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THE INDIANA ECONOMY

Vol. 2, Issue 3

IN the Spotlight:

Indiana: A Motor Vehicle Industry Leader

The Indiana motor vehicle and related products industry is one of the nation's largest, and Indiana ranks third or higher in employment in almost every category in this industry. Indiana motor vehicle and related products employment represents a significant segment of national employment (see Figure 1).

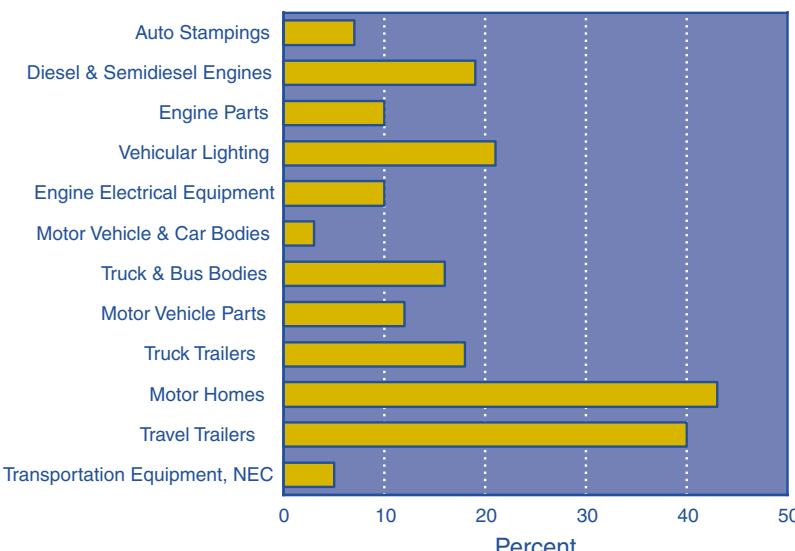
Since 1989, Indiana motor vehicle and related products employment increased by 32.1%, while national employment in this industry increased by 13.4%. Some segments in Indiana's motor vehicle and related products industry experienced growth that is

even more significant. The state's motor vehicle parts employment grew 89.3%, more than twice the national rate of 34.7%. During the same period, Indiana truck trailer production employment grew almost 92%, nearly three times the U.S. employment growth of 33.1%. Most notably, motor vehicle and car bodies employment grew at a faster rate than for any state with employment of 6,000 or greater.

Indiana and its neighboring states are known leaders in auto and related production, accounting for 56% of all industry employment. This covers all

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Figure 1: Indiana's Share of Total U.S. Employment in the Auto Industry, 1998



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IN Depth:

For all the latest data, visit the following Internet sites:
www.ibrc.indiana.edu/incontext
www.indianacommerce.com
www.dwd.state.in.us

Indiana
Unemployment Rate
for December 2000:
2.7%

IN the Spotlight

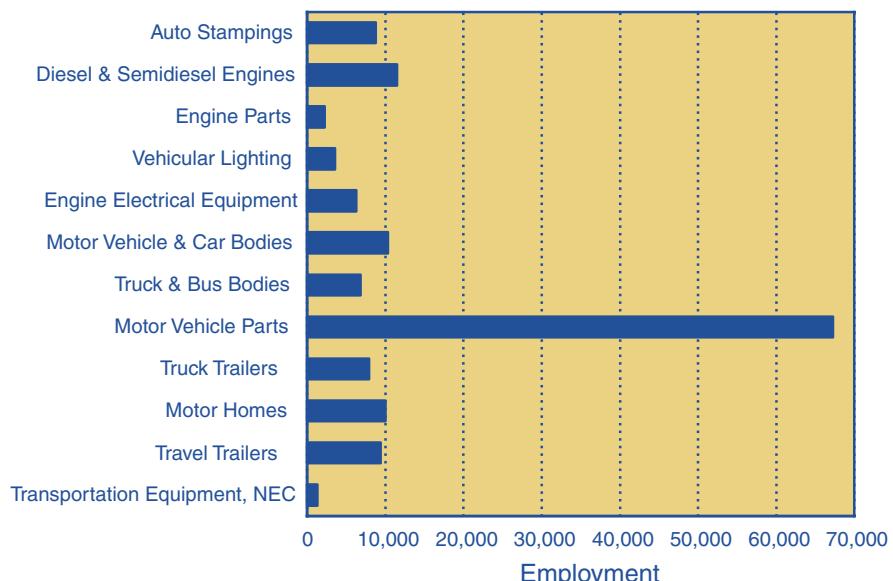
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major areas of motor vehicle production. Combined, these states account for more than a quarter of national employment for truck and bus bodies. Motor home production in this region approaches nearly half of national employment. These states also account for nearly two-thirds of finished cars and trucks and 80% of all stamped-metal auto-parts employment.

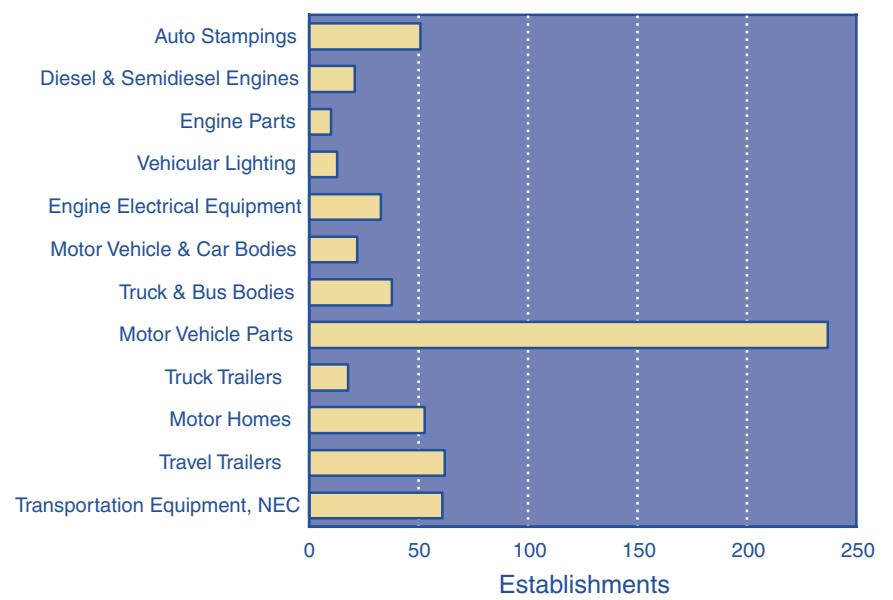
In 1999, Indiana had 619 establishments that were producers of motor vehicles equipment and related products, with a combined employment of 145,496 workers (see Figures 2 and 3). Indiana has a minimum of 2,200 employees in all but the smallest industry group. Motor vehicle operations can be found throughout the state (see Figure 4). Of Indiana's 92 counties, at least 79 have one or more facilities directly related to the industry. Of these, 43 have employment greater than 500, 32 have employment greater than 1,000, and seven have employment greater than 5,000.

