Using Data in Context

There are multiple ways of looking at the economy of an area. Population data; employment data by industry, residence, or occupation; wage data; and gross production data are important elements of an economy. It is best to consider these data together when trying to predict or influence economic activity.

Employment data are the primary focus of IN Context, as they provide a forum for disseminating three major data sets collected by the Indiana Department of Workforce Development for several federal programs. These data sets include:

- **Current Employment Survey (CES):** CES is a monthly survey of all nonfarm businesses that provides data on employment by industry. Manufacturing wages and hours worked are also collected. These data are presented and analyzed each month in the section titled “IN the Workforce.”

- **Covered Employment and Wages (CEW):** CEW is a quarterly census of all businesses in Indiana that fall under the Unemployment Insurance laws. The data include the number of firms, employment and wages by industry and county. The section titled “IN Business” looks at different aspects of these data each month, focusing generally on a region or industry.

- **Local Area Unemployment Survey (LAUS):** The LAUS program provides monthly and annual average estimates for Indiana’s labor force, employment and unemployment. It also provides these estimates for the unemployment rate in approximately 150 areas of the state: statewide, metropolitan statistical areas (MSAs), counties and cities with a population 25,000 or more. The data in the LAUS series are the official data used for federal fund allocations and are based on a statistical methodology that uses data from a variety of sources. The statistical model is consistent across states, so areas can be compared. “IN Local Areas” covers aspects of these data each month.

The goal of this publication is to present these data sets “in context,” showing employment over time and space and in relation to other economic data. Several articles in this and previous issues of IN Context consider the relationship between population and employment, while others focus on a specific geography or industry. Future issues will incorporate occupational data, gross state product data and exports.
Most Indiana counties continue to experience population growth, according to population estimates released by the U.S. Bureau of the Census in March.

Changes and shifts in population are important variables impacting economic development. Economic development requires that businesses have access to land, capital and workers. To stimulate economic development, each element of this equation must be understood. Access to workers in a given area can be understood in part by knowing the population trends and patterns of that area. An increase or decrease in population may alter the availability of labor, and in turn, the unemployment and wage rates. Areas with rapidly expanding populations are generally appealing to prospective companies because they provide opportunities for growth. This article highlights important aspects of Indiana’s population patterns that may be impacting the state’s economy.

According to U.S. Bureau of Census population estimates for July 1, 1999, Indiana’s population has increased, on average, by 7.2% since the 1990 census. Domestic migration is driving the state’s population growth, with the fastest-growing Hoosier counties experiencing the largest amounts of positive net domestic migration (more people from other states and counties moving in than moving out). International migration to Indiana has also steadily increased since 1990. The vast majority of international immigrants are moving to Hoosier counties with the largest populations: Marion, Lake and Allen.

The 10 largest Hoosier counties in terms of population are Marion, Lake, Allen, St. Joseph, Elkhart, Hamilton, Vanderburgh, Porter, Tippecanoe and Madison (see Figure 1). Hamilton County passed Vanderburgh County in the most recent year to become the sixth most populous county in the state. The smallest Indiana counties are Ohio, Union, Warren, Switzerland and Benton, each with a population under 10,000. The 1999 population estimates indicate that 47 Hoosier counties have grown faster than the state as a whole. Thirty-five of Indiana’s counties have grown in population since 1990, but more slowly than the state. Ten Indiana counties experienced a population decline (see Figure 2).

The fastest-growing Hoosier county continues to be Hamilton County, home of rapidly growing Fishers, Noblesville and Carmel. Hamilton County has added more than 63,000 people since the 1990 census, for a growth rate of 58% between 1990 and 1999. Hamilton County led the state in population growth rates for each year in the decade, with a growth rate of about 5% each year. In fact, Hamilton County has been the fastest-growing county in the region — Indiana, Illinois, Michigan, Ohio and Kentucky.
— and the 27th fastest-growing county in the nation since the 1990 census. Nationally, the fastest growing counties since 1990 are in Colorado and Georgia. (See “IN Business” for more details on population and employment growth in Hamilton County.)

