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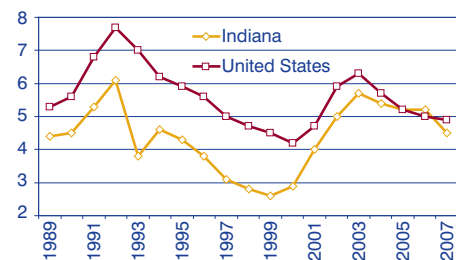
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### July Unemployment Rates

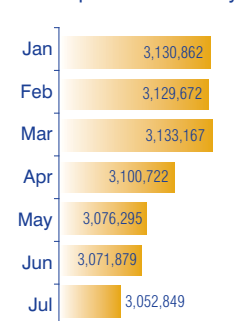
Indiana's July unemployment rate remained below the U.S. rate and even managed to widen the gap. In 2007, Indiana's rate fell to 4.5 percent, down from 5.2 percent the same time last year.



\*not seasonally adjusted

### Labor Day Labor Force

How many people is America celebrating this September holiday? According to the



latest data available from the Bureau of Labor Statistics, total employment was about 146,110,000 in July this year, down about 30,000 from last month. Indiana followed the same trend, remaining at 2.1 percent of U.S. employment with 3,052,849 workers.

\*seasonally adjusted

## 1 The Demand for Soft Skills 3 Key Skills for Indiana's Growing Occupations through 2014

As Indiana strives to be a leader in life sciences and advanced manufacturing, let's not forget the all-important basic skills such as reading comprehension and active listening. According to the *Indiana Career Guide 2007—Skill Pathways to Your Future*, basic skills are crucial for all types of occupations since they develop “capacities that facilitate learning” while “specialized” (or non-basic) skills are more specific to particular occupations. New research has found that basic skills will be in the highest demand for Indiana's growing occupations through 2014.

Using Indiana Department of Workforce Development (IDWD) occupation projections, the Indiana Business Research Center (IBRC) found this pattern across Indiana's 11 growth regions and even for jobs requiring different levels of preparation. Among specialized skills, the projected needs for social skills (including coordination and instructing) are higher than needs for technical, systems and resource management skills. This demand for social skills reflects predictions by the U.S. Bureau of Labor Statistics for large occupation growth in professional and business services, such as health care and social assistance—even within a manufacturing-intensive state like Indiana.<sup>1</sup>

### Basic Skills Are in Highest Demand

To project skill demands, employment projections were analyzed using *Skills-Based Projections* software<sup>2</sup> to produce a “skills gap index” for each skill. This measure captures the rate of growth for each skill based on the job requirements of projected openings through 2014 for 712 occupations across Indiana. The growth estimate is

**TABLE 1: SKILLS IN HIGHEST DEMAND FOR ALL INDIANA OCCUPATIONS, 2004 TO 2014**

Rank	Skill	Index
1	Reading Comprehension	100.0
2	Active Listening	97.1
3	Critical Thinking	94.3
4	Speaking	91.4
5	Coordination	88.6
6	Active Learning	85.7
7	Instructing	82.9
8	Monitoring	80.0
9	Writing	77.1
10	Time Management	74.3
11	Learning Strategies	71.4
12	Social Perceptiveness	68.6

Note: Basic Skills are highlighted in blue. For a complete list of all O\*NET skills, go to <http://online.onecenter.org/skills/>. Sources: IBRC and the Indiana Department of Workforce Development

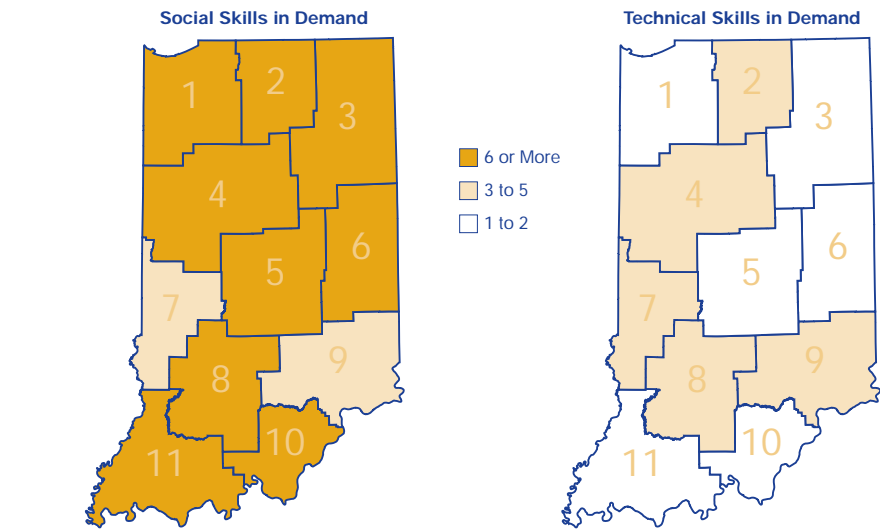
then standardized into a score from 1 to 100 so that the higher the score, the higher the potential gap between the supply and demand for the particular skill.<sup>3</sup>

The skills summarized in **Table 1** are each among the top 10 skill demands in one or more of Indiana's economic growth regions (EGRs) and indicate that basic skills and social skills will have the most demand. In particular, reading comprehension, active listening and critical thinking are among the eight basic skills that are in very high demand throughout the state. The fact that data for this article did not identify high levels of demand for mathematics and science does not mean that these basic skills are less important; in fact, the Strategic Skills Initiative identified these as critical for immediate opportunities in advanced manufacturing and medical technology.<sup>4</sup> This does mean that, in the long term, occupations will increasingly require social skills.

## Social Skills Are Key among Specialized Skills

Among the skills in highest demand summarized in **Table 1**, three of the four specialized skills—coordination, instructing and social perceptiveness—belong to the social skill set.<sup>5</sup> Looking more closely at specialized skill needs by region, almost all six social skills (including service orientation, persuasion and negotiation) are among the top 12 skill demands in the 11 EGRs. In contrast, technical skills (such as equipment selection, troubleshooting and equipment maintenance) are far less likely to be among the skills with high demand (see **Figure 1**). This makes sense considering that there are more service-oriented occupations

FIGURE 1: NUMBER OF SOCIAL AND TECHNICAL SKILLS AMONG THE TOP 12 SPECIALIZED SKILLS IN DEMAND FOR INDIANA EGRs



Sources: IBRC and the Indiana Department of Workforce Development

(such as nurses) that are expected to grow during the next seven years than technical occupations (such as mechanics). The only other skills with high demand are complex problem solving and one skill each from the resource management and systems skill sets (time management and judgment and decision-making, respectively).

## The Benefits of Developing Soft Skills

This research shows that, while credentialing in the form of degrees and certificates is important, development of soft skills—skills that are more social than technical—will be a crucial part of fostering a dynamic workforce. At last July's Strategic Skills Initiative (SSI) Summit hosted by IDWD, representatives from EGR 7 stressed this point in their presentation. Local economic developers in Terre Haute and surrounding areas used part of their SSI funds to respond to employer concerns about a lack of work ethic and communication skills among their employees. In collaboration with Ivy Tech, they implemented the *Soft Skills*

*Solution* to help incumbent workers develop a range of proficiencies, including team-building, conflict resolution and stress prevention. So far they are finding that soft skills can not only improve employee performance and satisfaction but can prepare technical workers for promotion into supervisory roles.

## Notes

1. Jerry Conover, "Indiana (Outlook for 2007)" *Indiana Business Review*, 81(4): 10-12; and Jon Wright and Bob Ferguson, "Indiana's Employment Outlook to 2014," *InContext*, 7(9).
2. This software has been developed by the State Projections Workgroup and is maintained by the State of Utah, Department of Workforce Services. More information is available at: <http://dev.projectionscentral.com/index.html>
3. This description uses information supplied by George W. Putnam (Illinois Department of Employment Security)
4. Allison Leeuw, "Is Indiana Ready to Be an Emerging Leader in the Biofuels Industry?" *InContext*, 2007: 8(3).
5. The Department of Labor's Occupational Information Network (O\*NET) system classifies non-basic skills into five skill sets: complex problem solving, resource management, social, systems and technical.

—Michael F. Thompson, *Economic Research Analyst, Indiana Business Research Center, Kelley School of Business, Indiana University*

# Opportunity Varies by Geography: Long-Term Job Outlook in Indiana's Economic Growth Regions

## Measuring Opportunity

What type of job presents the best opportunity for Hoosier workers as we look toward the next decade? The answer depends on geography and how one defines “opportunity.” If opportunity is defined as the greatest number of job openings, then production occupations (including assemblers, machinists, machine operators, etc.) form the leading occupational group in many regions. If you define opportunity as rapid percentage growth or many new jobs, two groups of healthcare jobs answer the best opportunity question in most regions. Indiana’s Department of Workforce Development has released occupational employment projections to 2014 for each of its 11 Economic Growth Regions (EGRs). **Figure 1** shows the top opportunities in each region using three measures identified in the projections: percent growth (rate of growth), numeric growth (new jobs) and total openings (opportunities resulting from both job growth and job replacements).