While the industry is distributed throughout the state, regional sub-sector concentrations can be found. All together, total industry employment is most concentrated in northern Indiana and along Interstates 65 and 69. The main concentration of metal-stamping facilities also follows Interstate 69 and Interstate 65 south from Indianapolis. Diesel engine production is centered in Lafayette, Indianapolis and Columbus.

With the exception of companies in Indianapolis, carburetor, piston and other engine-parts facilities are mainly found along the borders of Ohio and Michigan, with most employment

Figure 2: Industry Employment, 1999 Annual Average**The motor vehicle parts and accessories sector is the leading employer**

Source: Indiana Department of Workforce Development

Figure 3: Industry Establishments, 1999 Annual Average**Motor homes and travel trailers have more than 110 establishments**

Source: Indiana Department of Workforce Development

centered in Wayne County. Electrical components are found in several larger facilities throughout the state, but Anderson has the largest concentration of employment. Elkhart (and its surrounding area) is the center of the motor and travel trailer industry in Indiana and in the nation.

Indiana has a strong commercial truck industry, but tractor, bus and van body and assembly plants are located in different regions than semi-trailer production facilities. Truck plants are most concentrated in Indianapolis and Elkhart. Indiana facilities do not, however, turn out finished semi-truck cabs, but specialized products such as delivery vans, ambulances, tow-trucks and unfinished semi-truck cabs. Trailer facilities are found in west-central Indiana between Clay, White and Tippecanoe counties.

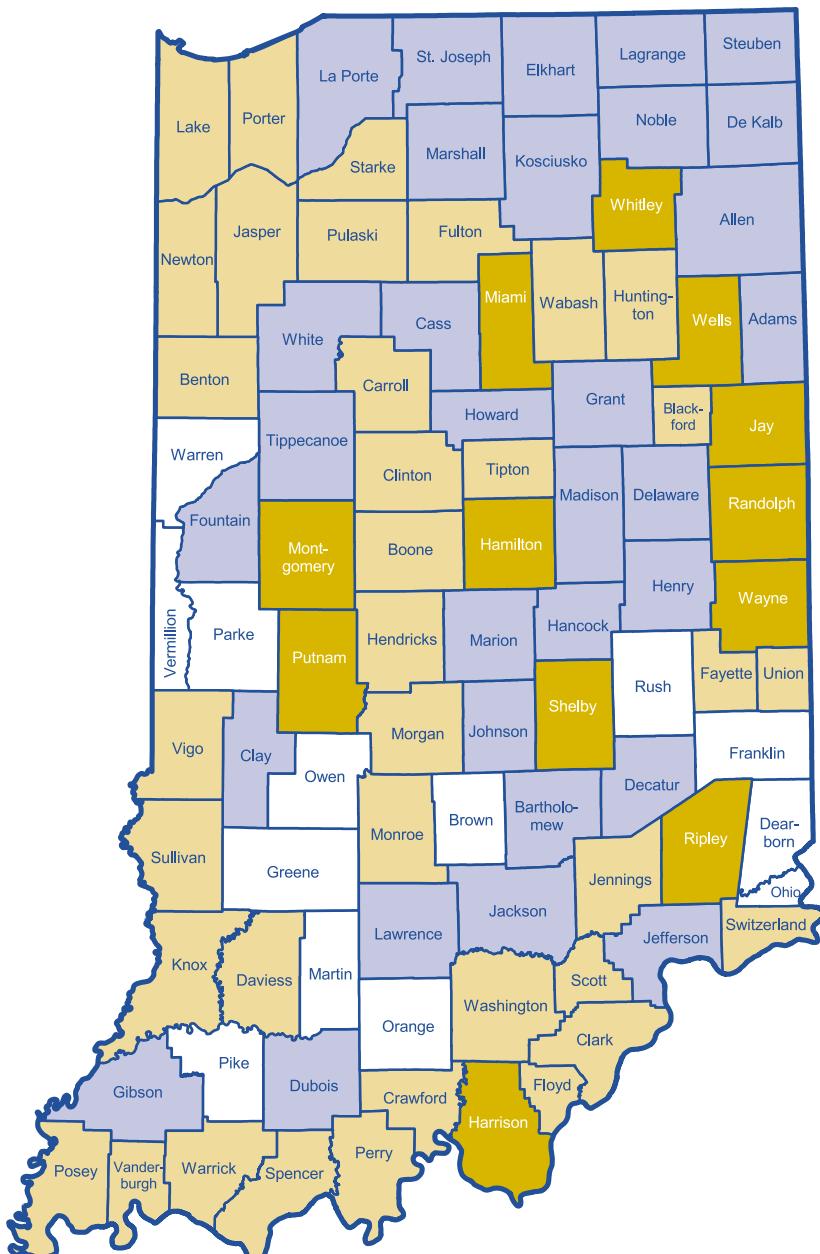
The motor vehicle parts category, which includes brakes, axles, exhaust systems and any other parts not listed separately in this report, is the state's largest single auto sector, with 20 counties having 1,000 or more employees. Most of this industry is concentrated in the northeast corner of the state. An extension of this concentration extends southeast of Indianapolis and is centered on Shelby County. Kokomo, however, is the auto parts center of Indiana.

Finally, we should not forget that in addition to Toyota Motor Manufacturing Inc. in Princeton and Subaru-Isuzu Automotive Inc. in Lafayette, Indiana also has major final assembly facilities in Fort Wayne (General Motors light trucks) and South Bend (military Humvees and civilian Hummers).