Other Hoosier counties experiencing high rates of growth since 1990 include Hendricks (30.5%), Johnson (27.9%), Dearborn (23.6%) and Hancock (22.2%). The high population growth rates in these suburban Hoosier counties are consistent with growth patterns experienced by the nation as a whole. The counties experiencing growth of 2% or more in the last year were Hendricks, Johnson, Morgan, Boone, Harrison and Hancock.

Marion County’s population has seen an overall increase of 13,800 people since 1990, but has experienced a decline of 4,800 people since 1996. Earlier in the decade, Marion County’s natural increase (more births than deaths) exceeded its out-migration, resulting in population growth. Since 1996, however, the county’s out-migration has exceeded its natural increase, resulting in population loss. The county has experienced growing domestic out-migration during the decade (increasing numbers of people moving to other states), but migration from other countries to Marion County has increased steadily throughout the decade.

Miami County has lost population since the 1990 census due to the restructuring of Grissom Air Force Base in the early ’90s. The county’s

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In the past year, Indiana’s employment grew by 1.7%, up slightly from the annual rate of 1.5% over the past five years. (All data refer to the month of February.) The fastest-growing sector has been services in both time periods (see Figure 1). The 1999-2000 period was distinguished by the strong performance of manufacturing, wholesale and retail trade relative to the longer 1995-2000 period. These disparities by sector, however, are less than the geographic disparities within the state (see Figure 2).

The 11 metropolitan areas of the state (with 77% of total employment) have averaged a 1.75% annual growth rate over the past five years, while the non-metro areas have grown at about half that rate at 0.85%. In the past year, the disparity increased as metro areas grew by 2.2% and non-metro area employment decreased by 0.4%.

The New Albany area (a portion of the Louisville MSA) led the state with a 3.2% increase over the past five years, followed by Indianapolis and Lafayette. The minor decreases shown for Terre Haute and Muncie may be treated as approximating “no change” because they are based on relatively small samples. The Kokomo and Elkhart-Goshen areas were the growth leaders in the past year, with only South Bend not increasing in number of jobs.
Sector Leaders

New Albany’s employment growth rate led all MSAs in three of the eight sectors from 1995 to 2000. Lafayette also captured the top spot in two other sectors (see Table 1). In the past year, employment growth has been broadly dispersed, with eight different metro areas taking the lead in different sectors.

Metro/Non-metro Differences

Although metro areas have more than three-quarters of all Hoosier employment, they host slightly more than two-thirds of manufacturing jobs (see Figure 3). The metro areas’ greatest hold on employment is in the financial sector, where they account for more than 86% of jobs.

Figure 2: Growth in Indiana Employment by Area

Source: Indiana Department of Workforce Development

Figure 3: Industry Share of Employment by Area, February 2000

Source: Indiana Department of Workforce Development
The U.S. Bureau of the Census recently released its county population estimates for 1999. Indiana’s Hamilton County has been among the fastest-growing counties in the nation since the 1990 census. Within Indiana, Hamilton County has added population faster, with 58% growth over the 10-year period, than any other county in the state. It is now the sixth largest county in Indiana, up from the 12th largest in 1990 (www.stats.indiana.edu/web/county/ranks/popestrank_cty99.html).

Has there been a corresponding growth in the county’s employment between 1990 and 1999? Yes. According to covered employment and wage data for second quarter 1990 through second quarter 1999, Hamilton County employment grew rapidly during this period. Covered employment grew from 41,000 in second quarter 1990 to 75,000 in second quarter 1999, a net employment growth of almost 34,000 (see Figure 1). Total employment in Indiana during the same period changed from approximately 2.5 million workers to approximately 2.9 million. Hamilton County ranks eighth in total employment in second quarter 1999, up from 15th in second quarter 1990. Hamilton County’s employment growth rate of 81.6% between 1990 and 1999 was second only to Ohio County’s 313.1%, due to the effect of the opening of the Grand Victoria Casino on the small employment numbers in Ohio County.

