

IN the Spotlight

Income and Population: Indiana's Regions

The Indiana Department of Workforce Development has identified 12 Workforce Investment Planning Regions. These aggregations of counties help us understand labor force issues far better than single-county analyses.

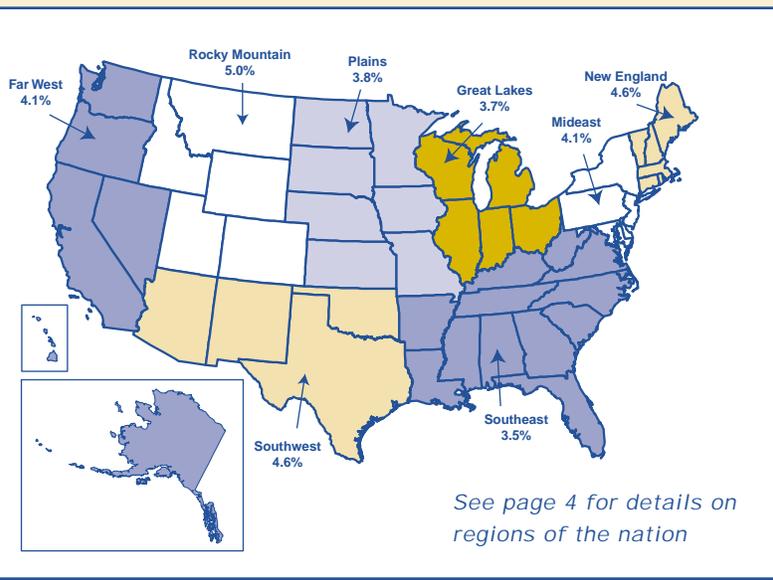
Figure 1 (see page 2) shows these 12 regions and each individual county's share of population within the corresponding region. The regions have considerable variability in certain dimensions. For example, Region 2 (South Bend-Elkhart) has just four counties, while Regions 9 (our eastern border from Richmond south to the Ohio River) and 11 (southwestern counties) each have 11 counties.

Region 8 (Indianapolis and suburbs) has 1.4 million people, while Regions 5 (Kokomo) and 7 (Terre Haute) have approximately 225,000 people each.

Figure 2 (see page 3) displays the variation in real per capita personal income (PCPI) that exists among Indiana's regions. Region 8 enjoys PCPI at \$28,727, which is not only 17.5% higher than the figure for the entire state, but also 8.7% above the national level. Last in PCPI among the regions is Region 7 at \$19,989, or 18.2% below the state level. The spread between the highest and lowest regions is 35.7%, the highest differential recorded in the past three decades.

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Regions Are Highlighted in This Issue



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May Unemployment Rate Falls
Even as Labor Force Grows

Indiana Unemployment Rate
Lower than in Neighboring States

Indiana
Unemployment Rate
for May 2000:
3.0%
Down from
3.4% in April

IN the Spotlight
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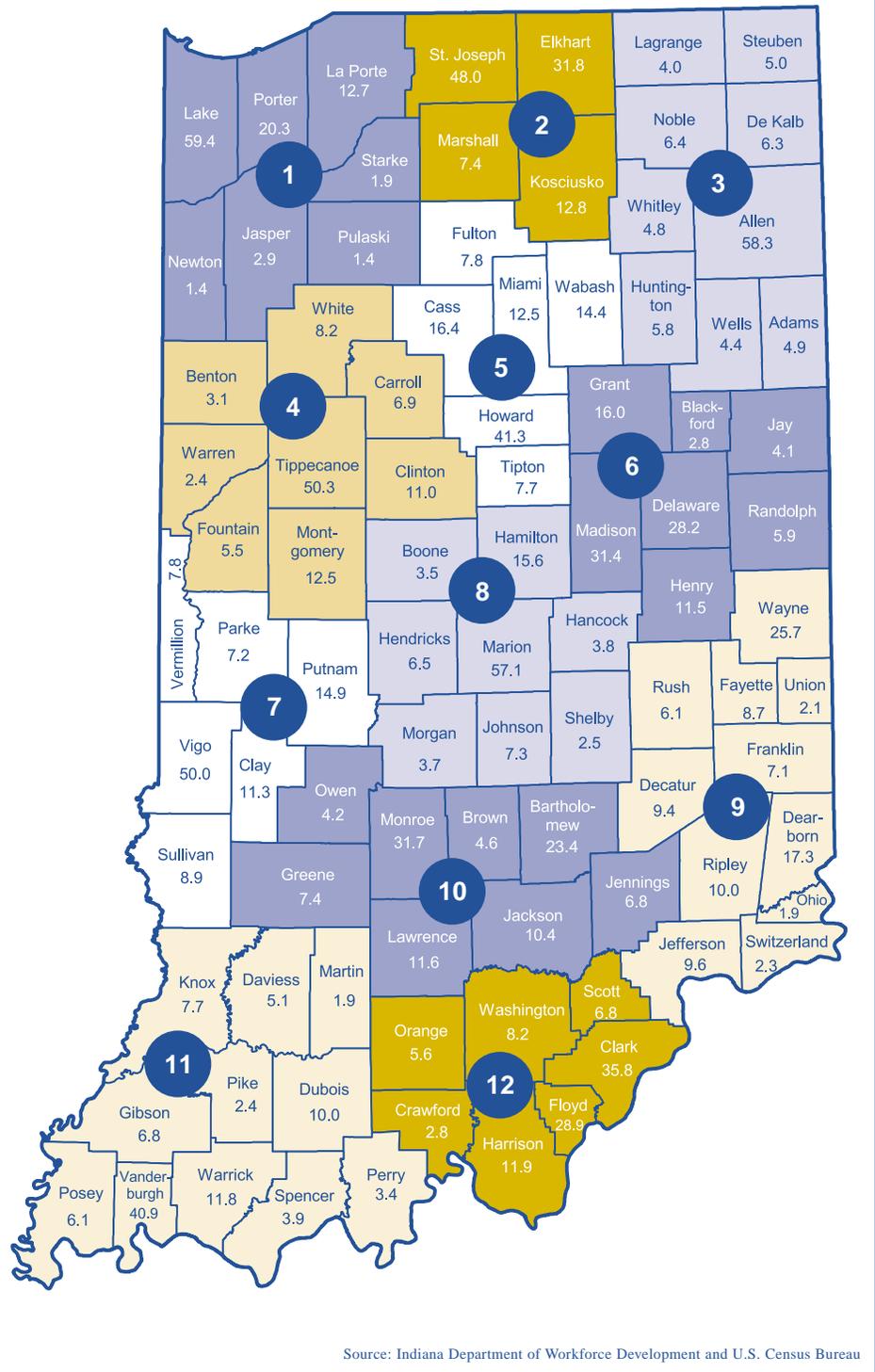
Table 1 indicates that in the most recent year for which regional data are available (1997-98), Region 12 (Clark-Floyd) and Region 8 (Indianapolis) topped both the state and the nation in growth of personal income, population and per capita personal income. Regions 2 (South Bend-Elkhart) and 11 (Evansville) also exceeded the nation's growth rate for personal income and PCPI by realizing slow population growth. Regions 3 (Fort Wayne) and 4 (Lafayette) both had more vigorous population growth combined with lackluster personal income growth and therefore did not match the state or the nation in PCPI growth. By contrast, Region 7 (Terre Haute) managed a somewhat better PCPI growth because it lost population.