Figure 4: Distribution of Indiana Motor Vehicle Employment by County

The motor vehicle industry is a presence throughout Indiana

- [Light Blue] 1,000 or more (31 counties)
- [Dark Yellow] 500 - 999 (12 counties)
- [Medium Yellow] 1 - 499 (36 counties)
- [White] No industry employment (13 counties)



Source: Indiana Department of Workforce Development

Indiana Job Growth Tops U.S. Average

Indiana added jobs at a faster rate than did the nation over the years 1989 to 1999, with a total addition of 615,000 jobs. With that 20.3% gain, Indiana ranked 27th in the nation, ahead of neighboring states Illinois, Michigan and Ohio. For the same period, the nation had a 19.3% increase (see Figure 1).

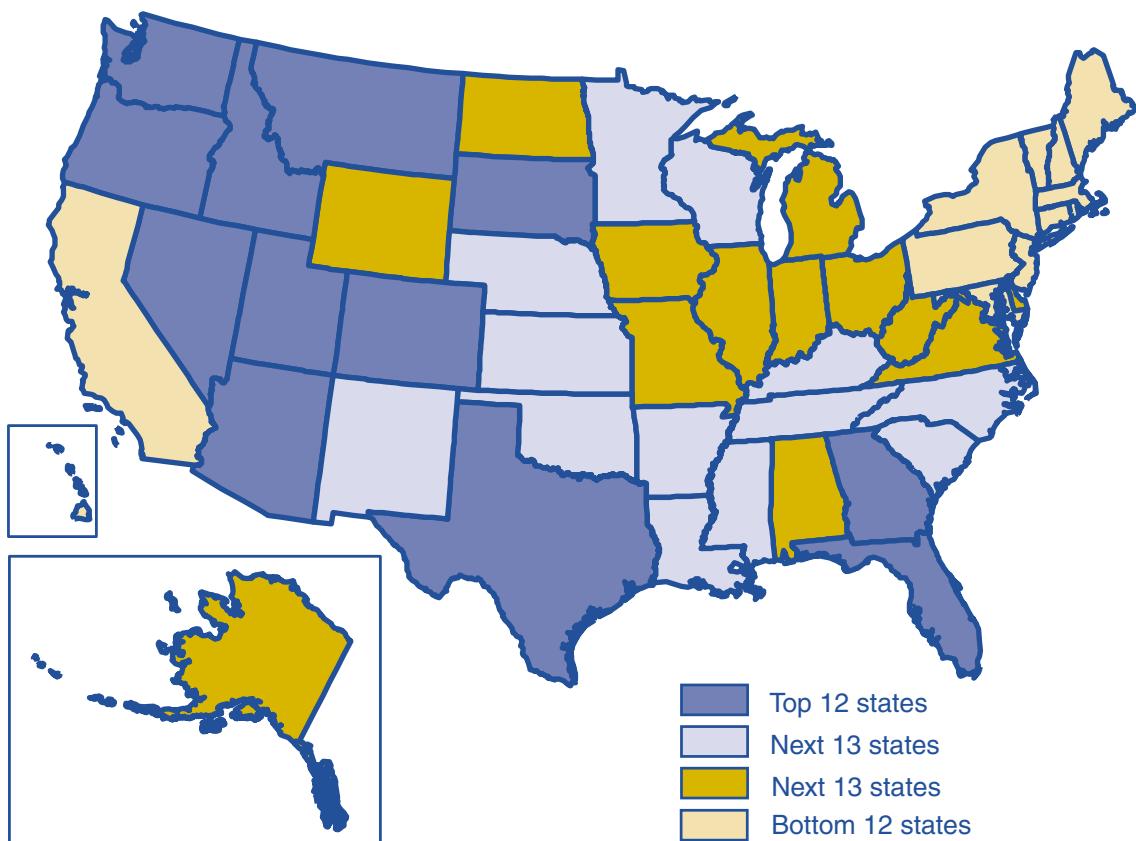
Job growth is closely related to population growth. Thus Nevada, Utah, Arizona and Idaho led the percentage derby. Only the District of Columbia

had fewer jobs in 1999 than 10 years earlier. However, Rhode Island, Connecticut, New York and New Jersey each had job growth rates of 6% or less.

Job growth alone can contribute to growing earnings, the aggregate compensation of workers and to the number of business proprietors. For example, Alaska had an 18% increase in jobs, but only a 6.1% increase in total earnings as average earnings per job fell by 10%. As high-paying

Figure 1: Percent Increase in Number of Jobs, 1989–99

Indiana ranked 27th in the nation



Source: U.S. Bureau of Economic Analysis

energy jobs were eliminated, lower-paying but more numerous service-sector jobs were introduced. Thus whatever growth did occur in total earnings was ultimately the result of increased numbers of jobs.

At the other extreme was the District of Columbia, where 36,400 jobs were lost, a decline of 4.7% over the 10-year period. Average earnings per job rose, though, by 22.7%. (D.C. led the nation in real earnings per job in both 1989 and 1999, with \$46,127 and

\$56,601, respectively.) Under these circumstances, whatever growth occurred in total earnings was ultimately the result of higher-paying jobs.