The following industries showed up as a “number one” in at least one of the three measured categories:

- **Health care practitioners and technical:** EGRs 1, 2, 3, 5, 6, and 11
- **Health care support:** EGRs 1, 5, 8, 10 and 11
- **Production:** EGRs 2, 3, 4, 7 and 9
- **Computer and mathematical:** EGRs 4 and 6
- **Education, training and library:** EGRs 4, 7 and 8
- **Life, physical and social science:** EGR 7
- **Office and administrative support:** EGRs 5, 8 and 10

- **Food preparation and serving related:** EGRs 1, 6 and 11
- **Personal care and service:** EGRs 3 and 9

## Occupational Groups by Region

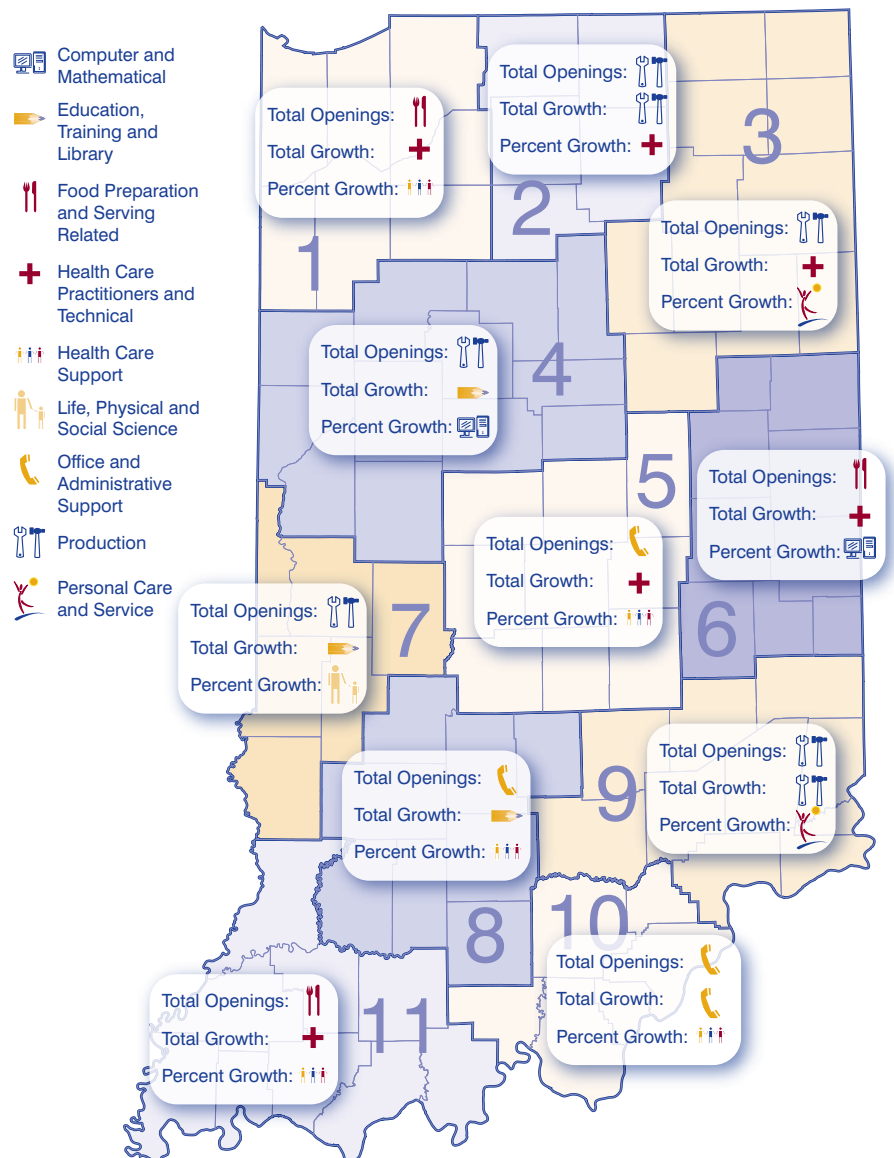
The production occupations group was the only occupational group to lead in two measures within the same region, being first in both numeric growth and total openings in EGRs 2 and 9.

The same industry boosted production occupations to the top in both regions—anticipated growth in transportation equipment manufacturing. EGR 2 is by far the nation’s leader for motor vehicle body and trailer manufacturing, and Honda’s arrival in EGR 9 in 2008 will add many new production jobs.

## Percent Growth Leaders by EGR

Health care support occupations are projected to have the greatest percent

**FIGURE 1: OCCUPATIONS IDENTIFIED AS OPPORTUNITY AREAS IN EGRs, 2004 TO 2014**



Source: Research and Analysis Department, IDWD

employment increase from 2004–2014 in five of the 11 economic growth regions, and will grow in all regions—ranging between 21 percent and 30 percent. Each of the regions has at least two occupational groups with over 20 percent growth. Regions 8 and 10 have the greatest number of occupational groups projected to grow by at least 20 percent, with nine occupational groups meeting that threshold for both regions. Region 9 has eight occupational groups with projected growth over 20 percent.

### Numeric Growth (New Jobs) Leaders by EGR

Health care practitioners and technical occupations are projected to have the greatest numerical growth in five economic growth regions, and rates as second or third in the remaining regions. Only three other occupational groups attained first place in numerical growth in at least one EGR.

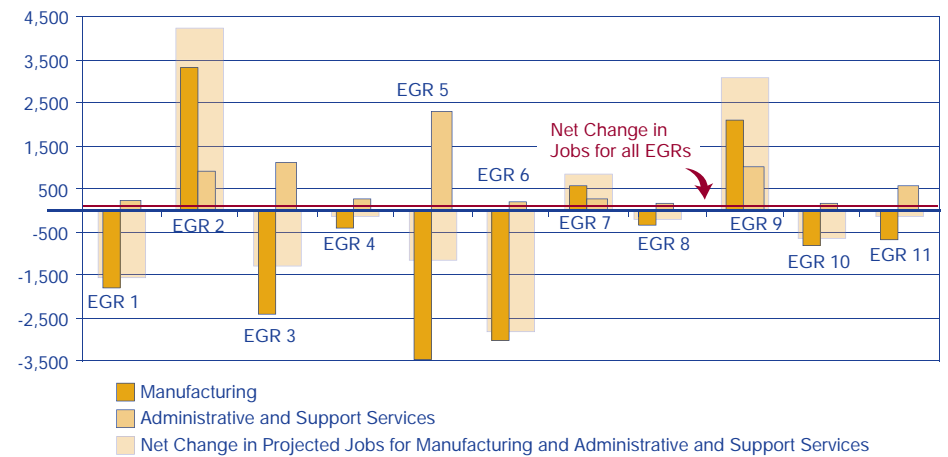
Education, training and library occupations rated first in regions 4, 7 and 8. Production occupations rated first in EGRs 2 and 9, with office and administrative support occupations topping the list in Region 10.

### Total Openings Leaders by EGR

Production occupations rated first in total openings in five regions (EGRs 2, 3, 4, 7 and 9). Two other occupational groups led by this measure in the other regions. Food preparation and serving occupations was first in EGRs 1, 6 and 11, while office and administrative support occupations led the way in EGRs 5, 8 and 10.

*“Three occupational groups dominate the job outlook in most regions—the two health care related groups and production occupations.”*

FIGURE 2: PRODUCTION OCCUPATIONS PROJECTED GROWTH FROM 2004 TO 2014



Source: Research and Analysis Department, IDWD

### Conclusion

Three occupational groups dominate the job outlook in most regions—the two health care related groups and production occupations. Health care has been identified for many years as an occupational area with many opportunities. The fact that production occupations top the list in terms

of job openings as well as new growth in some areas may come as a surprise. Despite significant losses in the manufacturing industry from 2000 to 2003 (amounting to 14 percent of the 2000 employment), the decline has been comparatively slight since then (less than 1 percent from 2003 to 2006). Production occupations will grow in regions with a manufacturing mix that has been and should continue to be strong—such as in EGR 2, where growth has occurred in motor vehicle body and trailer manufacturing each year since 2001 and is projected to grow through 2014. While there have been losses in the number of production occupations in some regions within manufacturing,

every region is projected to grow in production occupations within the administrative and support services industry, as manufacturers move toward increased labor contracting for their staffing needs (see Figure 2). Contracted employees are at times retained as permanent employees after the contract period.

