

MOHAVE

EMPLOYMENT GROWTH
2001-03

6.0

2001-06

6.7

STANFORD 9
2002

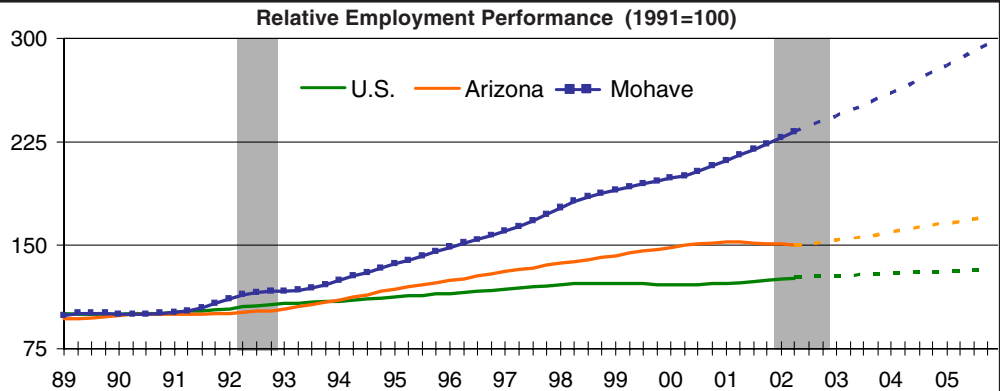
Language **38**
Math **57**
Reading **42**

EDUCATIONAL ATTAINMENT 2000

9.9%

POVERTY RATE

13.9%



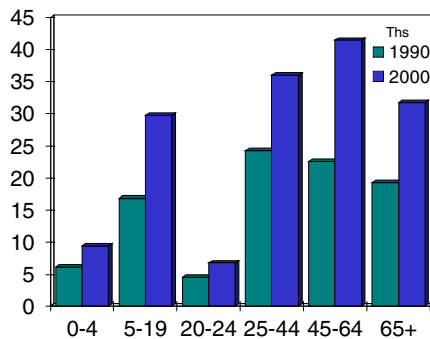
1995	1996	1997	1998	1999	2000	2001	Indicators	2002	2003	2004	2005	2006
1.50	1.58	1.66	1.78	1.93	2.08	2.18	Gross Product, C\$B	2.34	2.56	2.79	2.98	3.18
2.8	4.7	5.3	7.4	8.2	7.8	5.1	% Change	7.2	9.4	8.7	6.8	6.9
30.7	33.4	36.5	39.6	43.0	47.4	50.2	Total Employment (000)	52.8	57.1	61.6	65.7	70.5
3.6	8.7	9.2	8.6	8.6	10.3	5.8	% Change	5.3	8.0	8.0	6.7	7.2
6.7	7.2	5.3	4.3	4.6	4.2	4.5	Unemployment Rate	4.5	3.3	3.5	3.5	3.6
2.8	7.4	8.6	7.7	6.0	7.2	8.7	Personal Income Growth	4.2	6.4	7.5	6.5	6.2
130.3	136.4	140.9	145.2	150.4	156.4	161.8	Population (000)	166.9	173.1	179.8	186.0	191.7
1,535	1,327	1,428	1,772	1,904	1,887	2,141	Single-Family Permits	2,187	2,280	2,354	2,387	2,439
197	119	264	189	40	51	90	Multifamily Permits	81	112	118	121	122
84.4	84.7	86.1	92.2	96.6	100.9	109.7	Existing Home Price (\$Ths)	121.6	124.4	129.1	130.8	134.6
612	741	803	1,404	1,196	1,034	1,990	Mortgage Originations (\$Mil)	1,475	1,274	1,419	1,486	1,674
5.1	4.0	2.3	2.2	3.3	4.3	5.3	Net Migration (000)	4.3	5.2	5.4	5.0	4.6
443	642	824	854	806	780	966	Personal Bankruptcies	883.5	665.0	496.3	513.8	519.0

INDUSTRY OPPORTUNITIES

Opportunities for economic development include:

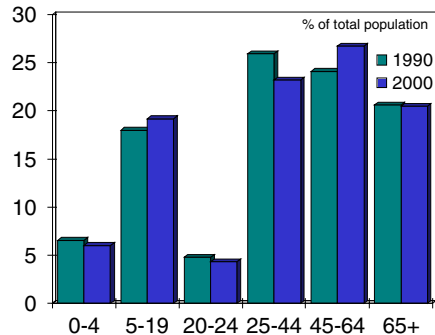
- Industrial machinery
- Transportation/logistics
- Tourism

