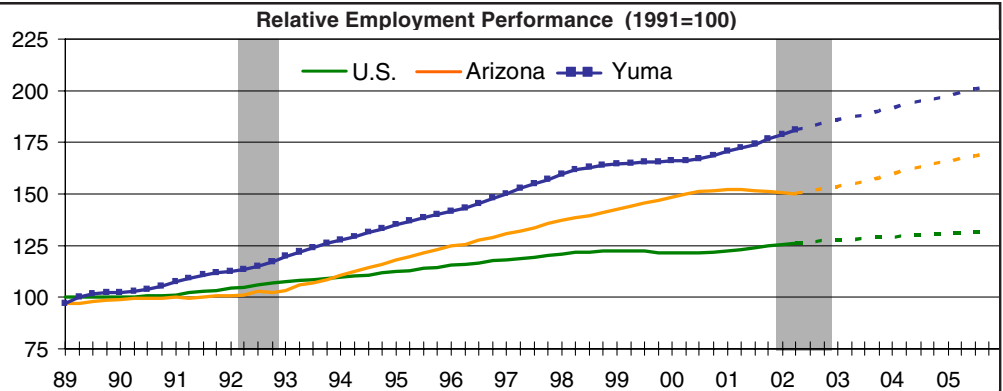
Language **31**  
Math **50**  
Reading **31**

EDUCATIONAL ATTAINMENT 2000

**11.8%**

POVERTY RATE

**19.2%**



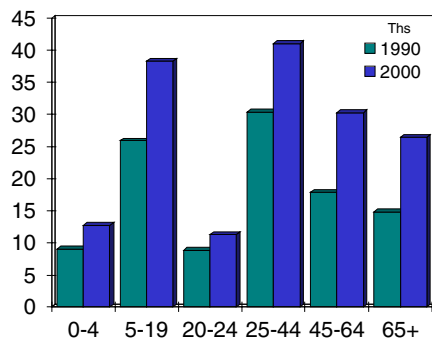
1995	1996	1997	1998	1999	2000	2001	Indicators	2002	2003	2004	2005	2006
2.66	2.32	2.44	2.72	2.73	2.67	2.88	<b>Gross Product, C\$B</b>	3.00	3.14	3.29	3.42	3.58
20.6	-12.7	5.1	11.5	0.1	-2.2	8.1	<b>% Change</b>	4.1	4.6	4.8	4.1	4.7
49.4	52.4	55.3	58.0	61.8	65.1	66.3	<b>Total Employment (000)</b>	67.2	69.9	73.3	75.9	78.4
7.4	6.1	5.5	4.9	6.5	5.3	1.9	<b>% Change</b>	1.4	4.0	4.9	3.5	3.4
28.6	30.8	27.8	28.2	29.8	27.4	24.4	<b>Unemployment Rate</b>	25.2	23.9	22.8	22.5	21.8
17.6	-5.5	7.0	11.5	0.9	2.9	6.6	<b>Personal Income Growth</b>	4.2	6.6	7.8	6.8	6.7
131.8	137.2	143.9	149.1	155.7	161.1	164.9	<b>Population (000)</b>	168.9	174.1	180.6	186.7	192.5
767	879	959	896	919	1,180	1,226	<b>Single-Family Permits</b>	1,295	1,211	1,233	1,237	1,254
6	272	98	143	128	108	84	<b>Multifamily Permits</b>	71	99	109	118	120
78.1	82.6	82.5	85.3	91.0	95.1	100.1	<b>Existing Home Price (\$Ths)</b>	103.4	105.5	110.4	112.7	116.6
520	631	688	1,209	1,033	893	1,714	<b>Mortgage Originations (\$Mil)</b>	1,260	1,069	1,168	1,204	1,341
0.1	1.2	2.0	0.7	1.7	1.8	1.9	<b>Net Migration (000)</b>	0.5	0.6	1.1	1.0	1.0
344	450	541	513	503	488	618	<b>Personal Bankruptcies</b>	600.1	583.2	552.1	565.8	563.6

## INDUSTRY OPPORTUNITIES

Opportunities for economic development include:

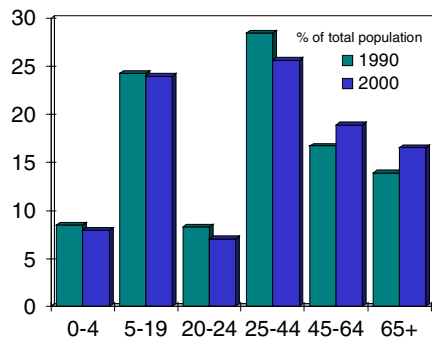
- Industrial machinery
- Transportation/logistics
- Agriculture/Food processing/Agriculture technology
- Defense/aerospace/avionics
- Tourism

## POPULATION BY COHORT



Source: Census Bureau

## POPULATION DISTRIBUTION



Source: Census Bureau

## ANALYSIS

**Recent Performance.** Growth in Yuma County is sluggish, but positive. YUM is currently among the better-performing counties in the state, thanks to healthy job growth in services. The government is adding jobs in YUM, which provides a significant boost to the local economy. The unemployment rate is stable. Personal bankruptcy filings are subdued in YUM.

**Tourism.** The YUM tourism industry has remained healthy, despite fears of a potential meltdown in tourist traffic following the 9/11 attacks. Winter tourist, or snowbird, visitation was down only slightly and the impact was marginal compared to last year, which is impressive given that the industry has seen a significant expansion of capacity in new RV parks and hotels.

Since most of YUM's visitors arrive via automobile, tourism was only marginally affected by the current slowdown. The summer tourist season is not as important in YUM. One unresolved concern about tourist flows in YUM is the impact of new border restrictions. The INS is currently considering restricting tourist stays to one month from the current six-month limit, which would affect visitors from Canada and Mexico, who typically stay for at least a few months in YUM. The policy, therefore, presents a downside risk for local retail and service industries.

**Agriculture.** Agriculture is the primary industry in YUM, and its health helped offset some of the economic downturn. Agriculture contributes over \$800 million to YUM's economy, and employs almost 9,000 locally. YUM also ranks highest in Arizona in terms of crop production and livestock raising. As such, a healthy crop and low land prices, along with sturdy federal farm aid, are providing some stability to local farmers.

One of the key areas of future growth in YUM will be in the value-added food processing and agribusiness industries. Already, the metro area has played host to three new cold storage

and salad processing facilities. A new dairy processing plant is considering relocation in YUM from more expensive California. The combination of lower business and land costs, proximity to farmers, access to transportation and warehousing network and an agglomeration of food processing industries makes YUM a very attractive location for sustained growth in agribusiness.

**Government.** The government, and especially the military, plays a major role in the local economy. Home to the Marine Corps Air Station and the U.S. Army proving ground, the military presence in YUM is estimated to generate almost \$260 million annually in terms of an economic impact on the metro area. The outlook for the two military facilities in YUM is stable. Strong political capital in Congress will ensure that YUM's bases evade downsizing, although there is still an outside chance that it could be considered for future base closings in 2005.

The biggest threat currently is Arizona's severe state budget crunch, which is forcing it to share the burden of financing with local authorities. The governor is considering a second round of budget cuts, which could affect local public spending and some public construction projects.

**Job growth in Yuma county will accelerate in the coming year. Population growth and low business costs will remain the two structural drivers for growth in the metro area. That said, YUM will continue to struggle with volatile employment growth and high unemployment. The jobs that it creates will remain low paying and often seasonal. However, the military presence is a stabilizing force and could provide a short-term boost. Longer term, YUM will be one of the better performing counties in the nation due to strong in-migration.**

Rakesh Shankar  
December 2002

## EMPLOYMENT & INDUSTRY

### TOP EMPLOYERS

U.S. Marine Corps Air Station (MCAS)	6,043
Dole Corporation	2,000
U.S. Army Yuma Proving Ground	1,776
Grower's Company, Inc.	1,500
Yuma Regional Medical Center	1,500
Salyer American Fresh	1,000
Paradise Casino	600
Tuftex, Div. Of Queen Carpet	510
Western Newspapers, Inc.	407
EMCO Harvesting Co.(seasonal)	400
U.S. Border Patrol	339
Wal-Mart Stores, Inc.	335
Super K-Mart	300
Pasquini Produce Co.	300
U.S. Dept. of Interior, Bureau of Reclamation	300
Arizona Western College	259
Russell	200
Yuma Daily Sun	200
Cocopah Bingo Casino	200
Gowan Company	200