The distribution of personal income across the state has been shifting since 1969. Figure 3 demonstrates that Region 8 (Indianapolis) has grown faster than other regions and thereby has added 4.1 percentage points to its share of the state's personal income. To give abstract percentage points some realism: That is more than \$6 billion in 1998 dollars. The largest negative shifts have been in Regions 1 and 6, while small gains have been made by Regions 3, 10 and 12.

Such shifts are part of the continuously changing competitive marketplace, and, if not too rapid, they are economically healthy.

Figure 1: Workforce Investment Planning Regions

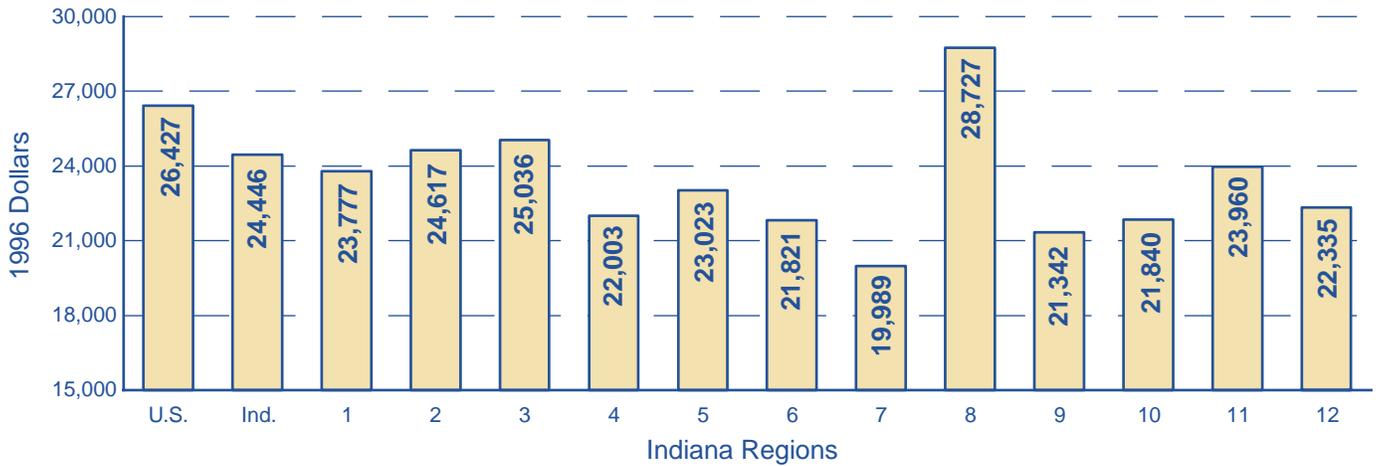
Each county's share of region's population



Source: Indiana Department of Workforce Development and U.S. Census Bureau

Figure 2: Real Per Capita Personal Income

Region 8 (Indianapolis) has a higher PCPI than the U.S. average



Source: U.S. Bureau of Economic Analysis

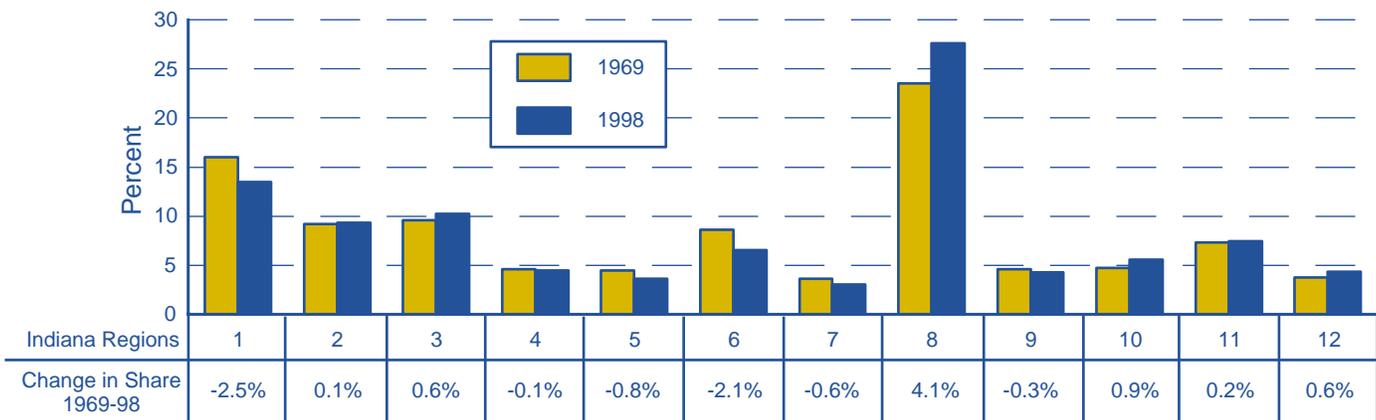
Table 1: Components of Change in PCPI: Percent Change 1997 to 1998

Percent Change in:	Indiana's 12 Regions													
	U.S.	Ind.	1	2	3	4	5	6	7	8	9	10	11	12
Real Total Personal Income	4.9	4.9	4.6	5.0	4.3	3.6	3.1	2.9	3.9	6.0	4.1	4.3	5.0	7.9
Population	0.9	0.6	0.3	0.5	0.9	1.3	0.1	-0.6	0.1	1.1	0.4	0.8	0.2	1.1
PCPI	4.0	4.3	4.2	4.4	3.3	2.3	3.0	3.5	3.8	4.9	3.7	3.5	4.8	6.8

Source: U.S. Bureau of Economic Analysis

Figure 3: Share of State's Personal Income 1969 and 1998

Region 8 grows, while six regions lose share



Source: U.S. Bureau of Economic Analysis

Per Capita Income: Regions of the Nation

The Bureau of Economic Analysis divides the United States into eight regions. Indiana falls into the Great Lakes region, along with Ohio, Michigan, Illinois and Wisconsin.

1998, the last year for which detailed data are available, was an outstanding year for the nation. The U.S. growth rate in real per capita personal income (PCPI) was 4.0%, the highest in the past 10 years (see Figure 1). It was also the most successful year in the decade for Indiana and the Great Lakes states, with the Hoosier state ranking second in the region at 4.3%, just behind Wisconsin (4.4%) and ranking 14th among the 50 states.

The Great Lakes region, however, ranked seventh among the eight regions in growth of real per capita personal income (3.7%). Only the Southeast advanced at a slower rate (3.5%). The leading region was the Rocky Mountains, which achieved a 5% increase (see Figure 2).

Personal income is the sum of all earnings (wages, salaries, proprietors' income) plus dividends, interest, rent and transfer payments. After adjustment for price changes, it is labeled

real personal income. This amount is divided by population to yield per capita personal income (PCPI).