The complete results of the *Occupational Projections 2004–2014 for Indiana’s Economic Growth Regions* can be found at [www.hoosierdata.in.gov](http://www.hoosierdata.in.gov). Employment data for each detailed occupation within its major group and a breakdown of each occupation by industry is included in each EGR occupational projections report, as well as typical educational and training requirements for each occupation.

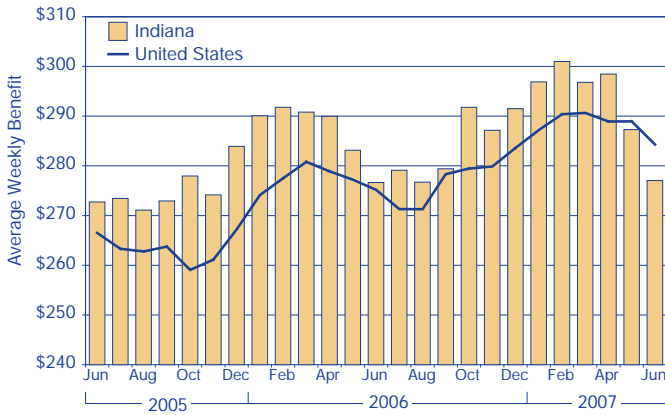
### Source

All projections data for this article were produced by the Research and Analysis Department, Advance Economic and Market Analysis Group, Indiana Department of Workforce Development.

—Jon Wright, Research and Analysis Department, Advanced Economic and Market Analysis, Indiana Department of Workforce Development

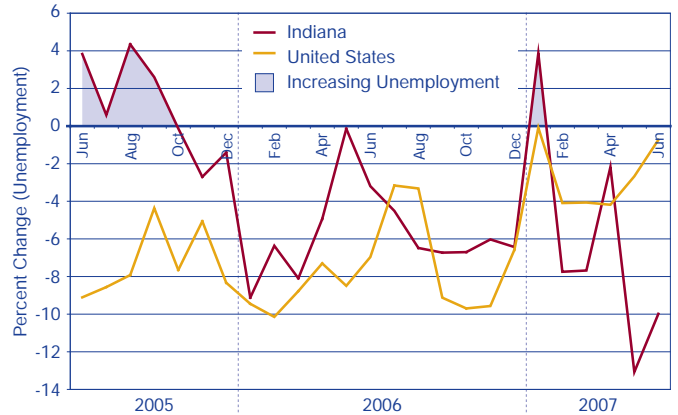
# Monthly Metrics: Indiana's Economic Dashboard

## AVERAGE BENEFITS PAID FOR UNEMPLOYMENT INSURANCE CLAIMS



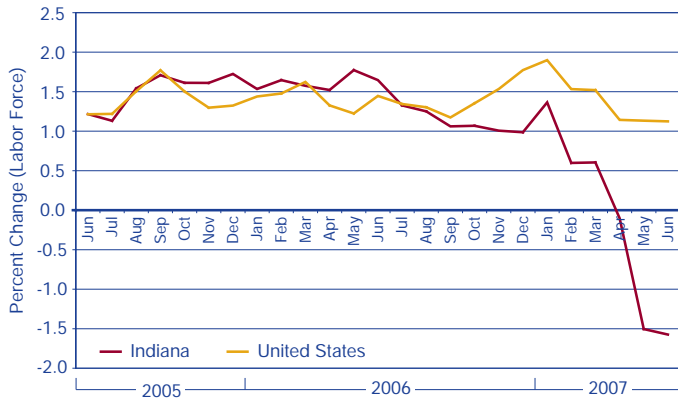
Source: IBRC, using U.S. Department of Labor data

## PERCENT CHANGE IN PERSONS UNEMPLOYED FROM THE PREVIOUS YEAR\*



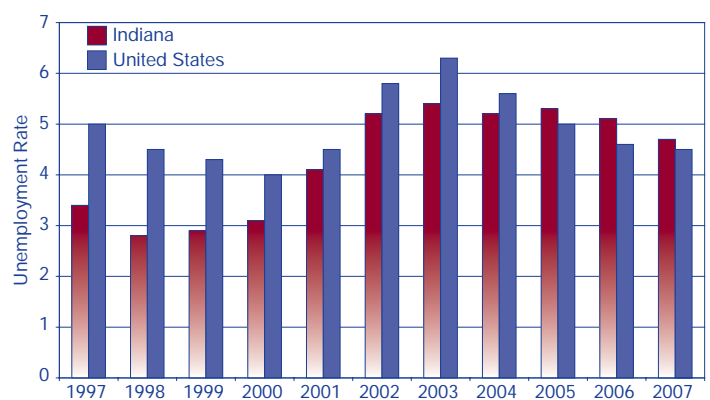
\*seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics data

## PERCENT CHANGE IN LABOR FORCE FROM PREVIOUS YEAR\*



\*seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics data

## JUNE UNEMPLOYMENT RATES



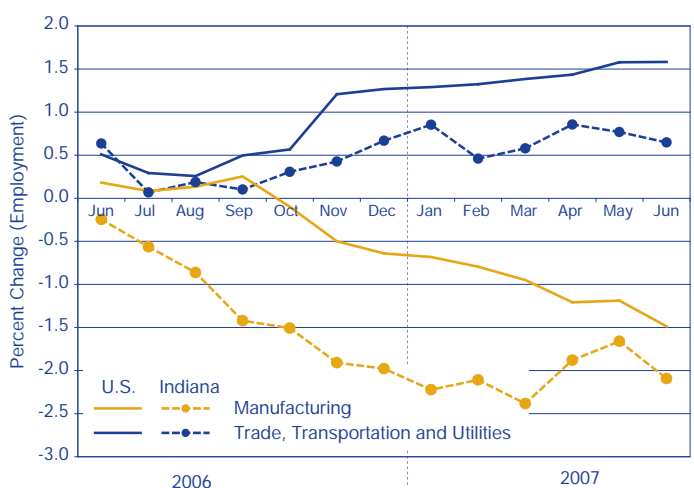
\*seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics data

## CHANGE IN EMPLOYMENT BY INDUSTRY SUPER-SECTOR, 2006 TO 2007\*

Industry	Indiana		United States
	Change in Jobs	Percent Change	Percent Change
Total Nonfarm	3,500	0.1	2.1
Leisure and Hospitality	3,100	1.1	4.2
Information	400	1.0	1.3
Government	3,200	0.8	1.6
Trade, Transportation and Utilities	3,800	0.6	1.6
Other Services	600	0.5	1.5
Professional and Business Services	1,000	0.4	3.2
Natural Resources and Mining	0	0.0	6.4
Financial Activities	-300	-0.2	1.8
Educational and Health Services	-1,500	-0.4	3.7
Manufacturing	-11,900	-2.1	-1.5

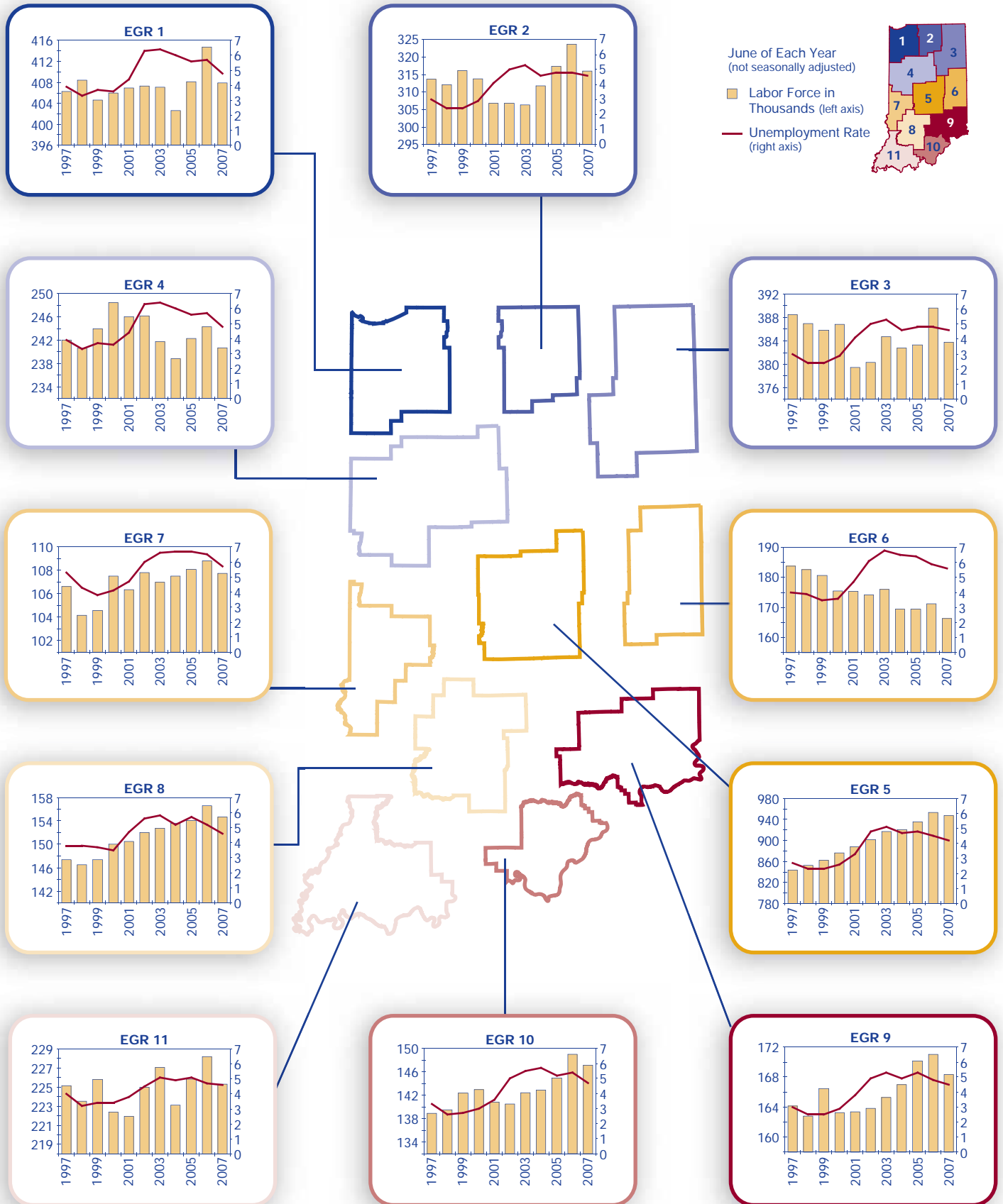
\*June of each year, seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics data