While Hamilton County’s employment grew by 81.6% between 1990 and 1999, its population grew by 58% during the same period (see Figure 2).
The county’s population growth rate was eight times the state average, while the county’s employment growth rate was four times the state’s growth rate.

Hamilton County’s share of the state’s population growth between 1990 and 1999 was 15.8%, while its share of the state’s employment growth was 7.3%. The county’s population increased from 2.0% of the state’s total population in 1990 to 2.9% in 1999. During the same period, its share of Indiana’s employed workforce rose from 1.7% to 2.6% (see Figure 3).

The services and retail trade sectors employed the most workers in Hamilton County in both 1990 and 1999. In 1990, three sectors — construction, wholesale trade and finance/insurance/real estate — each accounted for 9% to 10% of the county’s employment. By 1999, employment in the finance/insurance/real estate sector had grown to 15.5% of the county’s total employment.

Growth in the number of workers employed was largest in the same three sectors — services, finance/insurance/real estate and retail trade (see Figure 4). Together, these three sectors accounted for more than three-fourths of the county’s net employment growth. A 29% decline in employment occurred in the transportation/communications/public utilities sector.

The greatest percentage change in employment was in the finance/insurance/real estate sector, which increased by 204% between 1990 and 1999. Other sectors with high employment-growth rates include durable goods manufacturing (113%), services (104%) and retail trade (95%).

Note: To understand how Hamilton County’s employment distribution and growth compare to the surrounding counties, review the “IN Business” section of the March issue of IN Context.

Figure 4: Change and Percent Change in Employment in Hamilton County, 1990 to 1999

Source: Indiana Department of Workforce Development
Indiana’s rate of unemployment is among the lowest in the nation. In February, the statewide rate was 3.6%, compared to the national average of 4.4%. Sixteen states had a lower unemployment rate than Indiana.

It’s good news that so few people remain jobless in Indiana. But companies looking for additional staff sometimes find a shortage of applicants. An important factor is the growth pattern in the state’s labor force. From 1994 through 1999, Indiana’s labor force — the number of people who either are working or are unemployed but looking for work — has grown 1%. The number of employed people, however, has grown nearly 3% over the same five-year period (see Figure 1).

As a result, the number of unemployed Hoosiers has fallen steadily. In December 1994, Indiana reported 140,336 unemployed workers. By the end of 1999, out of a total labor force of more than 3 million, only 89,145 remained unemployed.

The numbers are just as dramatic at the county level. From 1994 through 1999, the growth rate of employment exceeded the growth rate of the labor force in every county except one (Pulaski). Even in counties where the labor force grew rapidly, it did not keep up with the growth in employed people. The growth leader was Hamilton County, where the labor force expanded by an average of 3.4% per year. Yet employment climbed 3.6% per year.

Of course, not all counties experienced a growing labor force (see Figure 2). From 1994 through 1999, 37 Indiana counties averaged a small annual decline in their labor forces. But the number of employed residents did not decline as quickly, so even these counties saw the number of unemployed workers shrink.
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Law Firms to Laundromats: The Services Industry

It’s no secret that the fastest-growing segment of the Indiana economy is the services industry. At the end of 1999, about 730,000 jobs were reported in our state’s services industry, up nearly 40% from 1990 (data are seasonally adjusted). Just what counts as a service industry, though, is not always obvious.

In fact, it is a tremendously diverse category. Listed as services are part-time building maintenance jobs and jobs for highly paid medical professionals, jobs in laundries and jobs in law firms.