POPULATION BY COHORT



Source: Census Bureau

POPULATION DISTRIBUTION



Source: Census Bureau

ANALYSIS

Recent Performance. The Mohave County economy has slowed sharply. Job growth is below state and national averages, with payrolls down from a year ago. Services, trade and construction are all weak, while financial services and transportation/utilities are expanding. The jobless rate, though at a historically low level, is edging up. Weaker job growth is likely to undercut some of the momentum from the housing market, where building has been robust. Residential permits are growing at a robust pace. Household balance sheets are holding their own, with personal bankruptcies beginning to fall.

Services. Services payrolls in MOH are currently contracting, but the industry has and will continue to be a growth driver for the county. Since 1980, services' share of non-farm earnings in MOH has doubled, reaching 30% in 2000. Healthcare services and casino gaming in neighboring Laughlin, Nevada have been especially important in generating service jobs for MOH residents. Demand for healthcare will remain strong because of the disproportionately large share of retirees living in MOH. Residents aged 65 and older account for nearly a quarter of the MOH population, compared to 13% nationally. Services that cater to retired residents will also expand in coming years as the county gains popularity as a retirement destination.

Income growth. Per capita income in MOH is 26% below the state, and 40% below the national average, disparities that underscore the absence of high value-added industries in the county. MOH has experienced one of the slowest growth rates in per capita income over the last decade among Arizona counties. The pace of income growth is fundamentally tied to increases in productivity, which explains why real per capita income has grown more slowly than inflation in six of the ten years from 1990 to 2000. A scarcity of college-educated workers is partially responsible. Just 10% of residents 25 and older hold bachelor's degrees in

MOH, versus 24% at the national level. Below-average education levels in MOH are a challenge to income growth.

Tourism drivers. The casino gaming industry in Laughlin, Nevada is a vital driver of job growth in and around MOH's Bullhead City. Many casino employees who work in Laughlin live just across the Colorado River in Bullhead City. Gaming wins in Laughlin fell 3% last year and are down moderately this year. Gaming's recovery in southern Nevada following September 11, however, has been surprisingly robust, which bodes well for tourism in Laughlin and, in turn, job growth in MOH.

Outdoor recreation is also a vital tourism driver in MOH. Lake Havasu is a regional Spring Break mecca for college students. The county's position along the Colorado River draws thousands of hikers, campers and fishermen annually from Arizona and nearby states. The short- and long-term outlooks for MOH's target markets are favorable. Southern California has been steady through the recession, Nevada is already recovering strongly, and Arizona itself is expected to begin expanding imminently. Over the long term, the region's economic growth will outpace the national average, enabling tourism to grow strongly.

The Mohave County economy will moderate in the near term but will accelerate over the next few years. Gaming's recovery in Laughlin and resurgent tourist travel will bolster growth. Longer term, MOH's outlook hinges on in-migration. With no export industry to speak of, in-migration to MOH depends on retiree inflows, which will slow in the next few years due to slower growth in the retiree population. The retirement of the baby boomers toward the end of the decade, however, will revive in-migration and help MOH to remain an above-average performer over the forecast horizon.

David Givens
December 2002

EMPLOYMENT & INDUSTRY

TOP EMPLOYERS

American Woodmark Corporation
Bullhead Community Hospital
Cyprus Climax Metals Company
Ford Proving Grounds
General Cable
Goodyear Tire & Rubber Company
Guardian Fiber Glass
Havasu Regional Hospital
IWX Motor Freight
Kingman Regional Medical Center
Laidlaw Corporation
McKee Foods
Mohave Community College
North Star Steel
Praxair, Inc.
Silver Ridge Village
Smith's Food and Drug Centers
Sterlite Corporation
True Serv
Wal-Mart Stores, Inc.