## OVER-THE-YEAR PERCENT CHANGE IN EMPLOYMENT BY SUPER-SECTOR\*



\*seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics and Indiana Department of Workforce Development data

# Regional Labor Force and Unemployment Rates



# Recovery and Restructuring Part I: The Indiana Economy Since 2001

The century did not start well, at least in economic terms. Investment in the United States dropped precipitously and with it, economic and employment growth. The nation as a whole suffered and the manufacturing sector shed jobs at a phenomenal pace. In 2003, the U.S. economy began its recovery and by late in the year, was growing at a healthy clip.

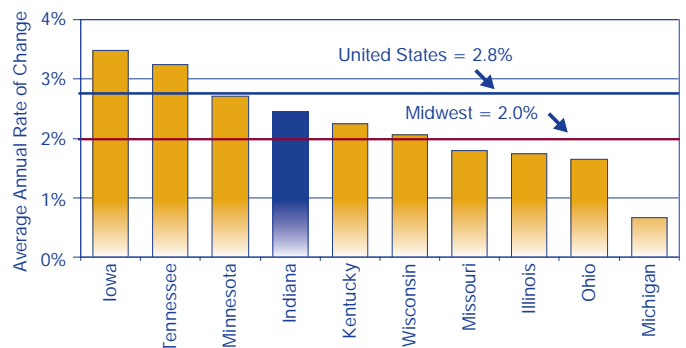
The Indiana economy was subject to the same forces as the U.S. economy. Not only did Indiana (and the Midwest in general) undergo the loss of manufacturing jobs due to the recession of 2001–2002 and the shift of the economy to the service sectors, but the struggling automotive industry put additional stresses on Indiana’s economic and employment growth after the recovery was well underway.

The traditional view is that Indiana’s economy is not only tied to manufacturing, it is tied to automobile manufacturing. Therefore, what the national economic expansion gave

starting in 2003, the havoc in the automotive sector took away. Is this news? Hardly. There isn’t a week that goes by, so it seems, that one hears of another auto-related plant destined for closure.

But the data released earlier this year by the Commerce Department present a mixed picture of the economic transitions that Indiana has undergone. These data also provide some clues as to what the future may hold for the state. The news isn’t all bad. The contributors to the June issue of *InContext* used these data to describe several elements of the Hoosier employment picture.<sup>1</sup> This article, part one of a two-part series, picks up on a couple of those themes and describes

FIGURE 1: ECONOMIC GROWTH IN THE MIDWESTERN STATES, REAL GDP BY STATE, 2001 TO 2006



Source: IBRC, using Bureau of Economic Analysis data

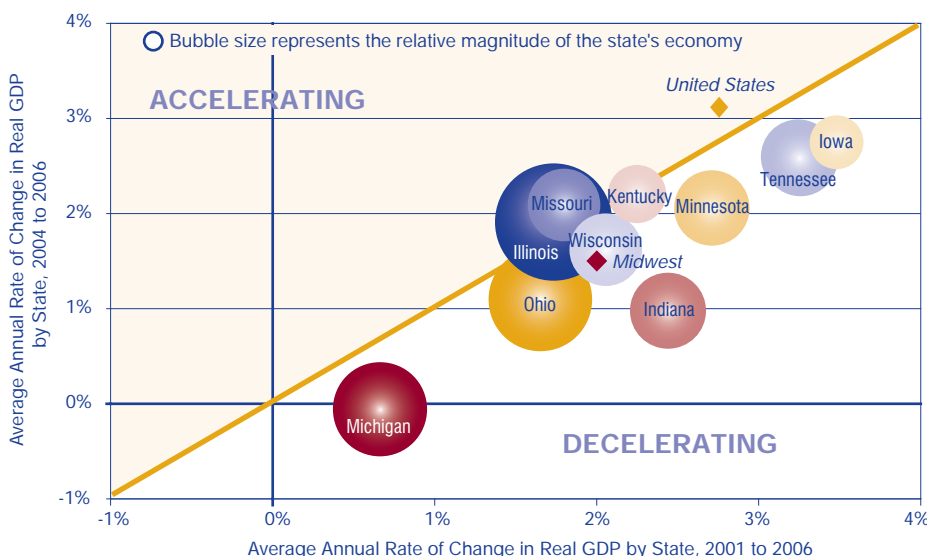
how Indiana’s economy has recently changed.

Indiana’s growth rate in real gross domestic product (GDP) was well behind most other states and the nation as a whole from 2001 to 2006. However, compared to the Midwestern states, Indiana’s economy grew 0.5 percentage points faster from 2001 to 2006, as depicted in **Figure 1**. (2001 was selected as the starting point because that is the year when GDP growth slowed to almost zero.) **Figure 2** shows that Indiana’s more recent growth, like the growth of the Midwestern region, has been decelerating. Only Illinois and Missouri—bubbles on the accelerating side on the diagonal line—have been growing faster than the 2001 to 2006 trend.

Manufacturing was particularly hard hit during the economic downturn of 2001–2002. Because Indiana has a particularly high percentage of its GDP and employment associated with manufacturing, it was particularly vulnerable to job losses.

For many sectors, the Midwestern states have approximately the same proportions as the United States. The size of the health care sector, construction and utility sector, and

FIGURE 2: CHANGE IN REAL GROSS DOMESTIC PRODUCT BY STATE FOR MIDWESTERN STATES, 2001 TO 2006



Source: IBRC, using Bureau of Economic Analysis data

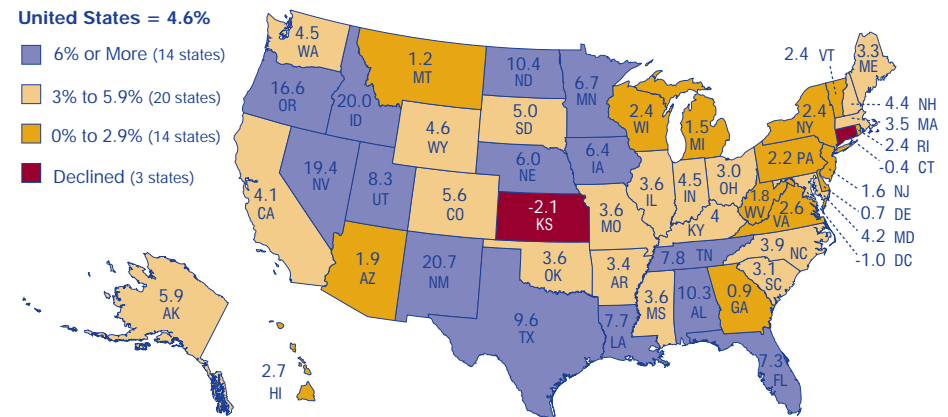
the transportation and trade sector are about the same for all Midwestern states and the nation. In other sectors, the differences are more dramatic. Manufacturing, for example, comprises about 12.2 percent of the U.S. output, but 28.1 percent of Indiana's economic output. Indiana's professional and business service sector, one of the faster growing sectors in the U.S. economy, is less than half that of Illinois and about half that of the United States.