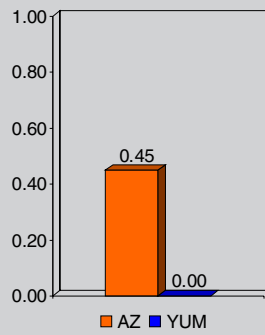
Source: Yuma Chamber of Commerce, June 2001

### Public

Federal	2,410
State	2,546
Local	6,380

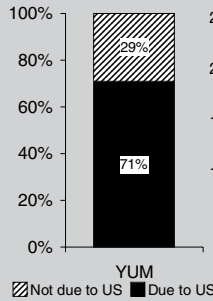
2001

### INDUSTRIAL DIVERSITY

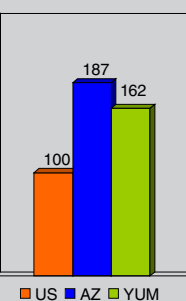


### EMPLOYMENT VOLATILITY

#### DUE TO U.S. FLUCTUATIONS



#### RELATIVE TO U.S.

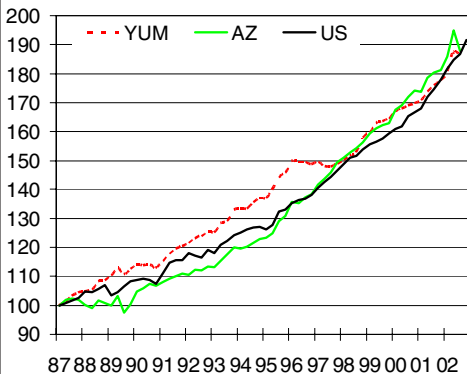


## COMPARATIVE EMPLOYMENT AND INCOME

Sector	% of Total Employment			Average Annual Earnings		
	YUM	AZ	US	YUM	AZ	US
Mining	0.0%	0.4%	0.4%	\$22,890	\$42,760	\$64,853
Construction	4.2%	7.3%	5.1%	\$35,526	\$35,534	\$37,846
Manufacturing	3.8%	9.3%	13.4%	\$25,749	\$52,820	\$50,161
Durable	31.1%	77.2%	60.1%	\$42,566	\$56,574	\$52,419
Nondurable	68.9%	22.8%	39.9%	\$17,773	\$40,158	\$46,703
Transport/Utilities	3.6%	4.9%	5.4%	\$27,100	\$42,761	\$50,161
Wholesale Trade	5.7%	4.9%	5.1%	\$16,132	\$47,228	\$49,721
Retail Trade	15.3%	18.6%	17.8%	\$15,428	\$19,835	\$19,357
Finance, Ins., Real Estate	3.1%	6.6%	5.8%	\$16,359	\$31,403	\$42,743
Services	47.3%	31.3%	31.1%	\$14,227	\$30,334	\$33,327
Memo: Health Services	4.4%	6.8%	7.9%	\$37,849	\$41,149	\$40,060
Government	17.1%	16.6%	15.9%	\$24,595	\$38,727	\$41,557

Source: Percent of total employment - BLS, 2001; Avg annual earnings - BEA, 2000; Economy.com

## HOUSE PRICES



Source: NAR, Economy.com, 1987Q1 = 100, NSA

## LEADING INDUSTRIES

SIC	Industry	Employees (000)
076	Farm labor and management services	10.3
078	Landscape and horticultural services	5.3
ML	Military personnel	4.3
072	Crop services	2.8
GVF	Total federal government - civilian	2.4
531	Department stores	2.3
FR	Farms	1.5
873	Research and testing services	1.3
514	Groceries and related products	1.2
074	Veterinary services	1.0
841	Museums & art galleries	0.9
228	Yarn and thread mills	0.9
422	Public warehousing & storage	0.9
655	Land subdividers & developers	0.6
804	Offices and clinics of other practiti	0.5
Total leading industry employment		41.6
High-tech employment		1.8
As % of total employment, all industries		2.6