As with any fraction, the growth of the number on the left of the equation depends on the growth of the numerator and the denominator. Basically, the growth rate of PCPI equals approximately the growth rate in personal income minus the growth rate in population. For example, during 1998, Indiana's real personal income
(continued on page 6)

$$\text{Real Per Capita Personal Income} = \frac{\text{Real Total Personal Income}}{\text{Population}}$$

Figure 1: Annual Growth Rate of Real Per Capita Personal Income 1989-98

Indiana's growth in 1998 was faster than the nation's

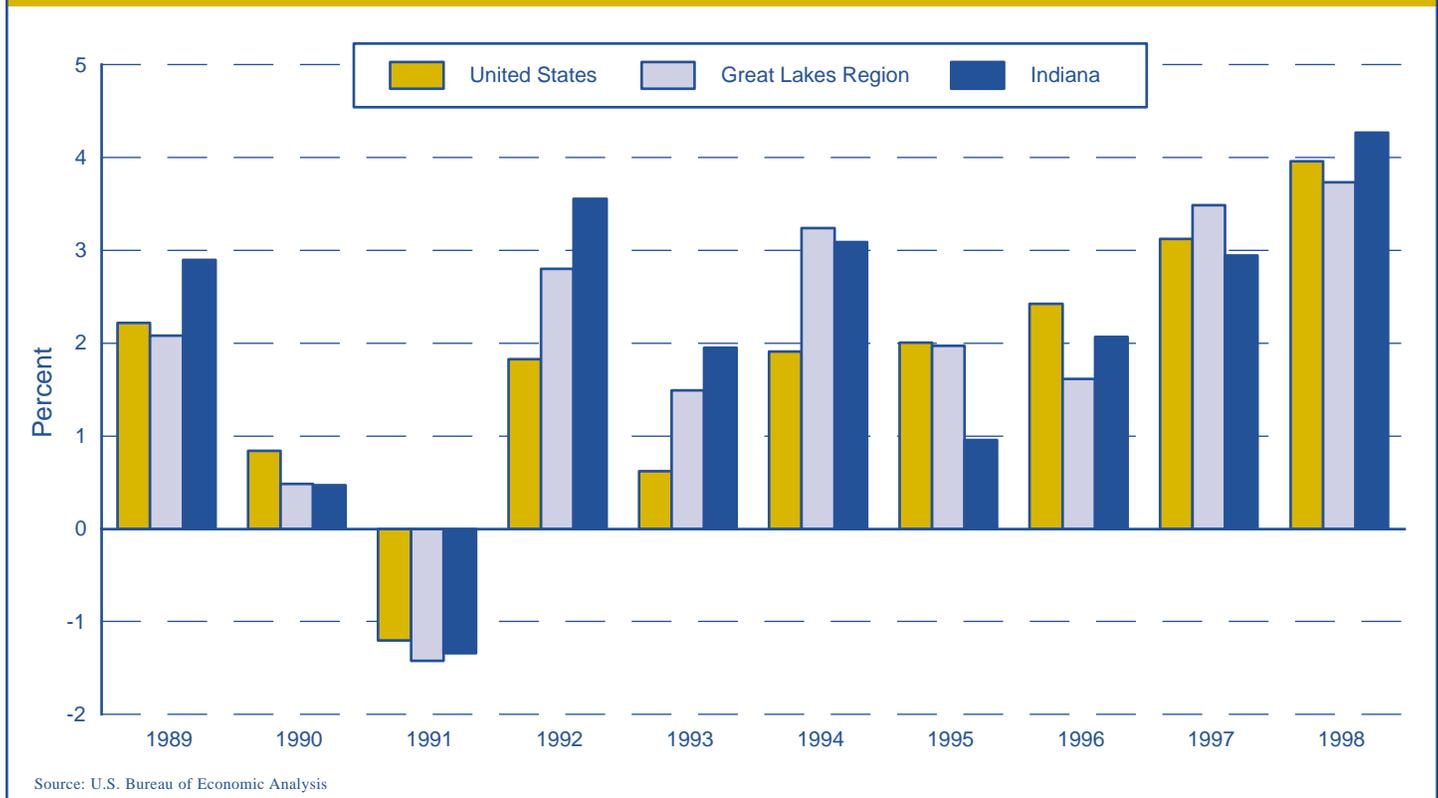
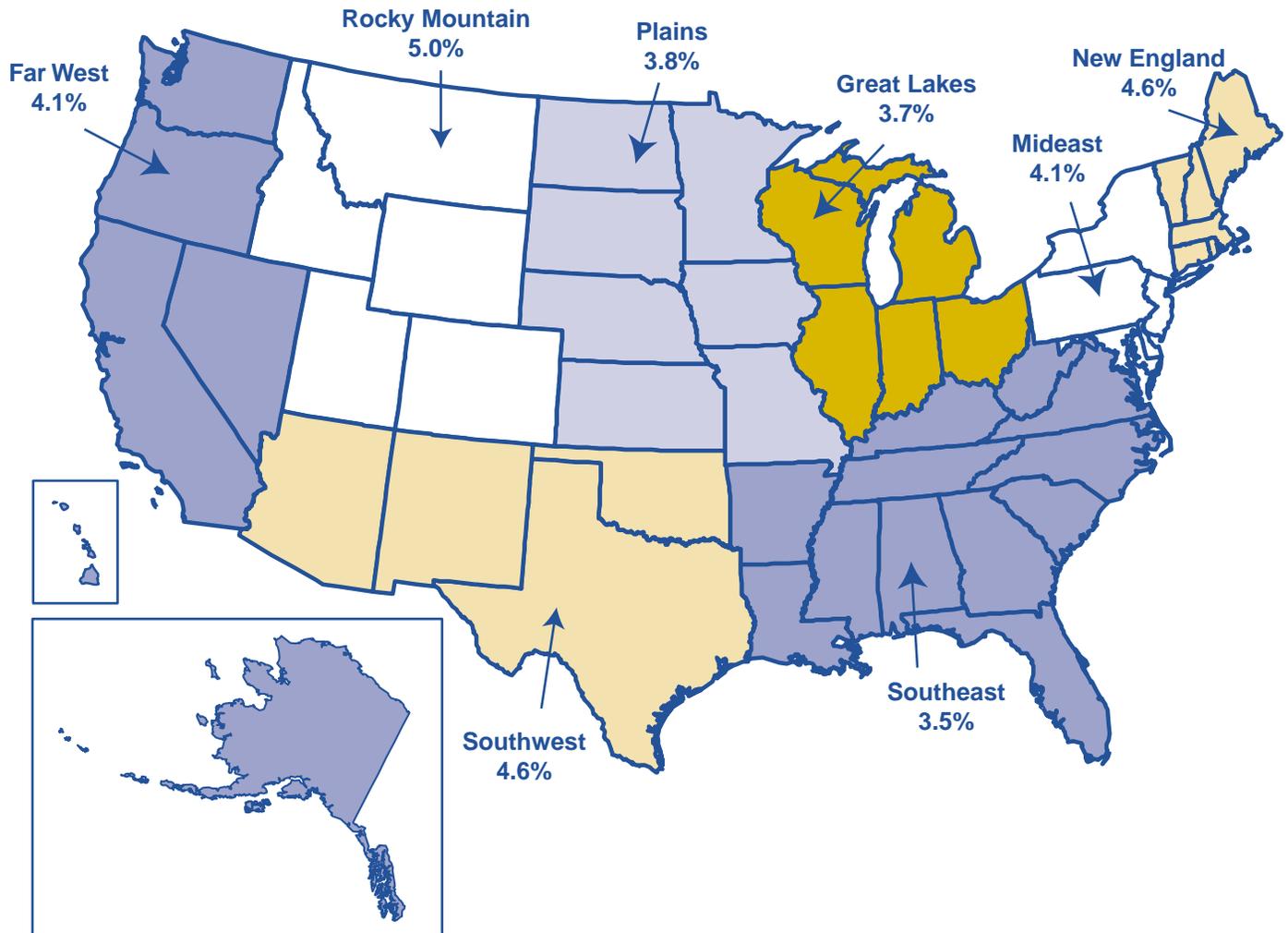