One might say that Indiana's industrial composition is overbalanced in favor of manufacturing, especially in durable goods manufacturing. Indiana's growth in durable goods manufacturing fell below the U.S. average from 2001–2006. The relative emphasis in durable goods manufacturing, plus the slower than average growth, serves to drag the average growth down. It is no surprise that Michigan, at the bottom of the U.S. growth in durable goods manufacturing is also at the bottom of the Midwestern states in terms of GDP by state (see **Figure 3**).

Relative to other states, the picture for nondurable manufacturing growth is much better. Indiana ranks in the top tier of states with robust growth in that sector, as shown in **Figure 4**. This growth of the nondurable sector is fueled, by and large, by a strong upswing in the manufacturing of chemicals. This should come as no surprise by those who have promoted the life science industries in Indiana, as pharmaceutical manufacturing is an industry under the rubric of chemical manufacturing.

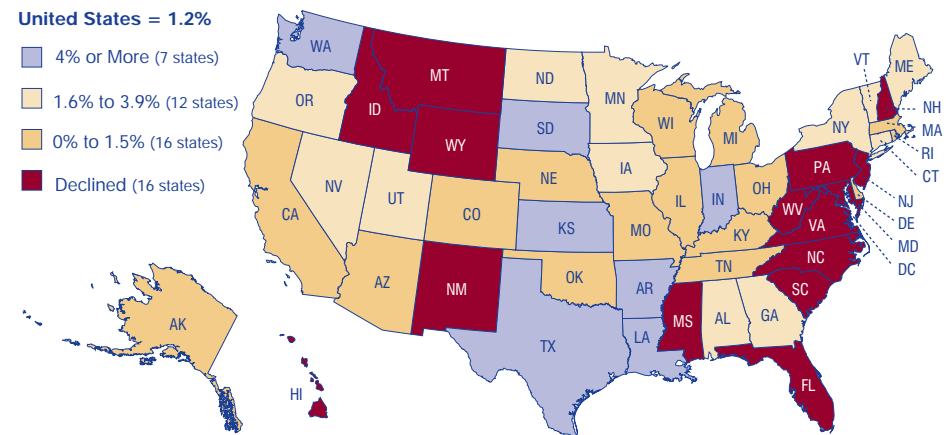
Indeed, the life sciences can also claim that, were it not for the growth in the manufacture of medical devices, an industry that falls within "miscellaneous manufacturing," the performance of Indiana's durable goods

**FIGURE 3: REAL OUTPUT GROWTH FOR DURABLE MANUFACTURING, 2001 TO 2006**



Note: Change is expressed using average annual rates.  
Source: IBRC, using Bureau of Economic Analysis data

**FIGURE 4: REAL OUTPUT GROWTH FOR NONDURABLE MANUFACTURING, 2001 TO 2006**



Note: Change is expressed using average annual rates.  
Source: IBRC, using Bureau of Economic Analysis data

sector would have been considerably worse.

Put another way, manufacturing in Indiana isn't dying ... it is transforming. While the output of motor vehicles and parts, as a proportion of Indiana's state GDP, fell from 5.0 percent to 4.1 percent from 2001 to 2005 (the latest data available for subsectors), both durable and nondurable manufacturing output increased as a proportion of state GDP by 0.6 percentage points. The composition of manufacturing, however, has undergone significant changes. Chemical manufacturing, as a proportion of state GDP increased

1.2 percentage points from 2001–2005. Miscellaneous manufacturing increased 0.6 percentage points in the same period. As **Figure 5** shows, primary metal manufacturing also registered a strong performance; it increased as a proportion of state GDP by 0.4 percentage points between 2001 and 2005.

On the service sector front, Indiana has not kept pace with the nation or its Midwestern neighbors. For two of the fastest growing sectors—namely, professional and business services and information, education and other services—Indiana's growth rate is below the national average, as **Figures**



6 and 7 show. Given that Indiana’s professional and business service sector is relatively small and in the bottom quartile of growth rates, it is likely that Indiana will continue to lag behind in this faster growth sector.

Despite the slower than average output growth in professional and business services, this sector registered the greatest rate of employment gains from 2001–2005.<sup>2</sup> Employment gains in health care and information, education and other services also gained jobs at an above average rate. **Figure 8** charts the rate of economic output by industry (or GDP by industry) on the horizontal axis and the rate of employment growth by industry on the vertical axis for each Midwestern state. (The size of the bubble denotes the relative magnitude of compensation per job for that sector.) The almost unexpected conclusion drawn from these graphs is that sectors can lose employment at significant rates, but still increase output. These graphs also show that, in terms of wages and benefits, a manufacturing job is worth over twice that of a job in information, education and other services—at least in Indiana.

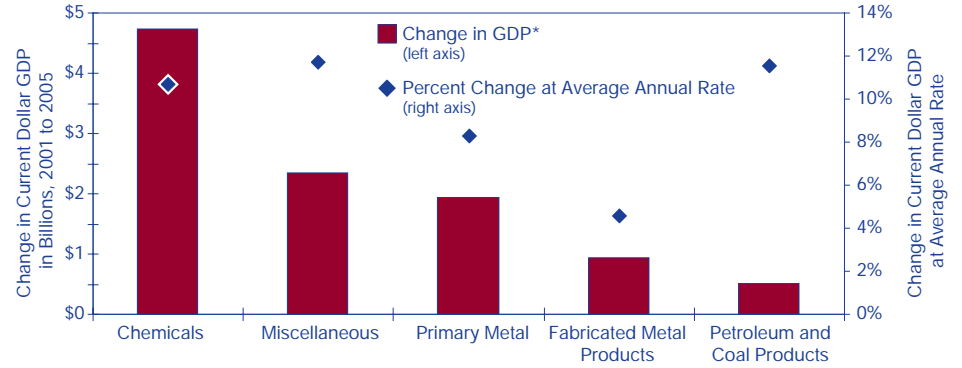
These graphs spark many questions regarding the nature of the shifts in employment and income in the state. The follow-up article will explore some of the trends in employment and income for the country as a whole, Indiana’s Midwestern neighbors and Indiana counties.

**Notes**

1. Morton J. Marcus, “Earnings per Job Growing Better than Number of Jobs,” *InContext*, June 2007, 8(6).
2. In order to keep a consistent time frame across axes, the years 2001 to 2005 were used: employment data was not yet available for 2006 at the time of writing.

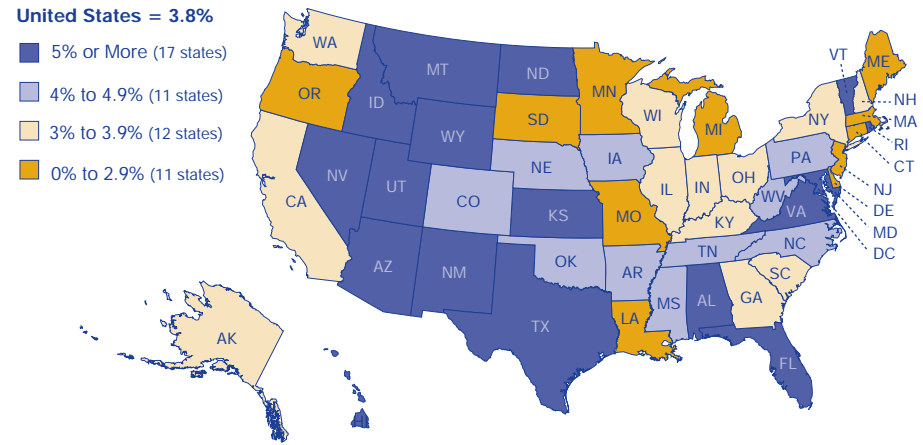
—Timothy F. Slaper, Director of Economic Analysis, Indiana Business Research Center, Kelley School of Business, Indiana

**FIGURE 5: LEADING INDIANA MANUFACTURING INDUSTRIES—FIVE INDUSTRIES WITH INCREASING OUTPUT, 2001 TO 2005**



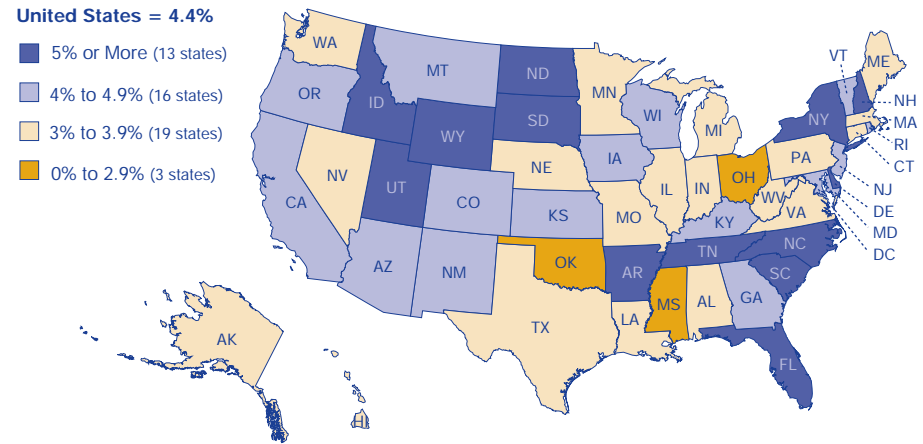
\*Each year’s GDP was adjusted to current dollars  
Source: IBRC, using Bureau of Economic Analysis data

