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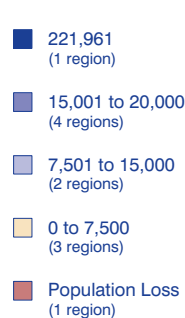
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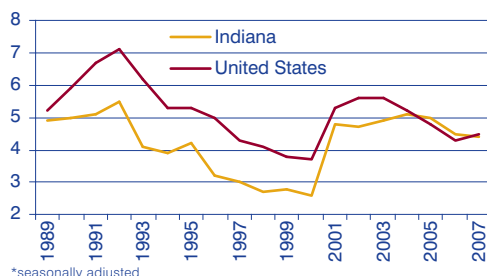
From 2005 to 2015, the population change in Indiana's economic growth regions is projected to be mostly positive.



Source: Indiana Business Research Center

November Unemployment

Indiana's unemployment rate fell below the national level, down to 4.4 percent in November. The U.S. rate was 4.5 percent.



*seasonally adjusted

Nurses in Demand: Hot Jobs by Indiana Region

Registered nurse is the hottest job throughout Indiana, according to the Department of Workforce Development (DWD). Across the state, this occupation is expected to grow nearly 30 percent by 2014 (from 2004 levels). This means the addition of 15,400 workers in a field where the statewide median wage was \$51,796 in 2006.

In fact, registered nurses (RNs) are in demand in every corner of the state, ranking either first or second in all 11 economic growth regions (EGRs), according to DWD's regional "Hoosier Hot Jobs" (see Table 1).

What Makes a Job Hot?

These rankings are based on the projected rate of employment growth, the total number of job openings and average wages. Jobs qualifying as a hot job have both high job growth

factors based on DWD's 2004–2014 occupational projections, as well as high wages according to data from the Occupational Employment Statistics survey of employers.

Registered Nurses

In the coming years, the opportunity for RNs to find work in Indiana will abound. Projections from 2004 to 2014 indicate that EGRs 8 and 9 will see increases exceeding 30 percent, while Region 7 will post the smallest increase—a still healthy 23 percent growth.

In addition, wages for RNs ranged from \$47,445 in EGR 11 to \$54,934 in EGR 5 during 2006 (see Table 1).

Other Hot Jobs

Figure 1 identifies the top five jobs in each region. Aside from registered nurse, the only other job to rank first

TABLE 1: REGIONAL DEMAND FOR REGISTERED NURSES, 2004 TO 2014

Economic Growth Region	2004 Jobs	2014 Projection	Total Growth	Percent Growth	2006 Median Wage	Hot Job Rank
Region 1	7,300	9,060	1,760	24.1%	\$54,375	1
Region 2	4,610	5,880	1,280	27.7%	\$48,839	1
Region 3	5,720	7,210	1,490	25.9%	\$48,159	1
Region 4	2,940	3,630	690	23.5%	\$47,844	2
Region 5	17,550	22,570	5,020	28.6%	\$54,934	1
Region 6	2,480	3,110	630	25.4%	\$51,314	2
Region 7	1,430	1,750	320	22.7%	\$48,265	2
Region 8	1,540	2,010	470	30.6%	\$47,570	2
Region 9	1,890	2,500	610	32.4%	\$52,515	1
Region 10	1,390	1,800	410	29.2%	\$53,162	1
Region 11	4,010	5,180	1,170	29.1%	\$47,445	1

Source: Indiana Department of Workforce Development, Research and Analysis Unit

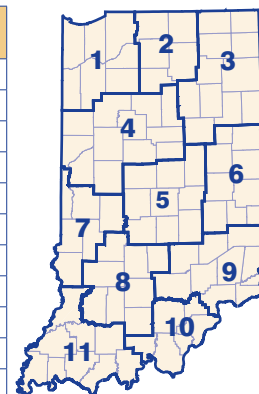


FIGURE 1: TOP FIVE HOT JOBS BY ECONOMIC GROWTH REGION, 2004 TO 2014

in any of the regions was postsecondary teacher, which topped the list in four regions that have a state university as a major employer (Purdue in EGR 4, Ball State in EGR 6, Indiana State University in EGR 7, and Indiana University Bloomington in EGR 8).