Source: BLS, Economy.com, 2001

## MIGRATION FLOWS

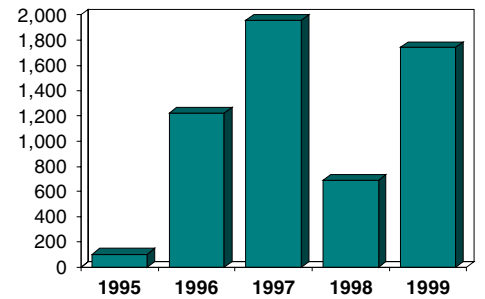
Into Yuma County	Number of Migrants	Median Income
Maricopa County	786	18,025
San Diego	569	25,399
Salinas	463	21,070
Los Angeles	319	13,471
Riverside	313	17,997
Pima County	238	19,820
Jacksonville	155	25,207
Las Vegas (NV part only)	135	19,166
Pensacola	133	13,797
Orange County	123	24,999
Total Immigration	9,492	19,670

### From Yuma County

Maricopa County	1,364	18,677
San Diego	505	24,249
Riverside	426	19,964
Pima County	403	18,416
Salinas	306	22,749
Los Angeles	217	14,062
Las Vegas (NV part only)	213	17,916
Mohave County	185	15,768
Yavapai County	123	21,249
Seattle	91	19,617
Total Outmigration	9,581	20,744

<b>Net Migration</b>	-89	-1,074
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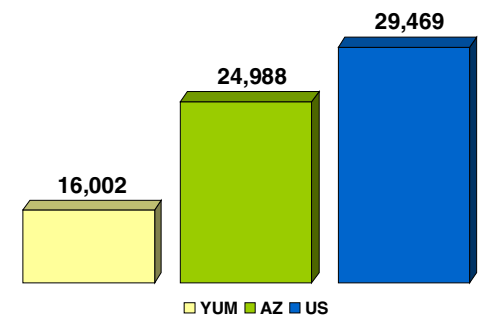
### Net Migration, YUM



	Domestic	Foreign	Total
1995	-1,459	1,560	101
1996	-5,37	1,758	1,221
1997	636	1,321	1,957
1998	-387	1,076	689
1999	557	1,187	1,744

Source: IRS (top), 2001; Census Bureau, 1999

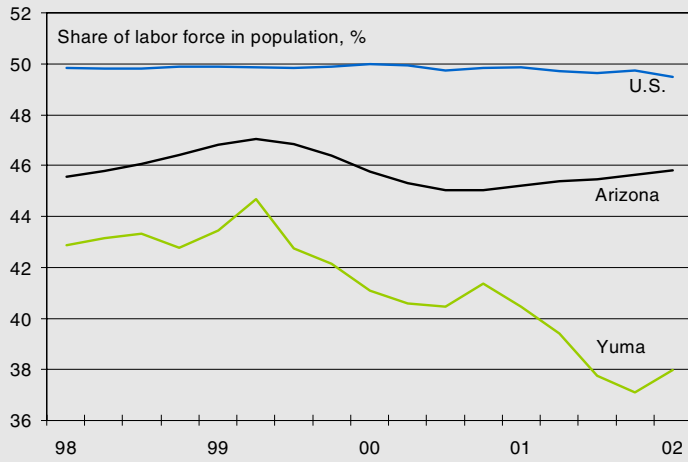
## PER CAPITA INCOME



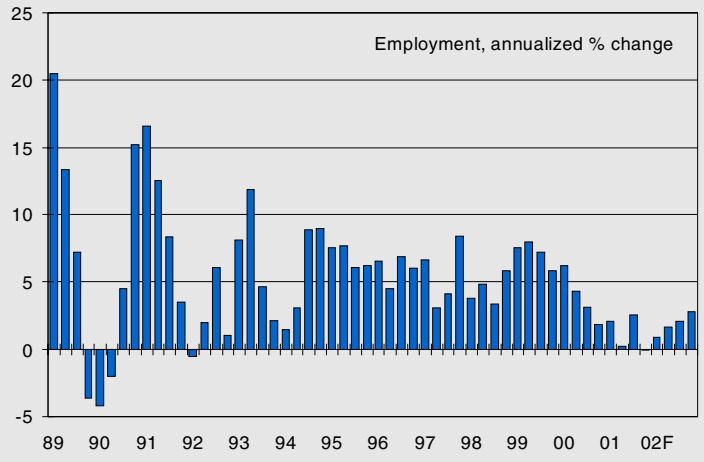
Source: Bureau of Economic Analysis, 2000