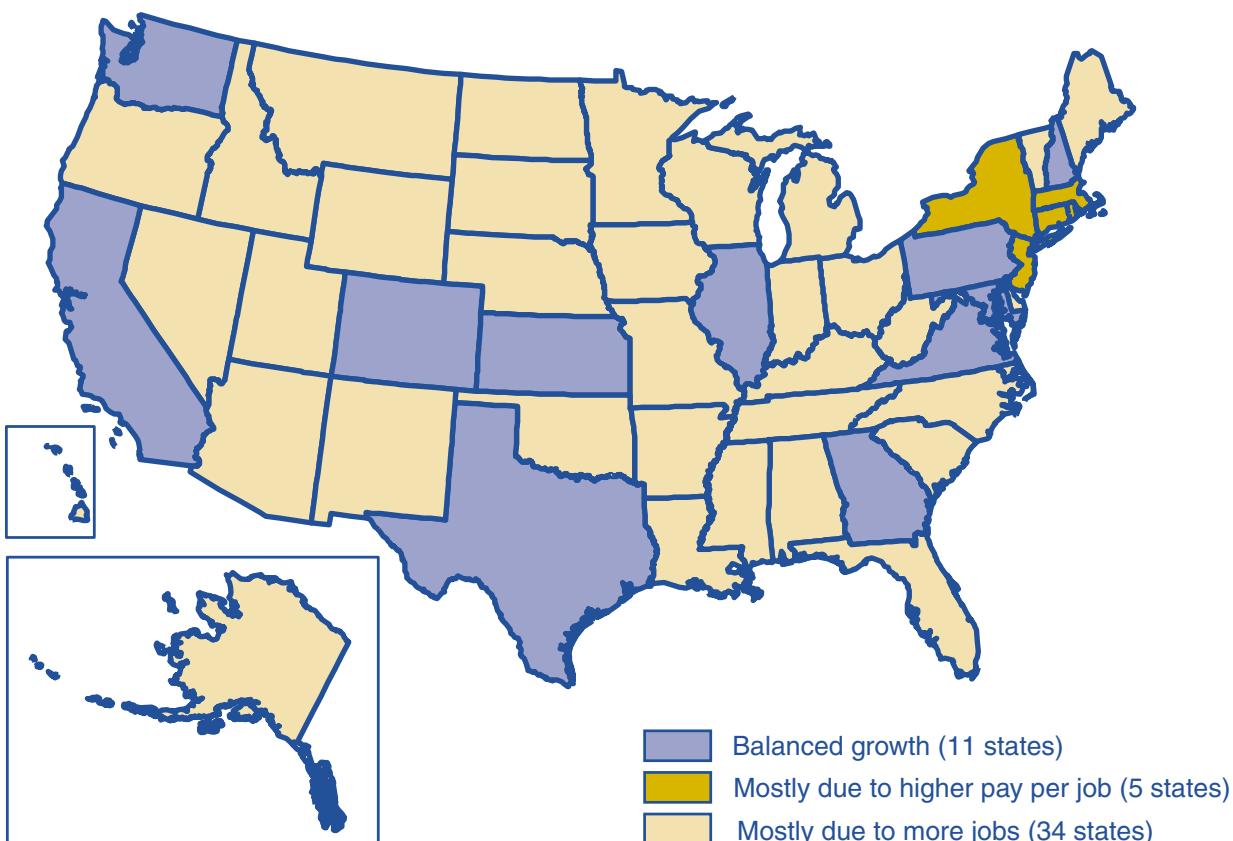
Nationwide, 58% of the growth in real total earnings between 1989 and 1999 was due to increased numbers of jobs. The balance (42%) of the growth in earnings was the effect of higher pay per job. Indiana had 67% of its increased total earnings arise from job growth — with 33% due to high

paying jobs — and was among the majority of the states in that regard (see Figure 2). There seems to be no statistical relationship between the rate of earnings growth and the share of that growth originating in either job or pay rate increases. Nor is it obvious that job growth or pay increases are universally superior objectives for economic development policy.

If you are interested in more detail by industry for the United States and Indiana, visit the *IN Context* Web site.

Figure 2: Source of Total Earnings Growth, 1989-99

Earnings growth due to higher number of jobs or higher earnings per job



Source: U.S. Bureau of Economic Analysis

Manufacturing and Services Run Neck and Neck

Although the services industry holds a slight statewide employment edge, the state's 92 counties are evenly split between manufacturing and services in terms of the dominant employing industry.

Indiana's economy is commonly perceived as being heavily dependent on manufacturing, even as the manufacturing industry has become a less important employer nationwide. At the national level in 1999, private-sector service industries employed about two workers for every one employed in manufacturing. In Indiana, the comparable 1999 ratio was approximately one to one. When public sector employment is included, however, service industry workers outnumbered manufacturing workers in Indiana by about four to three in 1999.

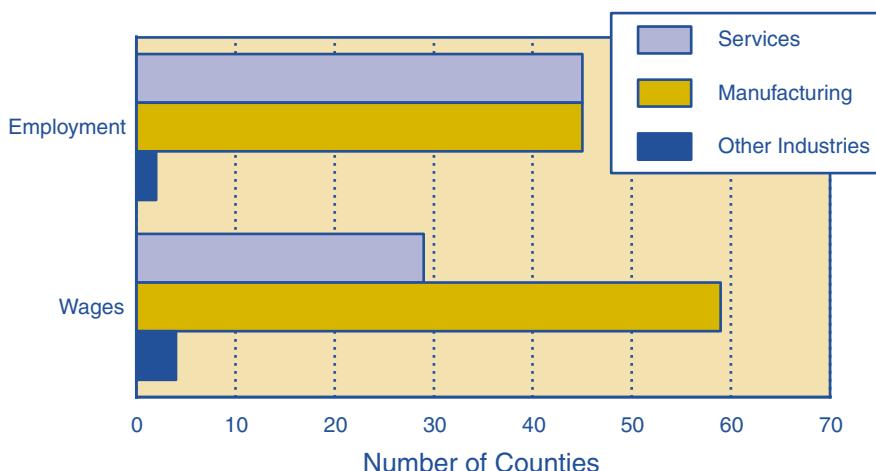
Although the services industry holds a slight statewide employment edge, the state's 92 counties are evenly split between manufacturing and services in terms of the dominant employing industry. Among 11 standard industry divisions, manufacturing is the leading employer in 45 Indiana counties, according to the most current quarterly tabulations of the Covered

Employment and Wages data series. The services industry leads in 45 other counties. The two exceptions are Johnson County, where retail trade employs the most workers, and Martin County, where public administration (Crane Naval Depot) is the dominant industry. Figure 1 shows a distribution of Indiana counties by the industry accounting for the largest share of county employment and wages in the first quarter of 2000.