Figure 2: PCPI Growth Rates by Region

Great Lakes region's moderate growth ranks seventh



Source: U.S. Bureau of Economic Analysis

TECHNICAL NOTE:

Population Growth and Income Growth: Correlation Far from Perfect

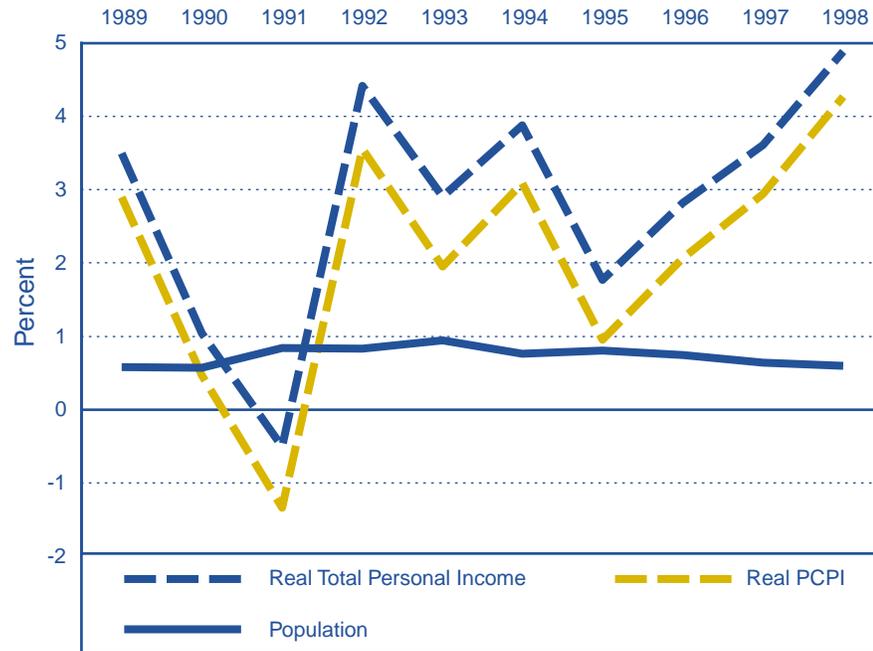
Growth in population and total personal income are positively correlated, particularly over long periods of time. But it is far from a perfect relationship. For the 10

years from 1988 to 1998, the correlation for the 50 states between personal income and population growth rates was +0.89 (where +1.00 is a perfect positive relationship,

zero is no relationship and -1.00 is a perfect negative relationship). But for the year 1998, the correlation was just +0.62, an unimpressive relationship.

Figure 3: Indiana's PCPI Growth Components, 1989-98

PCPI tracks income when population growth is steady



Source: U.S. Bureau of Economic Analysis

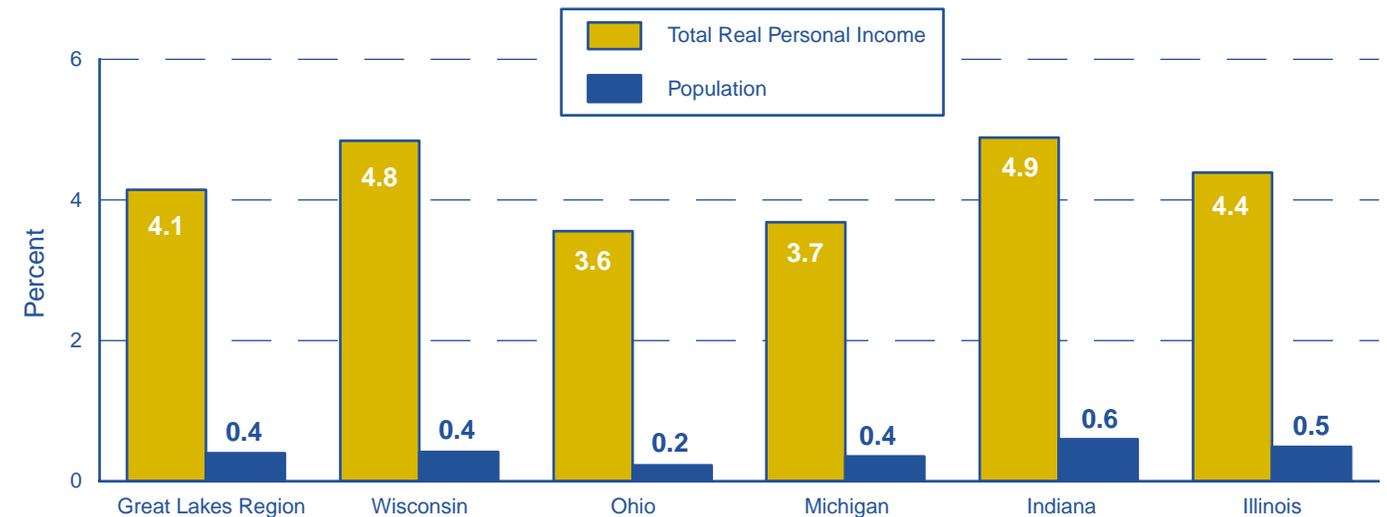
grew by 4.9% while the population grew by 0.6%. Therefore, the state's PCPI grew by 4.3%.

Figure 3 shows how the growth rate in per capita personal income rises with increases in real total personal income and falls with increases in population. Indiana's population growth has been steady during the last decade, while PCPI has fluctuated with changes in the growth rate for total personal income.

In 1998, Indiana actually led the Great Lakes region in growth rates for both personal income (4.9%) and population (0.6%), as shown in Figure 4. The result, however, was a second-place finish in the PCPI growth to Wisconsin, which had slower growth in both components (4.8% and 0.4%). In the strange race of PCPI growth, being first can sometimes lead to being second.