Employment Figures Unavailable

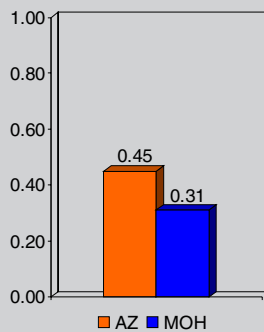
Source: Arizona Department of Commerce

Public

Federal	782
State	825
Local	600

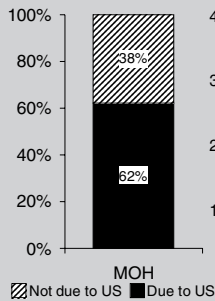
2001

INDUSTRIAL DIVERSITY

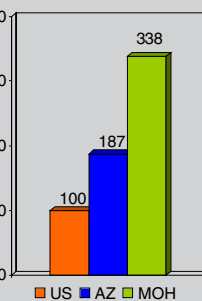


EMPLOYMENT VOLATILITY

DUE TO U.S. FLUCTUATIONS



RELATIVE TO U.S.

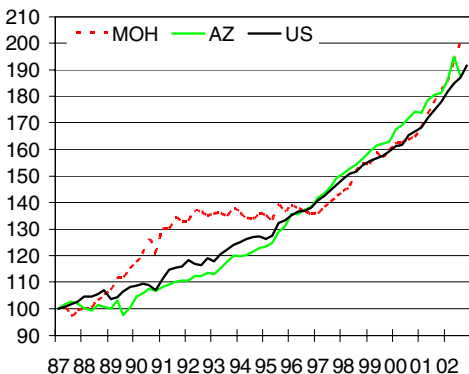


COMPARATIVE EMPLOYMENT AND INCOME

Sector	% of Total Employment			Average Annual Earnings		
	MOH	AZ	US	MOH	AZ	US
Mining	0.6%	0.4%	0.4%	\$13,045	\$42,760	\$64,853
Construction	8.7%	7.3%	5.1%	\$26,731	\$35,534	\$37,846
Manufacturing	9.1%	9.3%	13.4%	\$26,189	\$52,820	\$50,161
Durable	71.3%	77.2%	60.1%	\$19,913	\$56,574	\$52,419
Nondurable	28.7%	22.8%	39.9%	\$20,884	\$40,158	\$46,703
Transport/Utilities	6.6%	4.9%	5.4%	\$20,116	\$42,761	\$50,161
Wholesale Trade	2.5%	4.9%	5.1%	\$31,388	\$47,228	\$49,721
Retail Trade	26.7%	18.6%	17.8%	\$13,805	\$19,835	\$19,357
Finance, Ins., Real Estate	4.3%	6.6%	5.8%	\$18,224	\$31,403	\$42,743
Services	21.1%	31.3%	31.1%	\$28,848	\$30,334	\$33,327
Memo: Health Services	8.4%	6.8%	7.9%	\$29,180	\$41,149	\$40,060
Government	20.3%	16.6%	15.9%	\$17,478	\$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)
GVSL	Total state and local government	9.3
531	Department stores	2.1
541	Grocery stores	1.9
806	Hospitals	1.8
243	Millwork, plywood & structural member	1.6
PH	Private household workers	1.5
421	Trucking & courier services ex air	1.3
150	Res & nonres building construction	1.2
701	Hotels and motels	1.2
554	Gasoline service stations	1.0
549	Misc food stores	0.9
553	Auto and home supply stores	0.9
864	Civic, social, & fraternal association	0.9
308	Miscellaneous plastics products, nec	0.8
616	Mortgage bankers & brokers	0.8
Total leading industry employment		40.7
High-tech employment		0.6
As % of total employment, all industries		1.1

Source: BLS, Economy.com, 2001

MIGRATION FLOWS

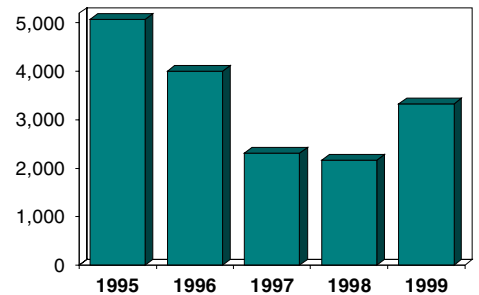
Into Mohave County	Number of Migrants	Median Income
Riverside	1,305	24,572
Las Vegas (NV part only)	1,231	21,600
Los Angeles	878	24,117
Maricopa County	782	21,644
Orange County	511	28,166
San Diego	420	23,124
Yavapai County	214	14,456
Coconino County	190	14,317
Yuma County	185	15,768
Salt Lake City	184	27,163
Total Immigration	13,458	21,980