Figure 2 presents the geographic distribution of the leading industry in employment for first quarter 2000. The services industry is the top employer in nine of the state's 10 largest counties (ranked by population size), with manufacturing-intensive Elkhart County as the lone exception. Counties in which the manufacturing industry is the largest employer are clustered primarily in the northeast to north-central area of the state and in a band of 15 contiguous counties running

Figure 1: Leading Industries, Indiana Employment and Wages, 2000:1

In total wages, manufacturing tops services in twice as many counties



Source: Indiana Department of Workforce Development

from Fayette County to Spencer County.

Conventional wisdom holds that manufacturing jobs pay higher wages than service jobs. That notion is supported in Figure 1. Manufacturers account for a higher share of wages than any other industry in 59 Indiana counties, compared to 45 counties where they lead in employment. In all 45 counties where the manufacturing

industry is the leading employer, the industry also pays out the most wages. Among the counties where the services industry leads in employment, however, a different industry pays more in total wages in 17 of 45 counties.

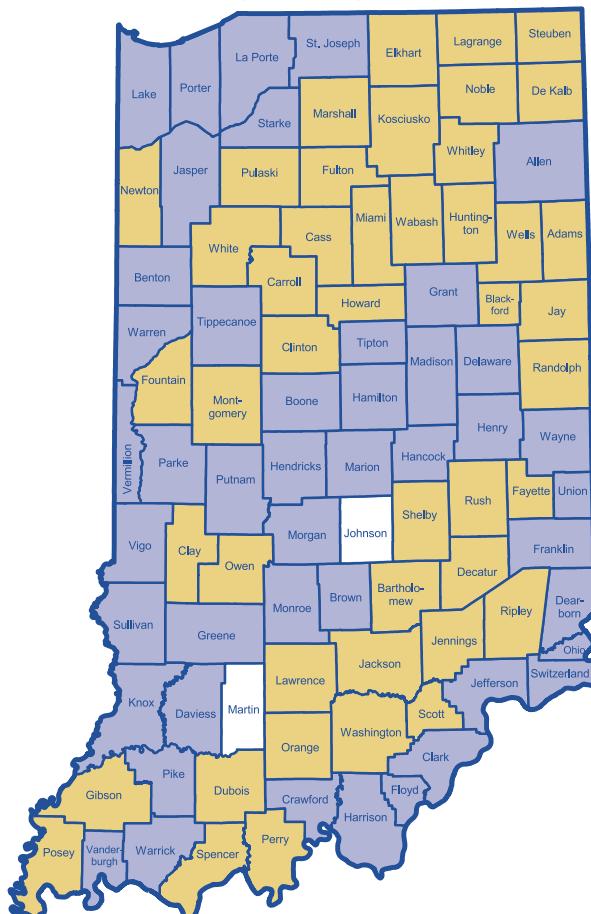
Figure 3 maps the distribution of the leading wage-paying industry in the first quarter one year ago. In four counties, neither the manufacturing nor

the services industry accounted for the highest total wages. Public administration led the way in total wages paid in both Martin County and Sullivan County (Wabash Valley prison); in Pike County, the top wage-paying industry was transportation, communications and public utilities; and the leading industry in Hamilton County was finance, insurance and real estate.

Figure 2: Leading Industry in Employment, 2000:1

Manufacturing and services are equally divided

- [Services (45 counties)]
- [Manufacturing (45 counties)]
- [Other (2 counties)]

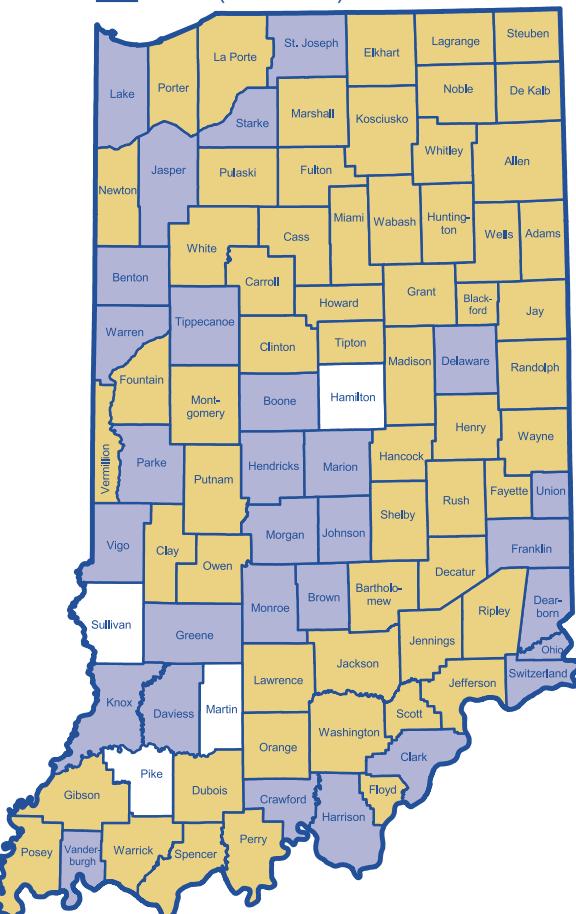


Source: Indiana Department of Workforce Development

Figure 3: Leading Industry in Wages, 2000:1

Manufacturing is dominant industry in 59 counties

- [Services (29 counties)]
- [Manufacturing (59 counties)]
- [Other (4 counties)]



Source: Indiana Department of Workforce Development

December Unemployment Rate Did Not Signal Recession

Indiana's statewide unemployment rate for December 2000 came in at 2.7%, according to the Indiana Department of Workforce Development, showing no sign of a recession in the state. The 2.7% rate was still well below the average for the year. For the first 11 months of 2000 the state unemployment rate averaged 3.1%.

Indiana's non-seasonally adjusted unemployment rate continued to be less than the national average in December. The U.S. non-seasonally adjusted rate was 3.7%.

Talk of a possible recession in the U.S. economy has been widespread. Twice in the month of January, the Federal Reserve reduced its target interest rate. But those interest rate cuts were a preventive measure. Economic data through December do not show that a recession had begun. A good example is the unemployment rate in Indiana (see Figure 1).

Often an early sign of a recession is a large increase in unemployment. The Indiana rate, however, has been at very

low levels for several years. In September, it took a major drop, to 2.1% from 3.3% in August.