# Yuma

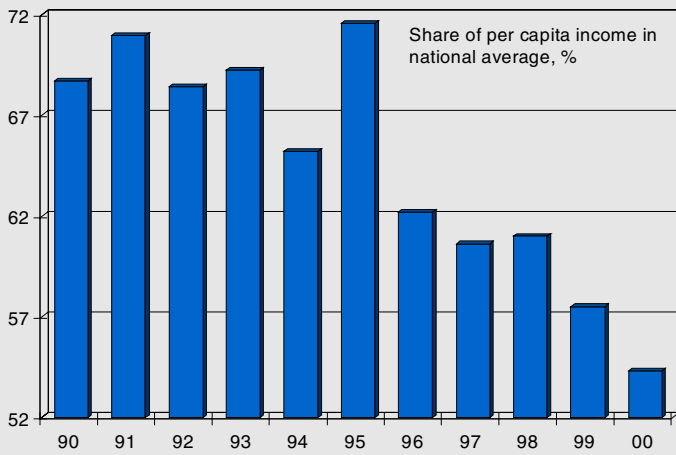
## Yuma's Labor Force Participation Is Very Low



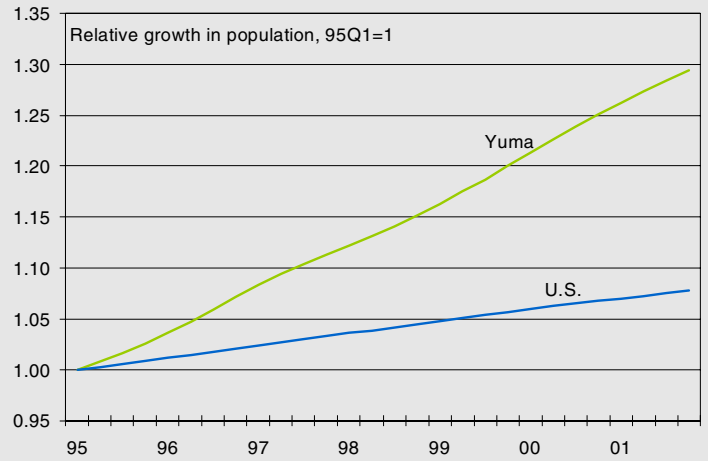
## Very Shallow Slowdown in Yuma This Time Around



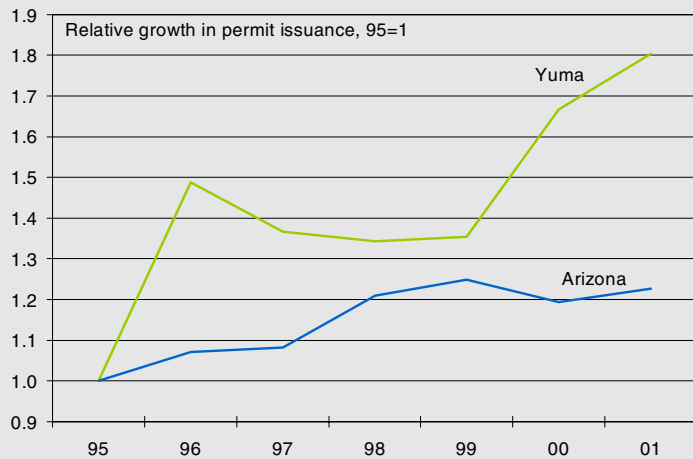
## Yuma's Income Trends Continue to Deteriorate