From Mohave County

Las Vegas (NV part only)	1,268	19,694
Maricopa County	860	20,235
Riverside	793	15,893
Los Angeles	353	15,602
Yavapai County	255	19,999
Coconino County	225	14,721
Orange County	179	16,785
San Diego	169	16,710
Pima County	150	14,999
Salt Lake City	133	15,634
Total Outmigration	9,560	18,268

Net Migration	3,898	3,712
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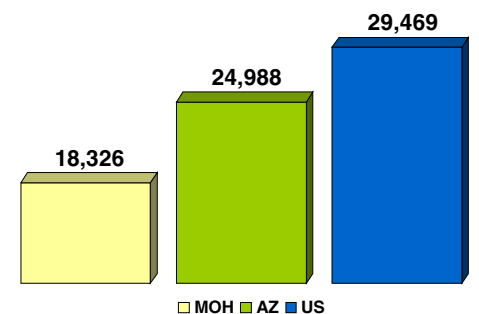
Net Migration, MOH



	Domestic	Foreign	Total
1995	4,974	102	5,076
1996	3,908	95	4,003
1997	2,199	117	2,316
1998	2,069	94	2,163
1999	3,231	100	3,331

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

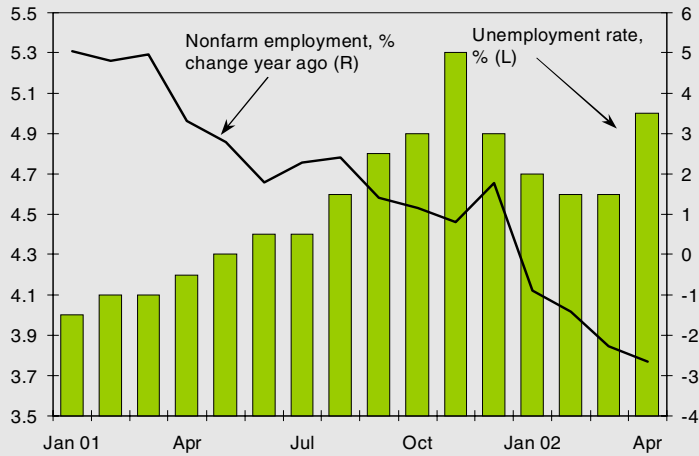
PER CAPITA INCOME



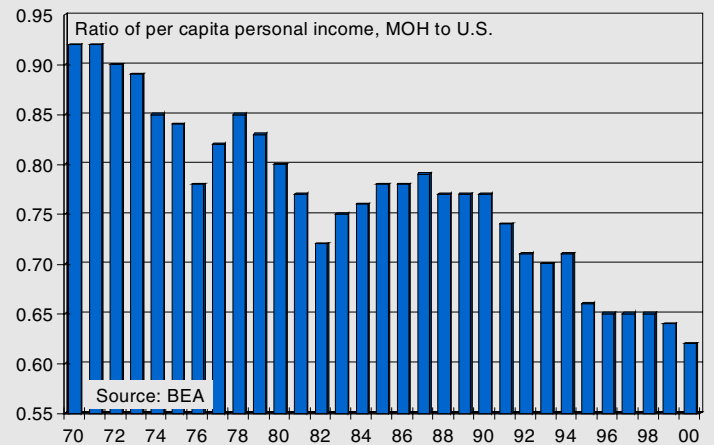
Source: Bureau of Economic Analysis, 2000

Mohave

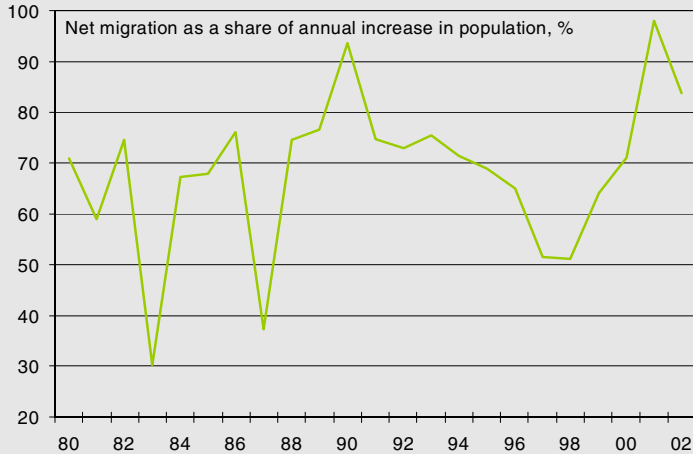
Labor Market Conditions Have Yet to Rebound