September's number may have been influenced by unusual characteristics of the sample survey taken by the U.S. Census Bureau that month. The Indiana Department of Workforce Development relies in part on that monthly survey to calculate the state unemployment rate. By December, however, most of the effects of an unusual September sample should have disappeared from the data.

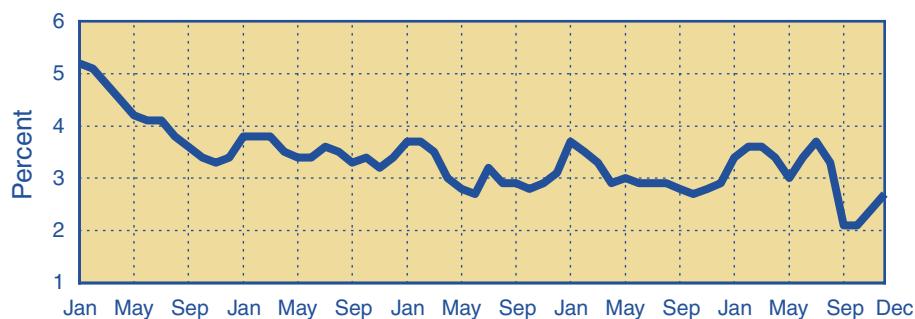
So if a recession were to show up in December's numbers, we should have seen the state rate not only climb back from the effects of September, but rise above the average of the preceding months. That did not happen.

Other states in this part of the country mirrored Indiana's experience in December. Illinois' rate was up slightly in December to 4.5%, but that did not significantly exceed its annual average. Michigan's rate actually fell, down to 3.4% from 3.5% in November. Both Kentucky and Ohio posted a

Economic data through December do not show that a recession had begun. A good example is the unemployment rate in Indiana.

Figure 1: Indiana Unemployment Rate, 1996-2000

December rose slightly but stayed lower than annual average



Source: Indiana Department of Workforce Development

December rate of 3.7%, unchanged from November.

A related measure of the health of the Indiana economy is monthly payroll statistics. Through another survey, the U.S. Bureau of Labor Statistics calculates the total number of jobs in each state each month. For Indiana, the December jobs number was 3,022,000. This total was nearly the same as the state job count in September, October and November. The average for the first 11 months of 2000 was 2,993,000, so December still remained above the average for the year.

If the data available for December do not show clear signs of recession, why all the recession talk? Part of the answer is the performance of individual sectors. While Indiana's overall economic health remained good through the last month of the year, certainly there were sectors — construction and durable goods manufacturing, for example — which showed more weakness than the rest of the state.

The December data also raised a question in another respect. The jobs number, while strong, did not increase. In most years, December brings an increase in jobs in Indiana.

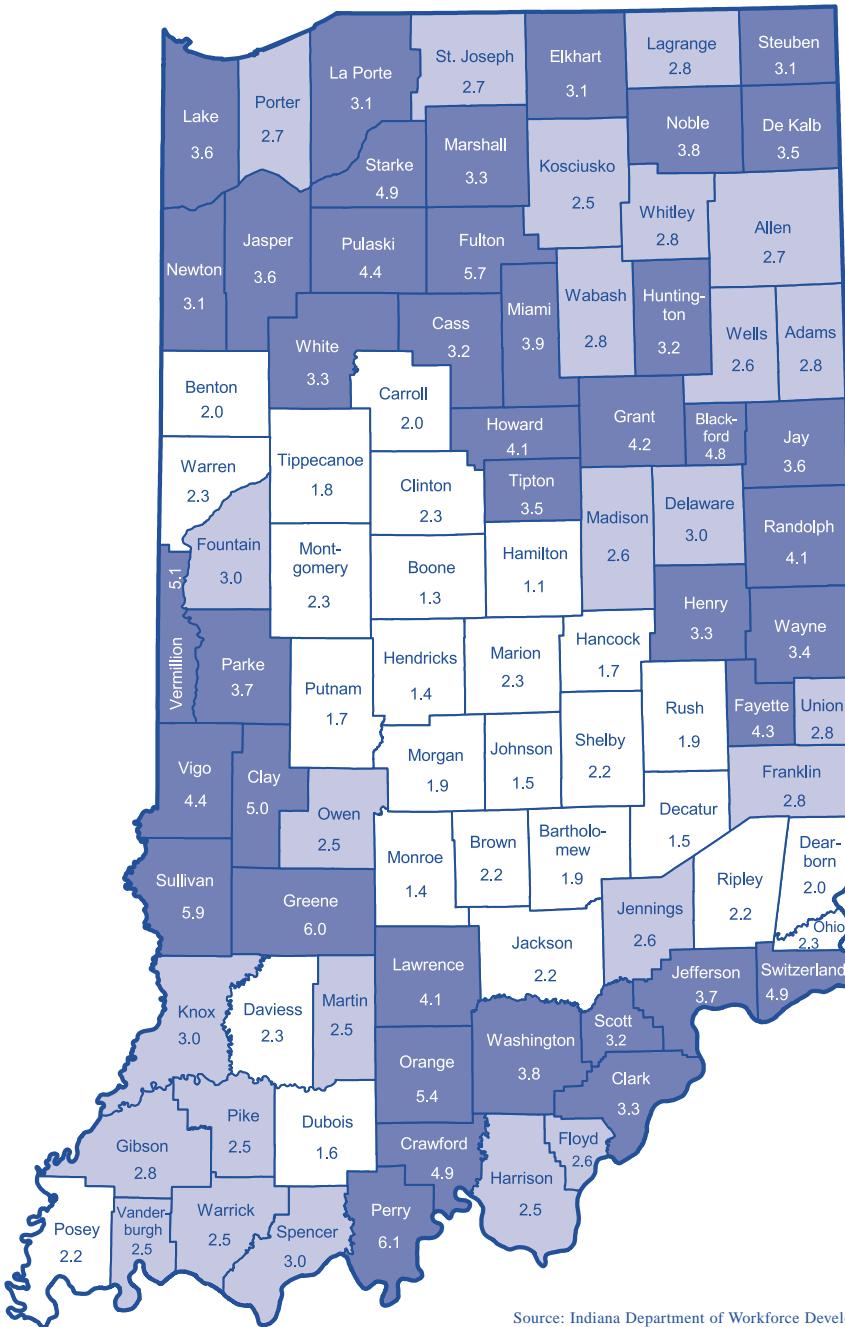
Another warning sign: Although the state unemployment rate for January was not available at the time of this writing, the national unemployment rate for January had been announced. It was 4.7%, rising one whole percentage point from December. The January unemployment rate for Indiana will be covered in the next issue of *IN Context*.