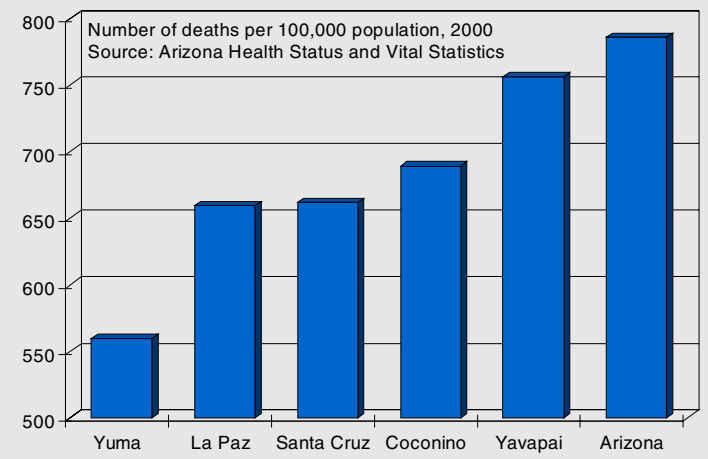
## Unabated Population Growth in Yuma



## Migration Feeds a Housing Boom in Yuma



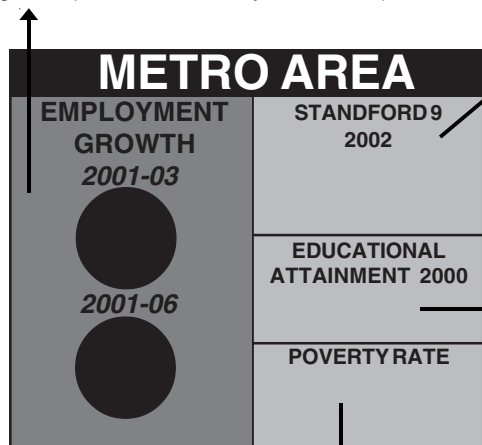
## YUM Has The Lowest Mortality Rate In the State



# USER'S GUIDE

## Educational Growth

These numbers represent the county's annualized employment growth rate in its short-term (over the next two years, top) and its long-term growth (over the next five years, bottom).



## Poverty Rate

This data point reflects the share of total population in the county that lives below the Federal Poverty Line. This is 1999 data, released by the Census bureau based on the Decennial Census 2000 surveys. The Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

## Standford 9

The data represent percentile ranks for the county's 9th grade students, released in Spring 2002. Stanford 9 tests are a commonly used measure of educational attainment for K-12 students. The test is a standardized one that compares individual students' performance in each of the subject areas with a representative sample of national public school students.

## Educational Attainment

This value represents the share of the county's residents aged 25 and over who have attained a bachelor's degree or higher. This is taken from data released by the Census Bureau based on the Decennial Census 2000 surveys.

## Industry Opportunities

Future opportunities for economic development include a mix of those industries that already drive the state's economy, and others in which their roles may be enhanced. A three-step process led to the creation of priority economic opportunities. First, Economy.com's forecasts of industry employment over the coming ten years was used to provide a rank of growth rates across all two-digit industries as defined by SIC codes.

Second, Economy.com conducted econometric analysis of the comparative advantages that contribute to the determination of industry location, using this to calculate the estimated growth potential by industry in Arizona. This was then compared with actual industry performance over the past ten years, and the difference provided a ranking of industries in which full potential is not yet realized given current measures of comparative advantage.

The rankings emerging from this analysis were then combined with the ranking of industries according to the national outlook by industry, weighting these two factors equally. Finally, from the ranking of industries that emerged from these criteria, industries were selected that had qualities fundamental to the assumptions of the changing macro and international economic environment.

## Population by cohort and population distribution

These two charts use population data for 1990 and 2000 released by the Census Bureau as part of its Decennial Census surveys. The first chart contrasts the actual number, in thousands, of residents in the county by age cohort, while the second chart details the share of residents in each age cohort.

Indicator	Units	Source	Note
Gross Product	Chain-weighted dollars	Economy.com	GCP is the sum of all income produced in a county, including corporate profits. Thus, it does not necessarily track employment growth.
Total Employment	Thousands	BLS 790 employment series; for NECMAs series estimated by Economy.com	Defined as sum of mining, construction, manufacturing, transportation/public utilities, wholesale/retail trade, finance/real estate, services, and government.
Unemployment Rate	Percent	Household employment series	
Personal Income Growth	% change previous year	Bureau of Economic Analysis	Measures income received by households from employment (including self), investments, and transfer payments.
Population	Thousands	Bureau of Census	
Single-Family Permits	Number of units	Bureau of Census	
Multifamily Permits	Number of units	Bureau of Census	
Existing Home Price	Thousands dollars	Nat'l Assoc Realtors	Index is affected by mix of homes sold.
Mortgage Originations	Millions dollars	Federal Financial Institutions Council	
Net Migration	Thousands	Bureau of Census	Calculated as number of domestic and international people moving into a state minus those leaving.
Personal Bankruptcies	Number of household filings	Admin. Office U.S. Courts	

# USER'S GUIDE

## EMPLOYMENT AND INDUSTRY STRUCTURE

### INDUSTRIAL DIVERSITY

Industrial diversity is defined as the extent to which a county's industrial structure approximates the U.S. industrial structure.