**FIGURE 6: REAL OUTPUT GROWTH FOR PROFESSIONAL AND BUSINESS SERVICES, 2001 TO 2005**



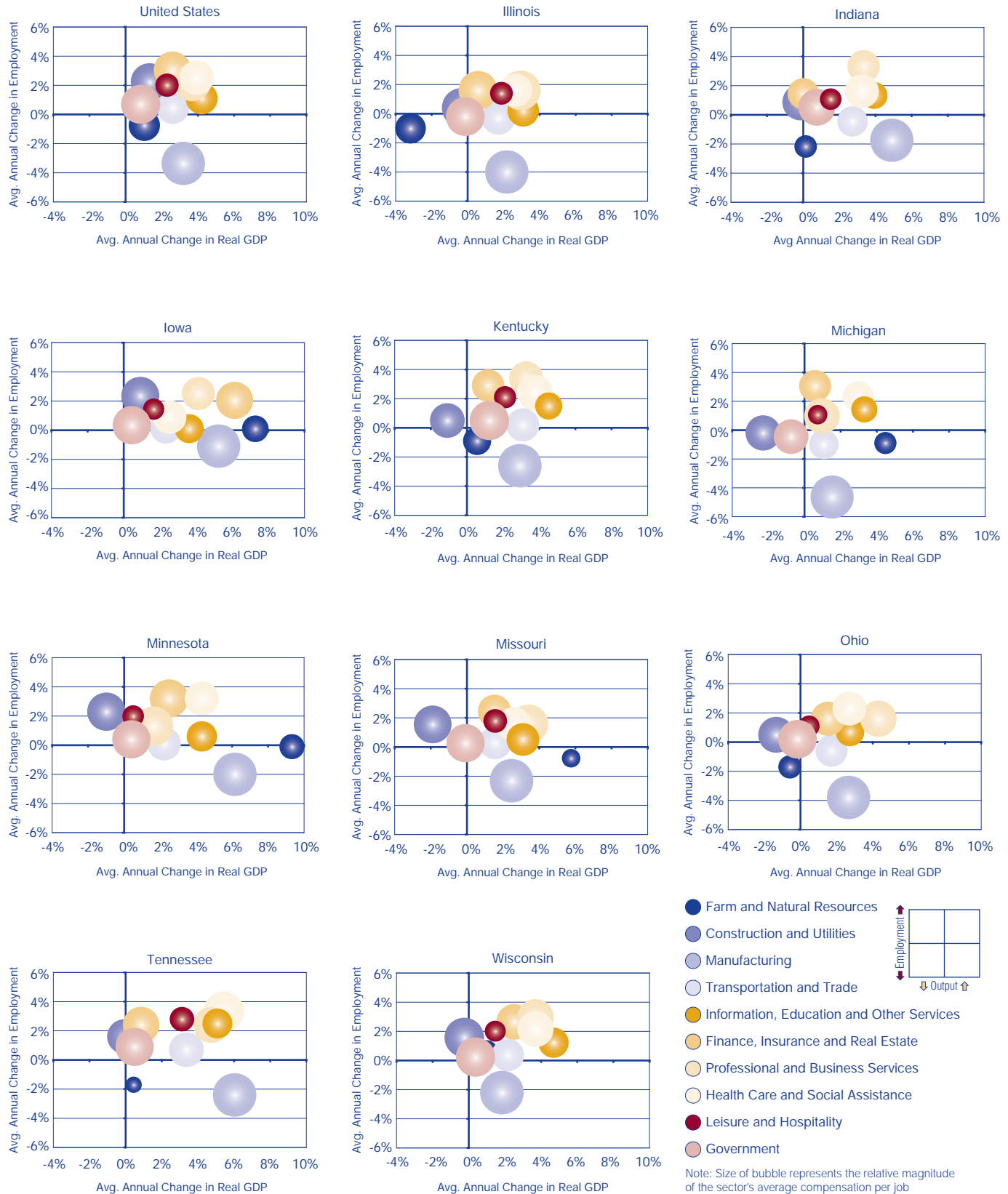
Note: Change is expressed using average annual rates.  
Source: IBRC, using Bureau of Economic Analysis data

**FIGURE 7: REAL OUTPUT GROWTH FOR INFORMATION, EDUCATION AND OTHER SERVICES, 2001 TO 2005**



Note: Change is expressed using average annual rates.  
Source: IBRC, using Bureau of Economic Analysis data

FIGURE 8: AVERAGE ANNUAL CHANGE IN REAL GDP AND EMPLOYMENT BY INDUSTRY, 2001 TO 2005



Source: IBRC, using Bureau of Economic Analysis data

# Indiana's On the Map: New Way to Access Labor Force Data

Indiana is now among the states whose data is accessible through OnTheMap version 2.2, a Web-based mapping application from the U.S. Census Bureau's Local Employment Dynamics program. OnTheMap is a powerful tool with many uses. Users can zoom in to get neighborhood data not available elsewhere or zoom out to regional labor markets that cross state boundaries.

This application, available at <http://lehdmap2.did.census.gov/themap/>, uses a standard Internet browser, but a high-speed connection is a must due to the large amount of data being processed. The data are useful (even if they seem a little old—2004 is the most current available), but because the interface is a little less than intuitive, some may overlook beneficial features. This article is somewhat of a mini-tutorial so you can get a jumpstart using this helpful tool.

## Overlay Options

The first page of the website allows you to focus in on a basic geographic area. Once you're in the map interface, there

are three ways to get data. Access these options by clicking the "Create/Change Overlay" button (see **Figure 1**).

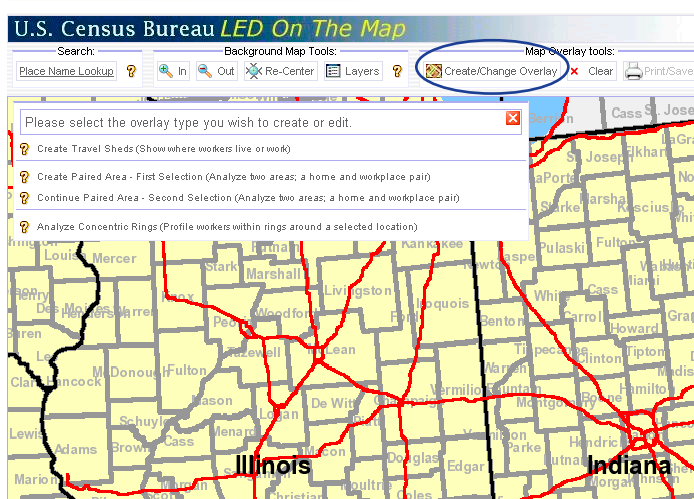
- **Create Travel Sheds:** Depending on if commute shed or labor shed is chosen, this profiles either residents who live in a selected location (e.g., where do people who live in Marion County work?) or workers employed within a selected location (e.g., where do people who work in the downtown Indianapolis 46204 ZIP Code live?).
- **Create Paired Area:** This option analyzes a single home and workplace pair (e.g., how many Lawrence county residents commute to the city of Bloomington?).
- **Analyze Concentric Rings:** Depending on if commute shed or labor shed is chosen, this creates profiles of residents or workers within three rings around a selected point using a user-defined radius (e.g., how do workers who live within two miles of the center of East Chicago differ from those who live within 5 miles or 10 miles?)

## Selection Options

After you've selected an overlay, the next dialog box will ask you to define the selection area (among other things). Even though we're only going to look at layer selections in this article, the following four selection options are available, so users aren't necessarily limited to analyzing data for predefined geographies (see **Figure 2**).