For all states in this five-state region, the growth rate for employment in services is far above the rate for any other industry. Along with the growth in services, though, manufacturing still means a great deal to Indiana. From 1990 to 1999, the number of jobs in manufacturing grew faster in Indiana (8%) than in its neighboring states, with the exception of Kentucky (12%).

The map in Figure 1 highlights the difference in the structure of the Indiana economy compared to our neighbors. In the other states, the services sector supplies, on average, 28% of all nonfarm jobs in the state, while manufacturing accounts for a much smaller share, about 20% or less. In Indiana, service sector jobs account for approximately 25% of employment, and manufacturing is a very close second at 23%.

Service industry jobs come in many varieties. In Indiana, health care leads by a wide margin. Table 1 lists the main categories of service sector jobs. More than half of all Hoosier service jobs are in either the medical field or the business services sector. Business services can include anything from advertising agencies to chauffeur services, software development companies to temporary service agencies. Personnel supply services...
make up the largest portion of employment in this grouping, followed by computer programming and building services. The number of jobs, however, is not the only measure of an industry’s economic contribution. The U.S. Bureau of Economic Analysis has published wage and employment totals by state for all industries, through 1997. These numbers do not include proprietors’ wages, so compensation of the partners in law firms, for example, generally is not counted. Figure 2 compares Indiana’s wages per job in some of the largest sectors in manufacturing and in services. All together, manufacturing firms in Indiana paid nearly $26 billion in wages in 1997, or 32% of Indiana’s total nonfarm earnings. Service sector earnings ($21 billion) constituted 22% of total earnings. In terms of earnings, therefore, manufacturing ranks higher than services despite the fact that the services sector employs the most workers in Indiana.

### Table 1: Employment in Indiana’s Services Industry, December 1999

<table>
<thead>
<tr>
<th>Services industry sector</th>
<th>Number of jobs</th>
<th>Percent of Services Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Services</td>
<td>226,300</td>
<td>31%</td>
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<tr>
<td>Hospitals, doctors’ offices</td>
<td></td>
<td></td>
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<tr>
<td>Business Services</td>
<td>153,200</td>
<td>21%</td>
</tr>
<tr>
<td>Temporary staffing, building maintenance, Internet service providers, computer programming, equipment rental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Services</td>
<td>52,200</td>
<td>7%</td>
</tr>
<tr>
<td>Job training, day care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Services</td>
<td>47,900</td>
<td>6%</td>
</tr>
<tr>
<td>Libraries, private schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering &amp; Management Services</td>
<td>40,700</td>
<td>6%</td>
</tr>
<tr>
<td>Architects, engineers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Services</td>
<td>28,800</td>
<td>4%</td>
</tr>
<tr>
<td>Laundries, beauty salons</td>
<td>13,500</td>
<td>2%</td>
</tr>
<tr>
<td>Legal Services</td>
<td>170,200</td>
<td>23%</td>
</tr>
<tr>
<td>Law firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td>732,800</td>
<td>100%</td>
</tr>
<tr>
<td>Total Services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 2: Manufacturing and Services: Number of Jobs and Earnings in Selected Sectors

Source: U.S. Bureau of Economic Analysis (1997 Regional Economic Information System)
population is down by 8.9% since the census, but it has seen population increases in each of the most recent four years, with population growth of more than 1,200 people since 1995. Other counties experiencing population decline since 1990 were Delaware County, down by 4,200 people or 3.5%; Grant County, down by 2,100 people or 2.8%; Vigo County, down by 1,800 people or 1.7%; and Knox County, down by 800 people or 2.1%. Counties showing smaller rates of decline include Wabash, Wayne and Blackford.

Background on the Data
It is important to note that these population figures are estimates produced using a demographic model and are not the result of an attempt to directly count people, as will be done in April of this year. The U.S. Bureau of the Census, using a demographic technique called the Tax Return Method, produced this set of estimates. Estimates are produced annually, and when estimates for the next year are released, estimates for previous years are corrected or revised to reflect more up-to-date information that may be available.