Figure 2: December Unemployment Rates by County

The national unemployment rate for December was 3.7%

Indiana Unemployment Rate = 2.7%

- [Dark Blue] Above State Rate (40 counties)
- [Medium Blue] Approx. Equal to State Rate (+/- 0.3) (25 counties)
- [Light Blue] Below State Rate (27 counties)



Source: Indiana Department of Workforce Development

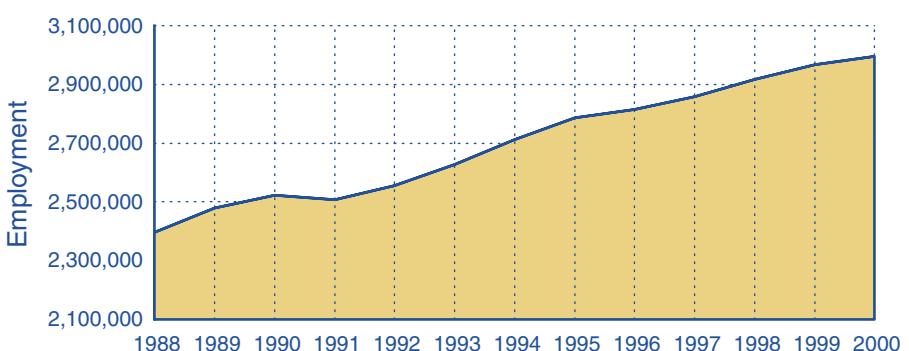
Indiana and U.S. Show Similar Trends in Employment Growth

In 1988, total nonfarm employment in Indiana averaged approximately 2.4 million. The annual average for the year 2000 was approximately 3.0 million, or 25% more than in 1988. Over the same time period, U.S. average annual nonfarm employment also grew by approximately 25%.

The Current Employment Statistics survey (CES), developed by the U.S. Bureau of Labor Statistics, collects employment data from a sample stratified by industry, area and employer size in all industries except farming. The data are collected at the state level on a monthly basis and count employees in every skill class. CES data are available within a month of collection. According to CES data, Indiana also reflects the nation in terms of annual changes in employment. For both Indiana and the nation, only one year — 1991 — showed a decline in employment in the 1988–2000 period. This was the height of the 1990s recession. Indiana's total nonfarm employment over time is shown in Figure 1, while Figure 2 shows a similar pattern for the United States.

Figure 1: Indiana Annual Average Nonfarm Employment

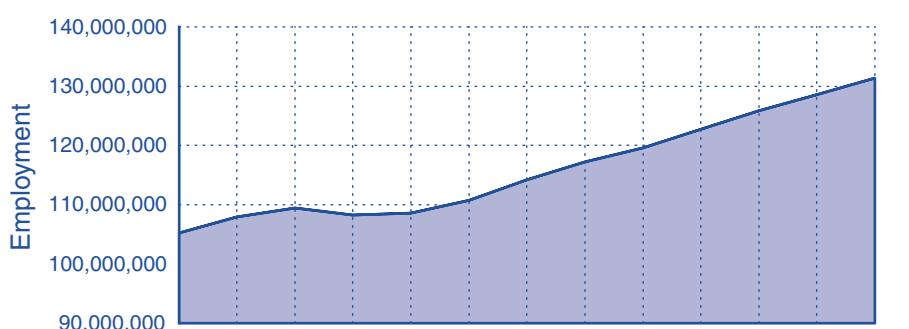
Twenty-five percent increase over 12-year period



Source: Current Employment Statistics, Bureau of Labor Statistics

Figure 2: U.S. Annual Average Nonfarm Employment

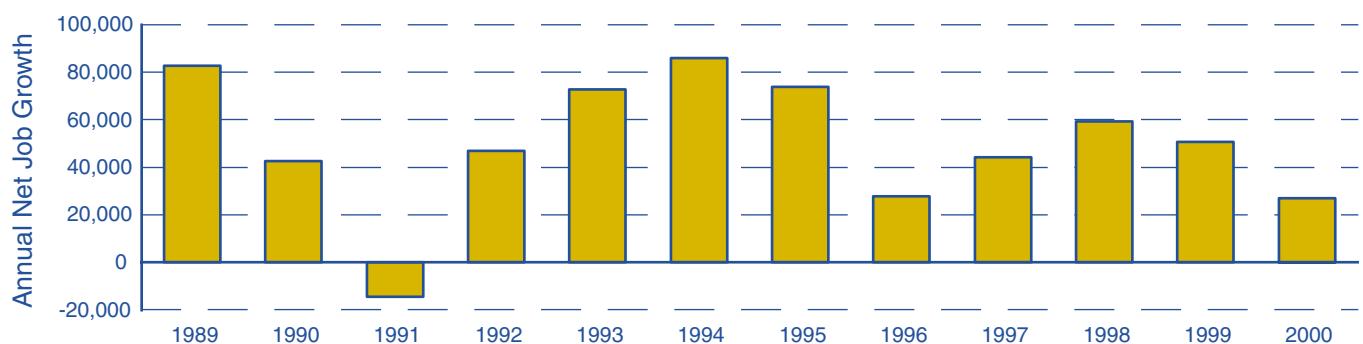
National increase mirrors Indiana's



Source: Current Employment Statistics, Bureau of Labor Statistics

Figure 3: Indiana Annual Net Job Growth

Job gains in 11 of 12 years



Source: Current Employment Statistics, Bureau of Labor Statistics

Job creation is a common benchmark used in economic development. Economic development officials are often judged by the number of jobs they helped create by providing financial support for location or expansion projects. Indeed, job creation is required for companies to obtain most state or local assistance for a project. However, it is not enough to only count the jobs created by new projects because at the same time some companies are expanding, others are

For both Indiana and the nation, only one year — 1991 — showed a decline in employment in the 1988–2000 period. This was the height of the 1990s recession.

reducing their workforce or closing down. The proper benchmark is *net* job creation, or the new jobs remaining after any job losses have been subtracted.