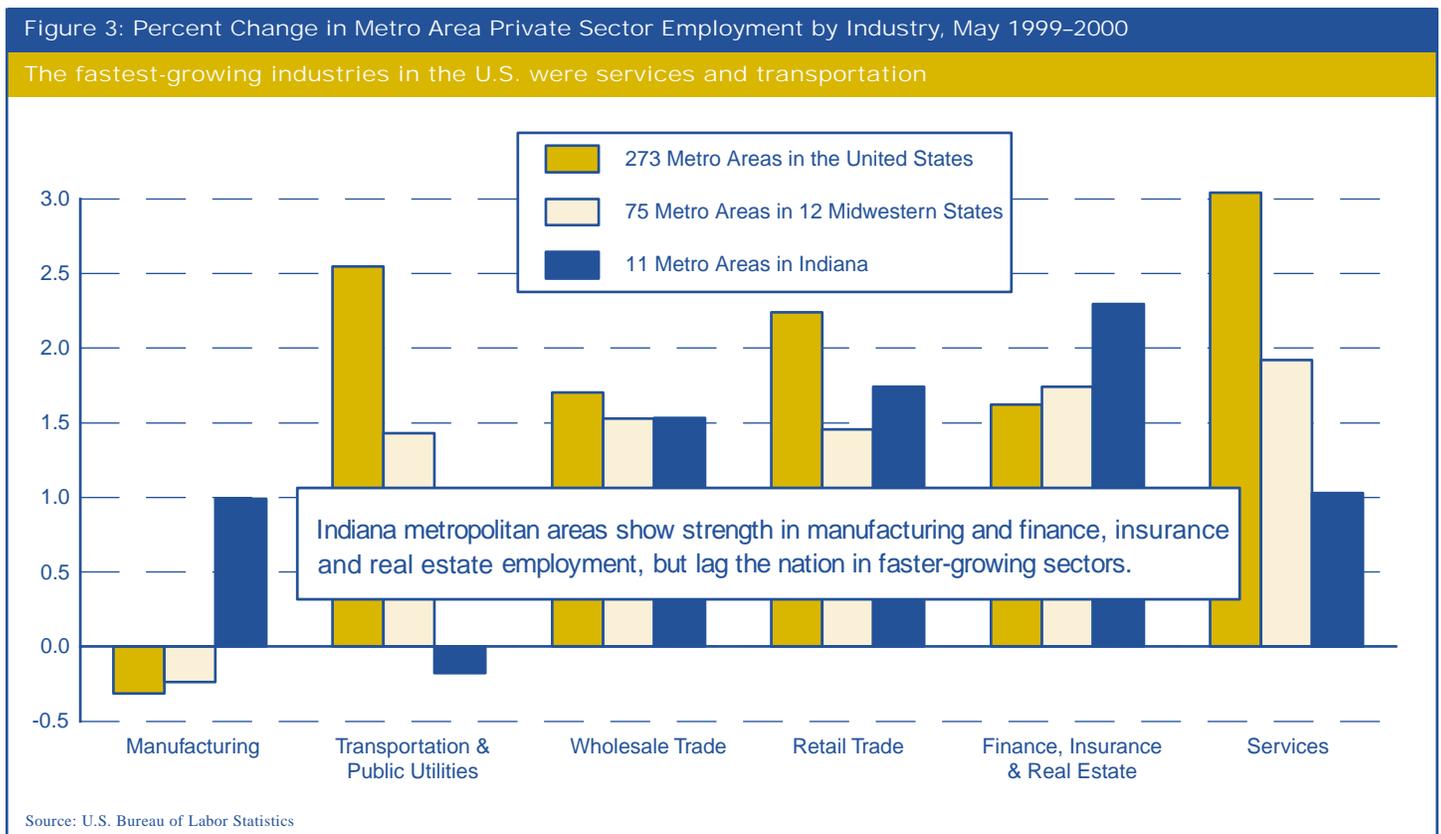
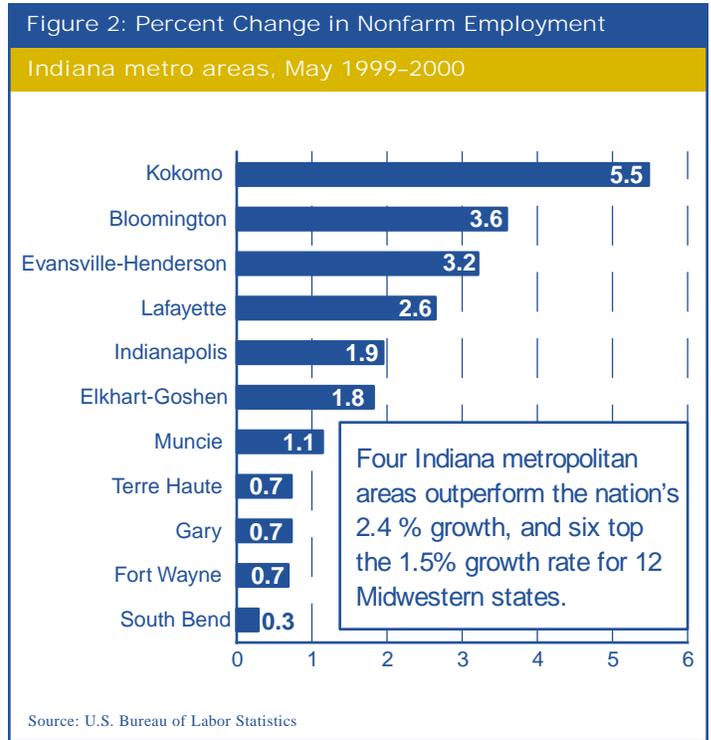
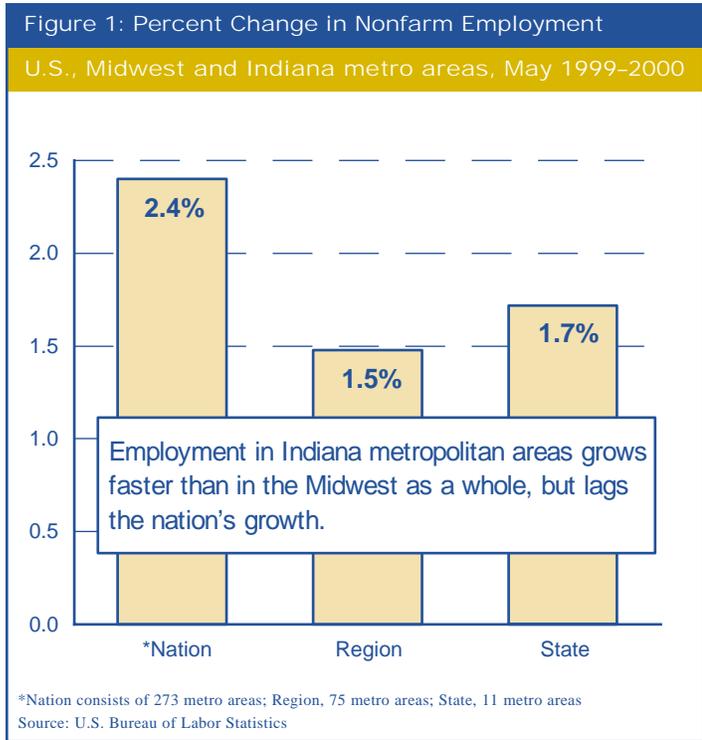
Figure 4: Great Lakes Region's PCPI Growth Components, 1998 Annual Rate

Indiana leads in both components; Wisconsin tops in PCPI growth



Source: U.S. Bureau of Economic Analysis

Indiana Metro Area Employment Grows, Industrial Mix Differs



Regional Employment Snapshot — May 2000

Midwest employment (26 million) represents 20% of total nonfarm employment in the United States, according to the latest federal employment data for May 2000 (see Figure 1). The Midwest is defined as Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio and Wisconsin. The data show U.S. employment at 131 million, 2.3% higher than the same month a year ago. Indiana contributes 3 million jobs, or 2.3% of the U.S. total. Within the Midwest, Indiana represents 11.5% of the region's total employment.