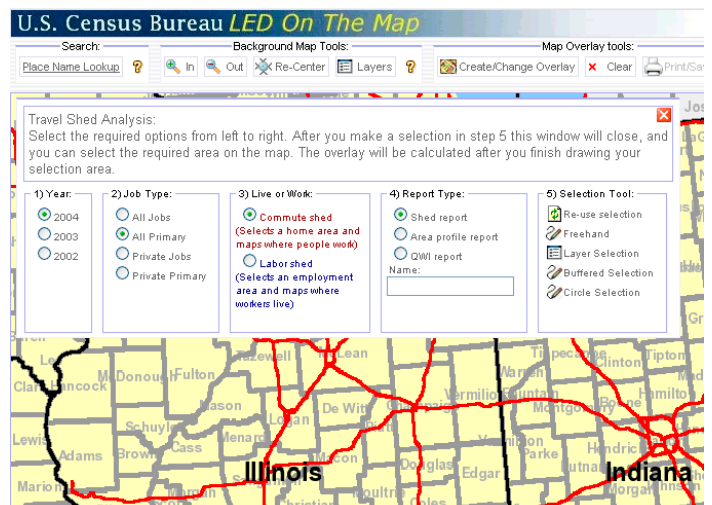
- **Freehand Selection:** Draw a freehand polygon on the map
- **Layer Selection:** Choose a layer type (such as counties, cities, townships or ZIP code tabulation areas) and then select a specific geographic unit on the map by dragging your mouse across it. \*Tip: you need to drag your mouse across at least a portion of the geographic unit you want to select. Just clicking on it will not work.
- **Buffered Selection:** Builds a buffer around a line you draw on the map (you specify the radius for the buffer in miles).
- **Circle Selection:** Selects an area (using a radius you specify) around a point you select on the map

**FIGURE 1: OVERLAY OPTIONS**



Source: U.S. Census Bureau, using LED Origin-Destination Database

**FIGURE 2: SELECTION OPTIONS**



Source: U.S. Census Bureau, using LED Origin-Destination Database

One of the improvements in this version of OnTheMap is that census blocks are used to define the selection area—excluding the freehand selection, which will continue to be defined at the block-group level.

## Report Options

The same dialog box that asks you to define a selection area also wants you to specify a report type. The tables in this article provide the actual output from OnTheMap for various queries so you know what is available.

If you selected the travel shed overlay, you may choose between three different report options:

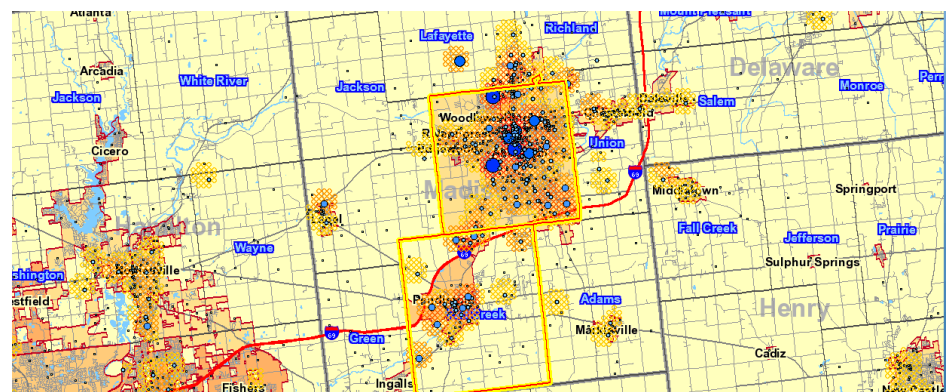
- 1. Shed Report:** If labor shed is selected, this report indicates where workers who are employed in the selected area live. As shown in **Table 1**, more than 60 percent of people who worked in the downtown Indianapolis ZIP code 46204 in 2002 lived in Marion County, but that number dropped to 55 percent by 2004. If commute shed is selected, the report indicates where residents who live in the selected area are employed.
- 2. Area Profile Report:** This report provides the characteristics of employed workers in the selected area. **Figure 3** shows the map output for the Anderson and Fall Creek townships in Madison County. **Table 2** provides the results of the associated area profile report, where we see that the percentage of residents employed in manufacturing dropped 2.5 percentage points between 2002 and 2004.
- 3. QWI Report:** This report provides 10 of the key quarterly workforce indicators. **Table 3** shows these indicators for the census tract

**TABLE 1: LABOR SHED REPORT—WHERE WORKERS EMPLOYED IN THE 46204 ZIP CODE LIVE**

Area Employment by Category	2004:2		2003:2		2002:2	
	Count	Share	Count	Share	Count	Share
Total Employers:	1,495		1,487		1,535	
All Jobs	69,546	100.0%	66,799	100.0%	65,823	100.0%
All Jobs (Private Sector Only)	50,690	72.9%	49,453	74.0%	49,315	74.9%
All Primary Jobs (Worker's highest paying job)	65,519	94.2%	62,662	93.8%	62,191	94.5%
All Primary Jobs (Private Sector Only)	46,835	67.3%	45,621	68.3%	45,949	69.8%
<b>Baseline Count of Jobs</b>						
All Primary Jobs	65,519	100.0%	62,662	100.0%	62,191	100.0%
<b>Cities/Towns Where Workers Live*</b>						
Indianapolis city (balance)	33,066	50.5%	35,764	57.1%	34,876	56.1%
Lawrence	1,576	2.4%	1,625	2.6%	1,569	2.5%
Carmel	1,473	2.2%	1,428	2.3%	1,288	2.1%
Fishers	1,470	2.2%	1,594	2.5%	1,501	2.4%
Greenwood	1,367	2.1%	1,224	2.0%	1,238	2.0%
Beech Grove	624	1.0%	615	1.0%	642	1.0%
Fort Wayne	541	0.8%	427	0.7%	366	0.6%
Speedway	533	0.8%	544	0.9%	562	0.9%
Plainfield	530	0.8%	460	0.7%	445	0.7%
Noblesville	521	0.8%	529	0.8%	468	0.8%
All Other Locations	23,818	36.4%	18,452	29.4%	19,236	29.4%
<b>Counties Where Workers Live*</b>						
Marion	36,289	55.4%	39,064	62.3%	38,128	61.3%
Hamilton	4,637	7.1%	4,678	7.5%	4,443	7.1%
Johnson	3,555	5.4%	3,115	5.0%	3,017	4.9%
Hendricks	2,630	4.0%	2,425	3.9%	2,439	3.9%
Morgan	1,236	1.9%	1,044	1.7%	1,131	1.8%
Hancock	1,096	1.7%	1,131	1.8%	1,134	1.8%
Lake	953	1.5%	714	1.1%	786	1.3%
Boone	899	1.4%	778	1.2%	739	1.2%
Allen	836	1.3%	677	1.1%	585	0.9%
Kosciusko	733	1.1%	683	1.1%	673	1.1%
All Other Locations	12,655	19.3%	8,353	13.3%	9,116	14.7%
<b>States Where Workers Live</b>						
Indiana	63,742	97.3%	61,253	97.8%	60,803	97.8%
Illinois	321	0.5%	260	0.4%	262	0.4%
California	286	0.4%	159	0.3%	151	0.2%
All Other Locations	1,170	1.8%	990	1.6%	975	1.6%

\*All in Indiana unless otherwise noted  
Source: U.S. Census Bureau, using LED Origin-Destination Database

**FIGURE 3: COMMUTE SHED: WHERE RESIDENTS OF ANDERSON/FALL CREEK TOWNSHIPS ARE EMPLOYED**



Source: U.S. Census Bureau, using LED Origin-Destination Database

that will be home to the much-anticipated Honda plant in Greensburg.

If you selected either the paired area or concentric rings, the following reports are available:

**4. Paired Area Report:** If labor shed is selected, this report provides the number of workers that are employed in selection area #1 and live in area #2, as shown in **Table 4**. If commute shed is selected, it provides information on workers that reside in selection area #1 and work in area #2.

**5. Concentric Circle Report:** If labor shed is selected, this report provides information about people who work in each radius. If commute shed is selected, it provides employment information about those who reside in each radius, as shown for East Chicago in **Table 5**.

## Viewing the Results

After creating an overlay, all you will see on the map is the selection itself, which is a little unnerving because you think it didn't work. However, to see the distribution of the labor force or workforce, you can choose to display points, thermals or both underneath "Display Option."