Using the CES data, it is possible to see the approximate number of net new jobs created in Indiana each year since 1988 (see Figure 3). Net job creation peaked for the state in 1994, with 85,800 jobs added during the year. On average, jobs were created at an annual rate of 1.85% per year over this 12-

year period, but actual rates from year to year ranged between positive 3.5% and negative 0.6%. As illustrated in Figure 4, similar variations are seen in the annual growth of U.S. nonfarm employment. These trends are also mirrored by changes in the annual Gross State Product (GSP) and Gross Domestic Product (GDP) (see

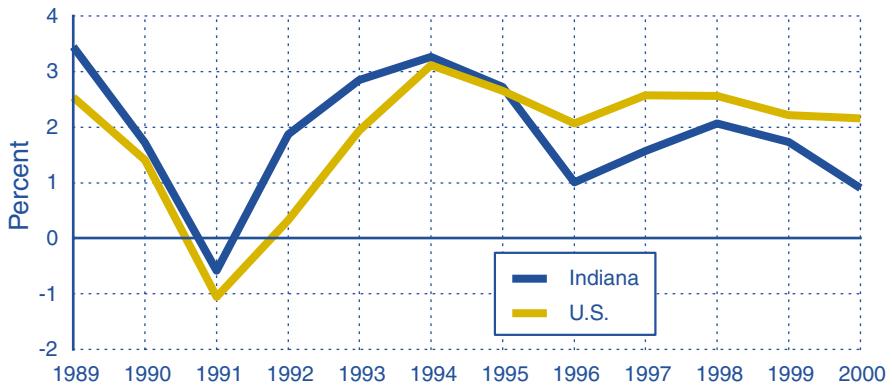
Figure 5). Unfortunately, GSP data are only available through 1998, so it is not possible to see if this trend has continued to date.

Net new employment can be calculated on a monthly basis as well as annually. However, monthly data are subject to seasonal changes in

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Figure 4: U.S. and Indiana Annual Job Growth

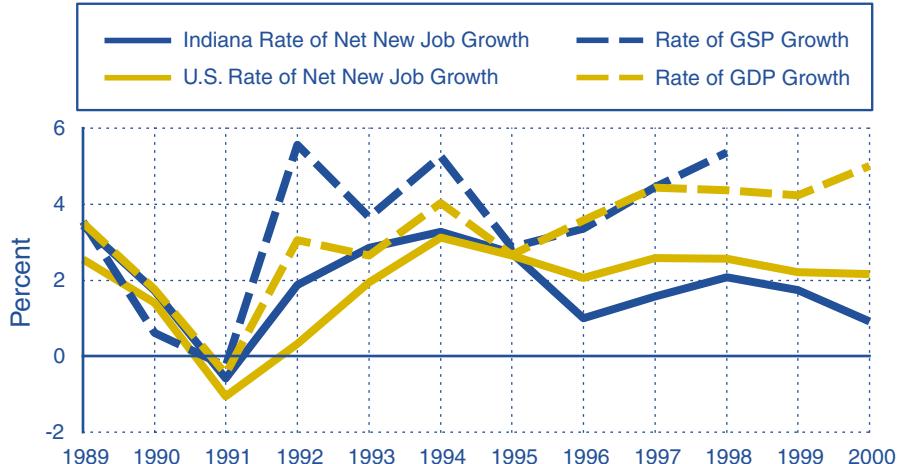
Twelve-year trendlines



Source: Current Employment Statistics, Bureau of Labor Statistics

Figure 5: Jobs vs. GDP/GSP — A Comparison of Growth Rates

Indiana and the nation



Source: Current Employment Statistics, Bureau of Labor Statistics and Bureau of Economic Analysis

IN CONTEXT

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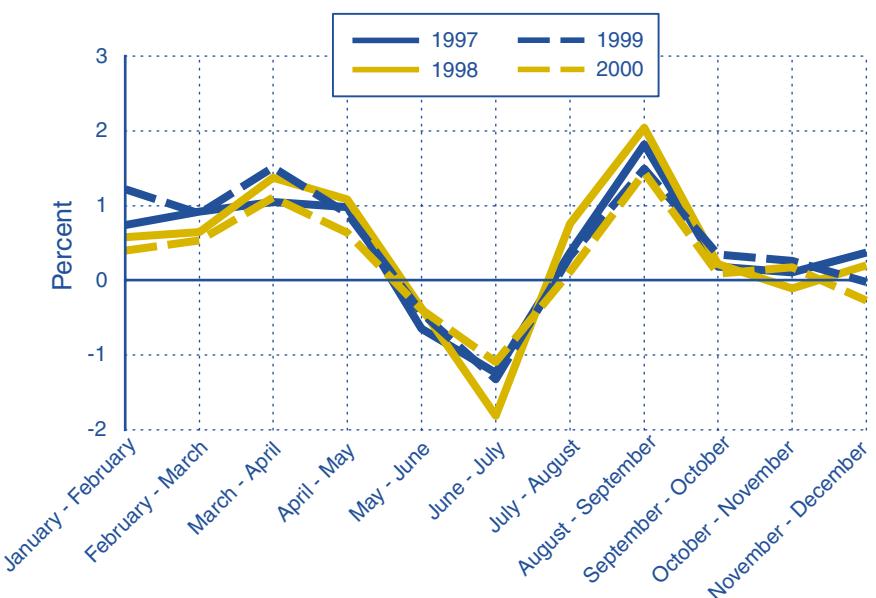
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employment patterns, making them an inaccurate snapshot of employment status. For example, employment tends to drop significantly between June and July because teachers have their summer break.

Most years generally follow the same seasonal pattern, as shown in Figure 6 for the years 1997, 1998, 1999 and 2000. Nevertheless, using an annual average, as in this article, or a rolling average of 12 months is the best method for gauging job growth over time.

Figure 6: Monthly Job Growth in Indiana

Seasonal trends, 1997-2000



Source: Current Employment Statistics, Bureau of Labor Statistics

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