Diversity is derived using the following formula:  
 $Diversity = 1/\sqrt{\sum (EMP_{ij}/EMP_{USj}) * EMP_{ij}}$

Where EMP = share of employment in three-digit SIC industry j during period 2000-01; i = COUNTY; US = U.S. The Diversity measure is bounded between 0 and 1. 1 means the county has the same industrial structure as the U.S.; 0 means it has a totally different industrial structure than the U.S.

Formula derived from Hachman index, Bureau of Business and Economic Research, Univ. of Utah, December 1994.

### EMPLOYMENT VOLATILITY

**Employment volatility** is defined as the standard deviation in a county's monthly year-over-year percentage nonagricultural employment growth relative to the standard deviation in U.S. year-over-year percentage nonagricultural employment growth over the 1992 to 2001 period. Volatility of 100 means that employment volatility in a county is equal to employment volatility in the nation. Counties tend to be inherently more volatile than states.

### EMPLOYMENT VOLATILITY DUE TO U.S. FLUCTUATIONS

**Volatility due to U.S. fluctuations** (also known as "systematic volatility") is defined as:  
 $SYSVOL = (Ri2)/1/2$

where SYSVOL = systematic volatility; R2 = is the proportion of total variance in county i's growth rate that is associated with contemporaneous fluctuations in national growth.

**Volatility not due to U.S. fluctuations** (also known as "nonsystematic volatility") is defined as:  
 $NONSYS = 1 - (Ri2)/1/2$

where NONSYS = nonsystematic volatility in county i; R2 is the proportion of total variance in county i's growth rate that is associated with contemporaneous fluctuations in national growth.

Formulas modified from "Assessing Regional Economic Stability: A Portfolio Approach," Economic Review (Federal Reserve Bank of San Francisco), Winter 1990.

## MIGRATION FLOWS

**IRS data.** When a taxpayer notifies the IRS of a change in address, the IRS records the household's current county of residence, the county to which the household is moving, the number of household members, and household income. Economy.com aggregates this data by metro area into gross migration. The data are then sorted to show the ten counties providing the largest number of new residents and the ten counties to where the largest number of current residents move. Subtracting the gross out-migration flows from the gross in-migration flows gives net out-migration.

The IRS migration data have several advantages. One advantage of the IRS data is that it is the only migration data set to show where out-migrants are moving to and where in-migrants are coming from. Another advantage is that the average income levels can be associated with both in-migrants and out-migrants. The disadvantages of the IRS migration data are that it only covers households that have filed income-tax returns and thus is not a complete record of all migration; and that it lags by two to two-and-one half years.

**Census data.** The Census measure of net migration attempts to capture all migration to and from counties. Economy.com aggregates this data to metro areas and to states. The Census measure of net migration differs from the IRS measure in several ways. First, Census measures only net migration; gross in and out flows are not available. Second, Census data cover all migrants, including international migrants, not just those who file income tax returns. Census data lack accompanying income data. Numbers differ from migration series data in indicator tables, which are estimated on Census 2000 data. New migration data from the Census will be available in 2002.

## HOUSE PRICES

The house price index presents relative growth in the median price for existing single family homes, indexed to the first quarter of 1987. The median home price data comes from the National Association of Realtors, and is estimated at the county level by Economy.com. Each month the NAR Research Division receives data on existing single-family home sales from over 650 Boards/Associations of Realtors and multiple listing systems across the country. In 1994, data on over 1,500,000 existing single-family homes were received and processed.

## LEADING INDUSTRIES

Leading industries are defined as the largest industries with location quotients greater than 1.1. A location quotient greater than 1 indicates an industry that serves more than the local market. Location quotients are calculated according to the formula:  $LC_{im} = (E_{im}/E_{tm}) / (E_{iUS}/E_{tUS})$  where LC = location quotient in county m for industry i; E = employment in industry i for county m or the U.S.; and t = total employment for county m or the U.S.

Economy.com defines high-tech employment as the sum of employment in the following industries:

SIC	Industry
283	Pharmaceuticals
357	Computer & Office Equipment
366	Communications Equipment
367	Electronic Components & Accessories
381	Search & Navigation Equipment
382	Measuring & Controlling Devices
384	Medical Instruments & Supplies
385	Ophthalmic Goods
489	Communications Services, NEC
737	Computer & Data Processing Services
873	Research & Testing Services

Prepared for the Arizona Department of Commerce  
Office of Economic Information and Research  
December 2002