The U.S. Bureau of Labor Statistics provides these data on a monthly basis using the Current Employment Survey (CES). The survey primarily provides nonfarm employment by industry and geographic areas including the United States as a whole, individual states and metropolitan areas. The data are best used to get a year-to-date or month-to-month snapshot of the economy. This month's article discusses regional and state employment. See the *IN Context* Web site (www.ibrc.indiana.edu/incontext/) for the states in each region.

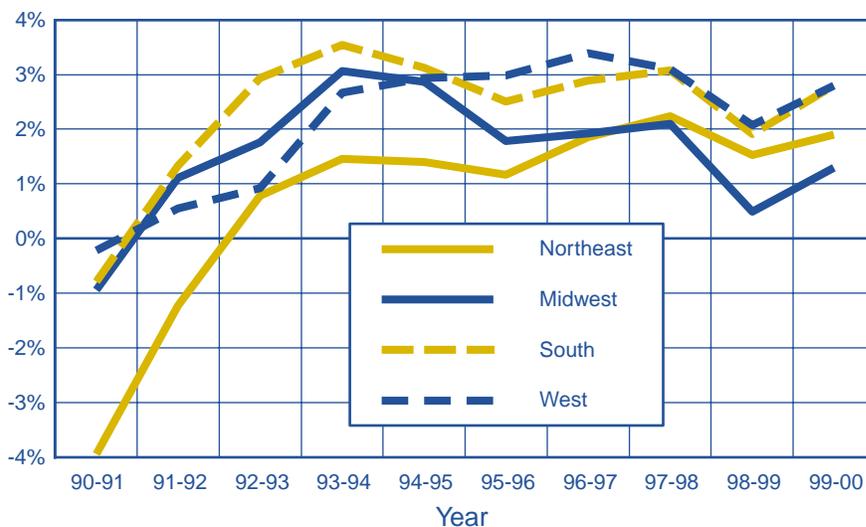
Regions Led by South and West Nonfarm employment in the South and West regions grew faster than the Northeast and the Midwest over the past year. This is a trend that has persisted since 1995, during which

period these regions also led in population growth (see Figure 2).

The South constitutes the largest portion — 33% — of national employment. The portion of U.S. employment in each region is

Figure 2: Nonfarm Employment Growth 1990-2000

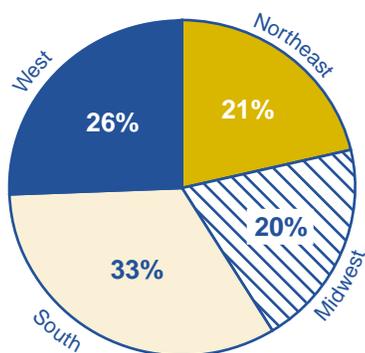
Ten-year growth rates by region



Source: U.S. Bureau of Labor Statistics

Figure 1: Nonfarm Employment

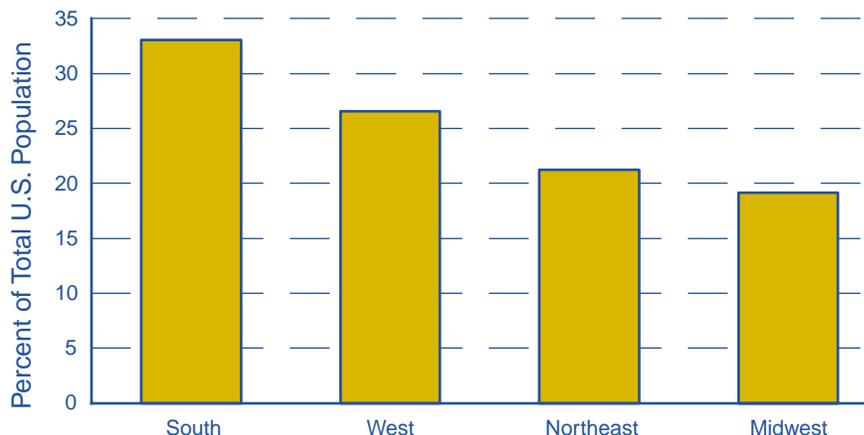
Regions' shares of U.S. total



Source: U.S. Bureau of Labor Statistics

Figure 3: Share of U.S. Population by Region 1999

South and West constitute 59% of U.S. population



Source: U.S. Census Bureau

consistent with the percentage of U.S. population living in each region (see Figure 3). Together the South and West regions have 59% of all U.S. nonfarm jobs and 59% of the U.S. population. These two regions together now equal 0.3% more of the nation's employment than they did a year ago. The Northeast and Midwest regions' share of national employment declined by this same amount over the year. The greatest shift in employment, approximately 0.2%, was from the Midwest to the South.

Manufacturing employment has declined in every U.S. region, with the largest decline occurring in the Northeast (-0.6%). The Midwest and West both declined by 0.5%, while the South is the only region that lost fewer manufacturing jobs than the national average (-0.3% versus -0.4% nationally).

Similarly, the South is the only region with a greater share of national manufacturing employment than a year ago. Thirty-two percent of all manufacturing employment in the United States is located in the South. Meanwhile, the traditional rust belt states of the Midwest constitute only 27% of U.S. manufacturing employment (see Figure 4). However, the Midwest still has the highest percentage of regional nonfarm employment in manufacturing (19.1%). The South follows with 13.4%, the Northeast with 12.6% and the West with 12.2%.

Top 10 States Vary by Perspective

The three states with the highest nonfarm employment growth since May 1998 are Arizona, Florida and

The portion of U.S. employment in each region is consistent with the percentage of U.S. population living in each region.

Nevada, all growing by approximately 5%. Idaho, Colorado and Georgia followed these states, at approximately 4% (see Table 1).

Of these six states, five led U.S. population growth during the same time period. Only Florida's population grew by less than 2%. The age demographics of these six states show no real consistencies that might explain what populations or industries might be driving this job growth. Further research into employment growth by industry might provide some explanation of these trends.