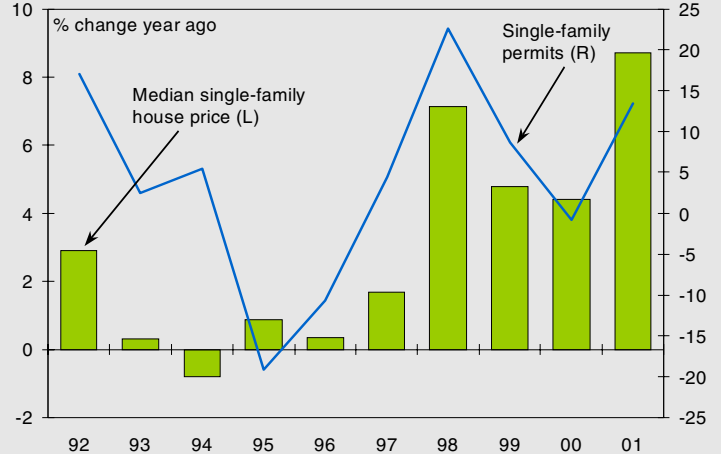
Per Capita Income Growth Has Not Kept Up



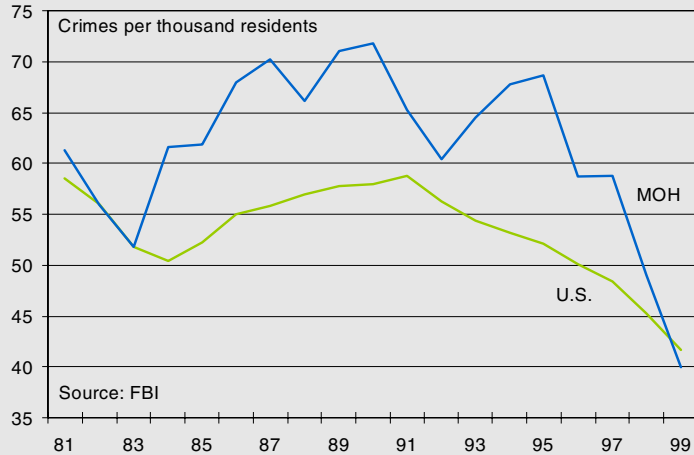
Net In-Migration Is Vital to MOH's Population Growth



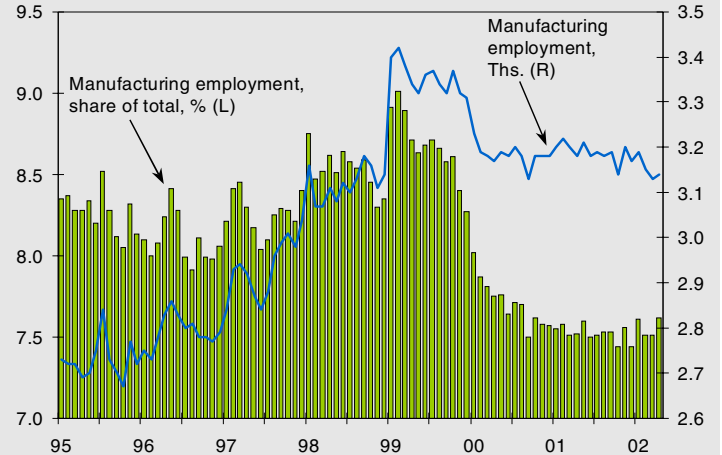
Population Growth Is Boosting the Single-Family Market



Crime Rate's Decline More Dramatic in MOH



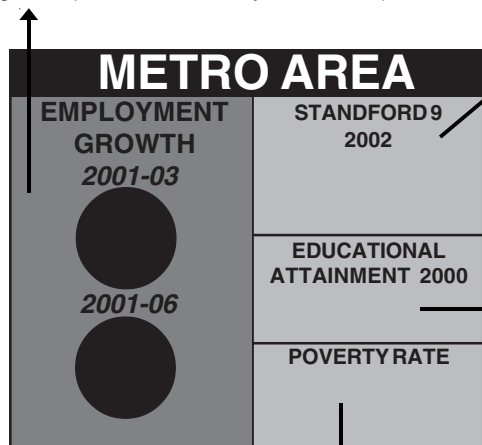
Manufacturing Employment Stagnates



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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