**TABLE 2: SELECTION AREA PROFILE—CHARACTERISTICS OF RESIDENT WORKERS IN ANDERSON AND FALL CREEK TOWNSHIPS (MADISON COUNTY)**

Resident Held Jobs by Category	2004:2		2003:2		2002:2	
	Count	Share	Count	Share	Count	Share
All Jobs	30,452	100.0%	29,799	100.0%	30,678	100.0%
All Jobs (Private Sector Only)	26,265	86.3%	25,604	85.9%	26,636	86.8%
All Primary Jobs (Worker's highest paying job)	28,496	93.6%	27,856	93.5%	28,724	93.6%
All Primary Jobs (Private Sector Only)	24,546	80.6%	23,919	80.3%	24,874	81.1%
<b>Baseline Count of Workers</b>						
All Primary Jobs	28,496	100.0%	27,856	100.0%	28,724	100.0%
<b>Workers by Age</b>						
Age 30 or younger	8,283	29.1%	8,116	29.1%	8,462	29.5%
Age 31 to 54	12,568	44.1%	12,525	45.0%	13,093	45.6%
Age 55 or older	7,645	26.8%	7,215	25.9%	7,169	25.0%
<b>Workers by Earnings Paid</b>						
\$1,200 per month or less	7,216	25.3%	7,244	26.0%	7,415	25.8%
\$1,201 to \$3,400 per month	17,009	59.7%	16,461	59.1%	17,080	59.5%
More than \$3,400 per month	4,271	15.0%	4,151	14.9%	4,229	14.7%
<b>Workers by Industry Type (2-digit NAICS)</b>						
Agriculture, Forestry, Fishing and Hunting	80	0.3%	96	0.3%	83	0.3%
Mining	25	0.1%	16	0.1%	22	0.1%
Utilities	41	0.1%	32	0.1%	25	0.1%
Construction	1,373	4.8%	1,230	4.4%	1,234	4.3%
Manufacturing	4,705	16.5%	5,043	18.1%	5,456	19.0%
Wholesale Trade	1,179	4.1%	1,114	4.0%	1,166	4.1%
Retail Trade	3,560	12.5%	3,458	12.4%	3,790	13.2%
Transportation and Warehousing	947	3.3%	920	3.3%	896	3.1%
Information	502	1.8%	520	1.9%	526	1.8%
Finance and Insurance	1,268	4.4%	1,281	4.6%	1,221	4.3%
Real Estate, Rental and Leasing	372	1.3%	397	1.4%	346	1.2%
Professional, Scientific and Technical Services	906	3.2%	835	3.0%	959	3.3%
Management of Companies and Enterprises	233	0.8%	252	0.9%	232	0.8%
Administrative, Support and Waste Management	1,496	5.2%	1,430	5.1%	1,519	5.3%
Educational Services	1,917	6.7%	1,905	6.8%	1,830	6.4%
Health Care and Social Assistance	3,977	14.0%	3,630	13.0%	3,490	12.2%
Arts, Entertainment and Recreation	372	1.3%	383	1.4%	370	1.3%
Accommodation and Food Services	2,647	9.3%	2,561	9.2%	2,704	9.4%
Other Services (excluding Public Administration)	811	2.8%	706	2.5%	832	2.9%
Public Administration	2,085	7.3%	2,047	7.3%	2,023	7.0%

Source: U.S. Census Bureau, using LED Origin-Destination Database

**TABLE 3: QUARTERLY WORKFORCE INDICATORS (QWI) PROFILE—CENSUS TRACT 18031969200 (WEST OF GREENSBURG)**

QWI Indicators—Private Sector Jobs	2004:2	2003:2	2002:2
Employment (Beginning-of-2nd quarter)	3,694	3,600	3,560
Employment, Stable Jobs	3,370	3,260	3,224
Separations, Stable Jobs	202	225	218
New Hires, Stable Jobs	254	185	212
Firm Job Gain	181	118	89
Firm Job Loss	64	94	115
Employment (reference quarter)	4,357	4,150	4,046
Average Monthly Earnings, Stable Jobs	\$3,041	\$2,877	\$3,038
Average Monthly Earnings Separations from Stable Jobs	\$1,063	\$1,107	\$993
Average Monthly Earnings, New Hires, Stable Jobs	\$1,513	\$1,553	\$1,862

Note: Data are for the second quarter of each year  
Source: U.S. Census Bureau, using LED Origin-Destination Database

**TABLE 4: PAIRED AREA REPORT—CHARACTERISTICS OF WORKERS THAT RESIDE IN LAWRENCE COUNTY AND COMMUTE TO THE CITY OF BLOOMINGTON IN NEIGHBORING MONROE COUNTY**

Workers Residing in Lawrence County	2004:2	
	Count	Share
All Jobs	17,884	100%
All Jobs (Private Sector Only)	14,853	100%
All Primary Jobs (Worker's highest paying job)	16,834	100%
All Primary Jobs (Private Sector Only)	14,012	100%
<b>Residents of Lawrence County Working in the City of Bloomington</b>		
All Jobs	2,330	13%
All Jobs (Private Sector Only)	2,002	13.5%
All Primary Jobs (Worker's highest paying job)	2,203	13.1%
All Primary Jobs (Private Sector Only)	1,891	13.5%

Note: Data are for the second quarter of each year  
Source: U.S. Census Bureau, using LED Origin-Destination Database

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Current workforce and economic news with searchable archives.

[www.incontext.indiana.edu](http://www.incontext.indiana.edu)

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[www.hoosierdata.in.gov](http://www.hoosierdata.in.gov)

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**TABLE 5: CONCENTRIC RING REPORT—2004 RESIDENT WORKFORCE PROFILE FOR EAST CHICAGO (COMMUTE SHED)**

Resident Held Jobs by Category	10 Mi. Radius		5 Mi. Radius		2 Mi. Radius	
	Count	Share	Count	Share	Count	Share
All Jobs	247,500	100.0%	75,900	100.0%	13,745	100.0%
All Jobs (Private Sector Only)	205,232	82.9%	63,541	83.7%	11,598	84.4%
All Primary Jobs (Worker's highest paying job)	229,150	92.6%	70,767	93.2%	12,825	93.3%
All Primary Jobs (Private Sector Only)	189,532	76.6%	59,195	78.0%	10,828	78.8%
<b>Baseline Count of workers</b>						
All Primary Jobs	229,150	100.0%	70,767	100.0%	12,825	100.0%
<b>Workers by Age</b>						
Age 30 or younger	62,672	27.3%	20,785	29.4%	4,610	35.9%
Age 31 to 54	119,693	52.2%	35,098	49.6%	5,728	44.7%
Age 55 or older	46,785	20.4%	14,884	21.0%	2,487	19.4%
<b>Workers by Earnings Paid</b>						
\$1,200 per month or less	60,773	26.5%	18,392	26.0%	3,798	29.6%
\$1,201 to \$3,400 per month	113,103	49.4%	35,654	50.4%	7,071	55.1%
More than \$3,400 per month	55,274	24.1%	16,721	23.6%	1,956	15.3%
<b>Workers by Industry Type (2-digit NAICS)</b>						
Agriculture, Forestry, Fishing and Hunting	140	0.1%	52	0.1%	14	0.1%
Mining	207	0.1%	75	0.1%	24	0.2%
Utilities	1,381	0.6%	530	0.7%	75	0.6%
Construction	8,694	3.8%	3,155	4.5%	472	3.7%
Manufacturing	25,972	11.3%	9,357	13.2%	2,051	16.0%
Wholesale Trade	8,419	3.7%	2,912	4.1%	522	4.1%
Retail Trade	25,441	11.1%	8,542	12.1%	1,775	13.8%
Transportation and Warehousing	12,453	5.4%	3,195	4.5%	404	3.2%
Information	4,641	2.0%	1,278	1.8%	153	1.2%
Finance and Insurance	10,985	4.8%	3,084	4.4%	286	2.2%
Real Estate and Rental and Leasing	3,863	1.7%	1,115	1.6%	196	1.5%
Professional, Scientific and Technical Services	8,355	3.6%	2,391	3.4%	283	2.2%
Management of Companies and Enterprises	1,922	0.8%	481	0.7%	55	0.4%
Administrative, Support and Waste Management	14,965	6.5%	4,063	5.7%	886	6.9%
Educational Services	24,129	10.5%	6,577	9.3%	993	7.7%
Health Care and Social Assistance	34,071	14.9%	9,228	13.0%	1,536	12.0%
Arts, Entertainment, and Recreation	4,723	2.1%	1,932	2.7%	473	3.7%
Accommodation and Food Services	16,513	7.2%	5,298	7.5%	1,202	9.4%
Other Services (excluding Public Administration)	7,755	3.4%	2,429	3.4%	469	3.7%
Public Administration	14,521	6.3%	5,073	7.2%	956	7.5%

Note: Data are for the second quarter  
Source: U.S. Census Bureau, using LED Origin-Destination Database

Point size is based on concentration of workers, while thermals show density using a workers per square mile calculation. The number of workers/jobs in each quarter-mile grid cell is averaged with the numbers from the eight adjacent cells and then converted to workers per square mile. The colors chosen for the thermal overlay make it a little difficult to see what is going on, so it is useful to use that layer in conjunction with the points layer by selecting the "Both" option. To see the actual legend breaks for a specific map, click the square next to "overlay key" in the legend in the lower left corner.

While the map gives a decent visual of commute and labor sheds, the real meat of this application is in the aforementioned reports, which will open up in a new window if you select the "Reports" option.

While a bit slow and a little clunky at first, OnTheMap may prove to be an indispensable resource for data you can't easily get anywhere else.

—Rachel Justis, Managing Editor, Indiana Business Research Center, Kelley School of Business, Indiana University