The largest manufacturing state is
(continued on page 12)

Figure 4: Manufacturing Employment

Regions' shares of U.S. total

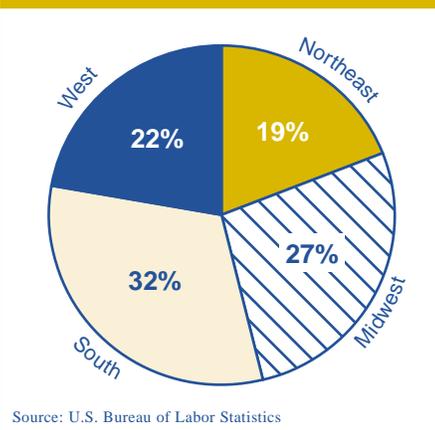


Table 1: Top 10 States: Nonfarm Employment (000)

Total Jobs May 2000	Net New Jobs May 1999-2000	Percent Growth May 1999-2000
California 14,390	California 465.0	Arizona 5.1
Texas 9,408	Florida 320.5	Florida 4.7
New York 8,633	Texas 288.1	Nevada 4.5
Florida 7,153	New York 205.7	Idaho 4.3
Illinois 6,008	Georgia 137.3	Colorado 3.6
Pennsylvania 5,611	Arizona 108.5	Georgia 3.5
Ohio 5,597	North Carolina 80.4	California 3.3
Michigan 4,583	Colorado 77.2	Maine 3.2
Georgia 4,008	New Jersey 73.3	Delaware 3.2
New Jersey 3,933	Virginia 71.8	Texas 3.2

Source: U.S. Bureau of Labor Statistics

Table 2: Top 10 States: Manufacturing Employment (000)

Total Jobs May 2000	Net New Jobs May 1999-2000	Percent Growth May 1999-2000
California 1,925	Georgia 7.6	Hawaii 2.4
Texas 1,082	Arizona 4.1	Arizona 1.9
Ohio 1,078	Indiana 3.9	Nevada 1.9
Michigan 969	Kentucky 2.4	Georgia 1.3
Illinois 952	Florida 2.0	Idaho 1.3
Pennsylvania 930	Pennsylvania 1.6	Montana 1.2
New York 884	California 1.2	West Virginia 0.9
North Carolina 789	Maryland 1.2	Kentucky 0.8
Indiana 691	Virginia 1.2	Maryland 0.7
Wisconsin 614	Idaho 1.0	Indiana 0.6

Source: U.S. Bureau of Labor Statistics

May Unemployment Rate Falls Even as Labor Force Grows

Indiana's unemployment rate dropped to 3% in May, bringing it down to a level consistent with the same month in 1998 and 1999.

The rate typically falls in the spring, but April's rate did not come down as much this year as it did in 1998 or 1999. Some analysts speculated that April's higher rate signaled a slow-down in Indiana's economy. Then came a healthy drop in May. Taken together, the first five months did not show any significant increase in the unemployment rate.

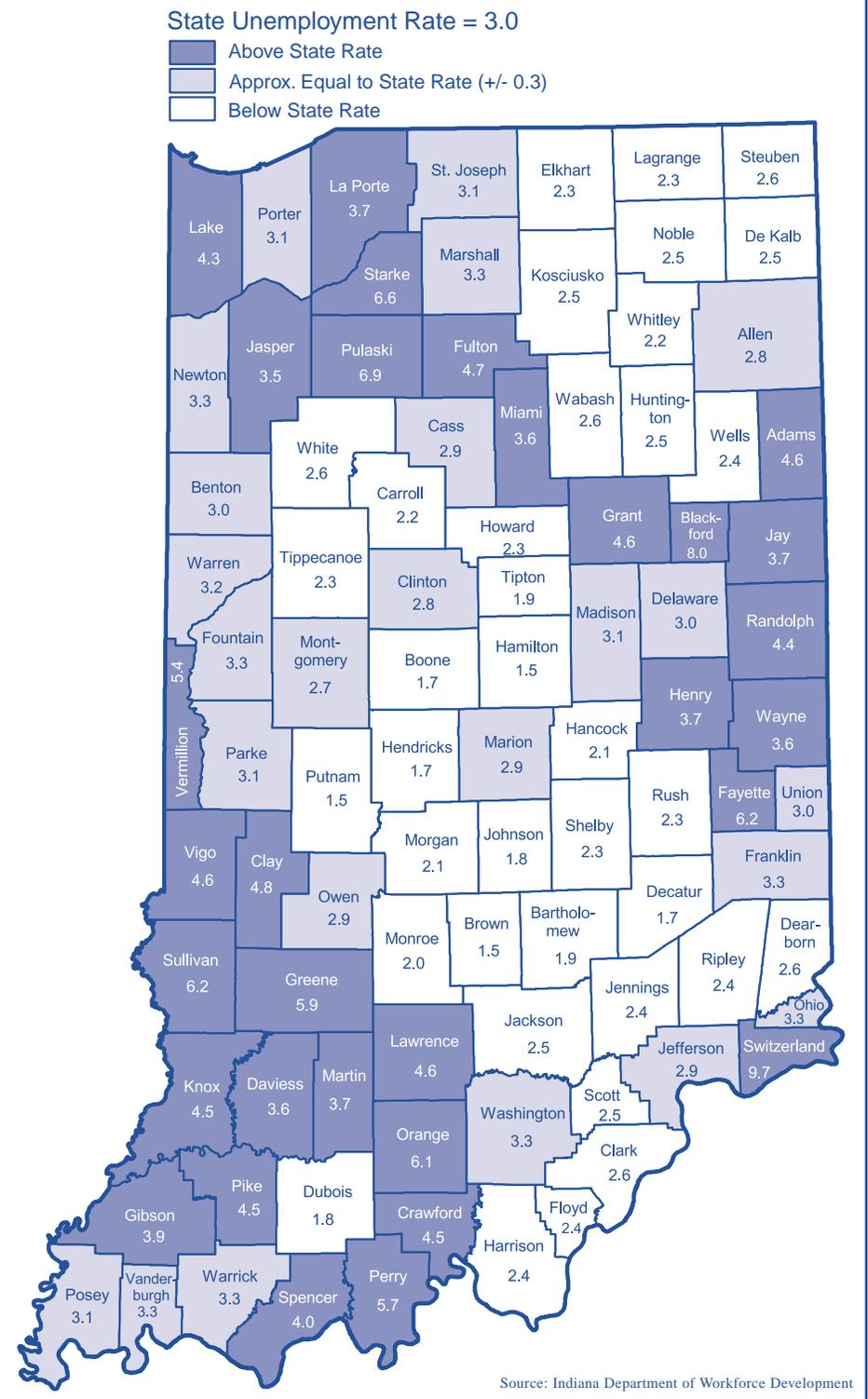
Indiana's rate decline came despite growth in the state's labor force. A steady expansion of the labor force this year reversed the shrinkage that occurred in 1999. Last year, in most months, the labor force was down compared to the same month in 1998. In the first five months of 2000, the labor force grew at least 1.3% every month, compared to the same month in 1999.

The total labor force in Indiana stood at 3.13 million in May, according to estimates from the Indiana Department of Workforce Development and the U.S. Bureau of Labor Statistics. That's close to the record labor force estimate of 3.18 million set in June 1995.

Coupled with the declining unemployment rate, this larger labor force resulted in a near-record number of Hoosiers at work in May. The total number of employed people surpassed 3.03 million, and was, in fact, just 5,000 people shy of the record 3.04 million in June 1998.

Figure 1: May Unemployment Rates by County

The national unemployment rate for May was 3.9%



Indiana Unemployment Rate Lower than in Neighboring States

In May, Indiana continued to post a lower unemployment rate than the nation as a whole. Indiana's rate fell four-tenths of a point to 3%, while U.S. unemployment edged up from 3.7% to 3.9% (see Figure 1).

For more than 10 years, Indiana's unemployment rate has almost always been lower than the national rate. Sometimes a persistent rate difference is due to regional factors. If so, several neighboring states might exhibit the same kind of differential from the U.S. numbers. Indiana's low unemployment rate, however, is not a regional

phenomenon. In fact, since 1990, Indiana's unemployment rate has been consistently lower than the rates in neighboring states. The unemployment rates for Indiana and its four neighbors – Illinois, Kentucky, Michigan and Ohio – for the most recent four years are shown in Figure 2. Neighboring states generally had unemployment rates ranging from half a percentage point to two full points higher than Indiana's. Illinois and Kentucky were both at about 4% in May 2000, compared to Indiana's 3%. Ohio came down from 4.9% in February to 3.6% in May.

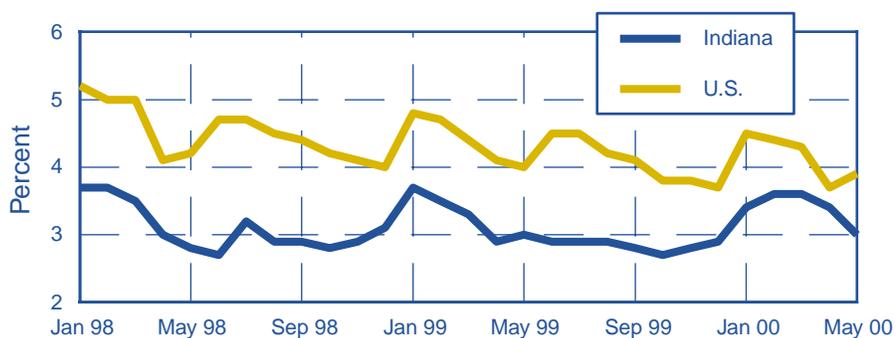
"There does not appear to be a problem with the data that would explain this pattern," said Charles Mazza, director of Labor Market Information at the Indiana Department of Workforce Development. "The U.S. Bureau of Labor Statistics uses the same formula to estimate the unemployment rate for all states."

Part of the explanation could be mix. "Indiana's economy," said Mazza, "has a higher proportion of its jobs in manufacturing. And that sector has grown very well in recent years."

Indiana's low unemployment rate is one likely factor in the growth of its total labor force — that is, the number of people in the state who are working or looking for work. With a labor force of 3.1 million people, Indiana ranks fourth in the five-state region (see Figure 3). Illinois and Ohio each have a labor force that is about twice the size of Indiana's. Michigan's is about 65% larger, and Kentucky's, the smallest of this group, is about two-thirds the size of Indiana's. Indiana's share of the five-state total has remained constant for several years.

Figure 1: Unemployment Rates in Indiana and the U.S.

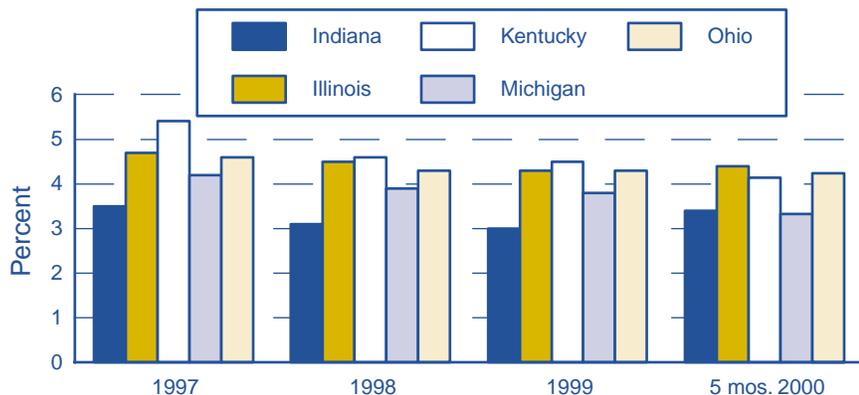
Unemployment in Indiana historically stays below the nation's



Source: Indiana Department of Workforce Development and the U.S. Bureau of Labor Statistics

Figure 2: Average Unemployment Rate

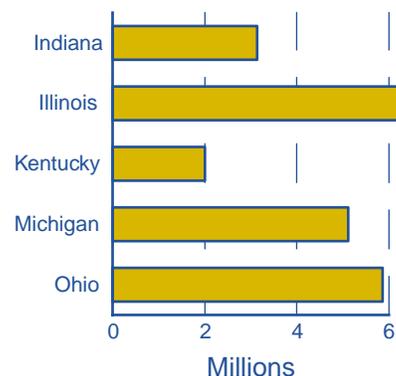
Indiana generally is lowest in the region



Source: Indiana Department of Workforce Development and the U.S. Bureau of Labor Statistics

Figure 3: Labor Force, May 2000

Illinois largest in region



Source: IDWD and U.S. Bureau of Labor Statistics

INCONTEXT

Published monthly by a partnership of:

Indiana Business Research Center

Kelley School of Business
Indiana University
Bloomington Campus
501 North Morton Street
Bloomington, Indiana 47404
IUPUI Campus
801 West Michigan Street
Indianapolis, Indiana 46202-5151
E-mail: ibrc@iupui.edu

Indiana Department of Commerce

One North Capitol
Suite 700
Indianapolis, Indiana 46204

Indiana Department of Workforce Development

Labor Market Information - E211
Indiana Government
Center South
Indianapolis, Indiana 46204

INDIANA UNIVERSITY

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IN the Workforce

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California, with 1.9 million manufacturing jobs — around 850,000 more than Texas and Ohio (see Table 2 on page 9). However, in terms of manufacturing jobs per capita, Midwestern states still lead the nation.

The states with the highest percentage increase in manufacturing jobs over the past year were primarily states with small manufacturing sectors, with the exception of Georgia, which ranks 11th nationally. Logically,

however, the larger manufacturing states contributed more net new jobs than the smaller states.

Maryland was the smallest manufacturing state creating the greatest number of net new jobs over the past year. Georgia led the nation, adding 7,600 manufacturing jobs since May 1999, followed by Arizona (4,100) and Indiana (3,900). Of the top 10 largest manufacturing states, only California, Pennsylvania and Indiana added rather than lost manufacturing jobs.

IN Depth:

For all the latest state and county figures and complete time series data sets related to the Indiana economy, visit the following Internet sites:

- www.ibrc.indiana.edu/incontext
- www.stats.indiana.edu
- www.indianacommerce.com
- www.dwd.state.in.us

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IUPUI Campus
801 West Michigan Street, BS 4015
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