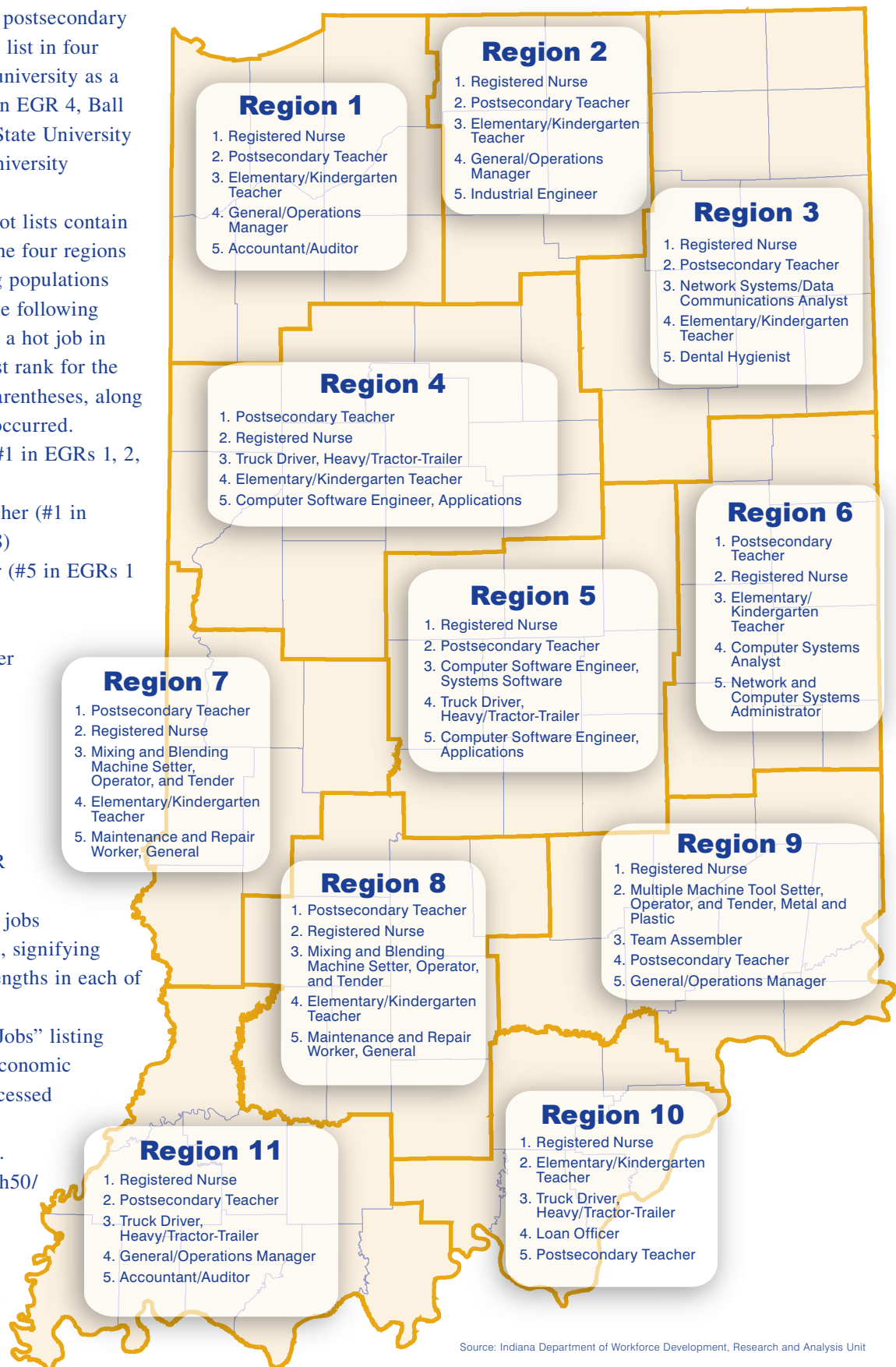
Seven of the regional hot lists contain 50 jobs, while those for the four regions with the smallest working populations are limited to 25 jobs. The following six occupations appear as a hot job in all 11 regions. The highest rank for the occupation is shown in parentheses, along with the region where it occurred.

- Registered nurse (#1 in EGRs 1, 2, 3, 5, 9, 10 and 11)
- Postsecondary teacher (#1 in EGRs 4, 6, 7 and 8)
- Accountant/auditor (#5 in EGRs 1 and 11)
- Elementary/ kindergarten teacher (#2 in EGR 10)
- Medical and health services manager (#6 in EGR 3)
- Secondary school teacher (#9 in EGR 10)

A total of 117 different jobs appear on at least one list, signifying the differing industry strengths in each of Indiana's regions.

The full "Hoosier Hot Jobs" listing for each of Indiana's 11 economic growth regions can be accessed on the Hoosiers by the Numbers website at www.hoosierdata.in.gov/docs/hh50/hh50regions.pdf

—Rachel Justis,
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University



Source: Indiana Department of Workforce Development, Research and Analysis Unit

Moving “Up One Level”

Preparing for Service and Supervisory Roles through Cross-Functional Skills

Why not start the New Year with a commitment to lifelong learning? This commitment is crucial for building human capital—the skills and learning we acquire in order to pursue economic and life-enriching opportunities.¹ This article is the second of a two-part series that examines the importance of increasing skills for Hoosiers to make job transitions to higher income and improved career prospects. Building on last month’s focus on basic skills, this article examines required improvements in key cross-functional skills for service and supervisory roles.

Last month, we discussed the importance of improving basic skills to make job transitions suggested in Indiana’s “up one level” reports²—transitions that workers can make from “frequently listed jobs” to better-paying occupations without much additional training or experience.³ Analysis of all 255 job transitions listed in these regional reports revealed that moving “up one level” leads average wages to increase from \$21,931 to \$32,029 per year. **Figure 1** summarizes average

wage increases for all 11 economic growth regions. While these job transitions are often modest, they can be important first steps up the career ladder for workers in low-wage jobs. However, moving “up one level” still requires substantial improvement in key basic skills—11 percent for reading comprehension, 17 percent for writing, 19 percent for mathematics, 12 percent for active listening, 16 percent for speaking and 16 percent for critical thinking. Overwhelmingly, this pattern is true across all economic growth regions, and there are very few job transitions in which higher salaries are not accompanied by higher skill requirements.⁴

The same methodology is now used to examine the higher skill requirements that may be necessary for key cross-functional skills. The occupations listed in the “up one level” reports were analyzed by their skill level scores to measure the extent to which workers may need to improve their skills for successful job transitions. The required skill levels for almost all of these occupations were

found in the O*NET database.⁵ In the few cases where skill level data were not available, comparable occupations were used.

Developing Cross-Functional Skills

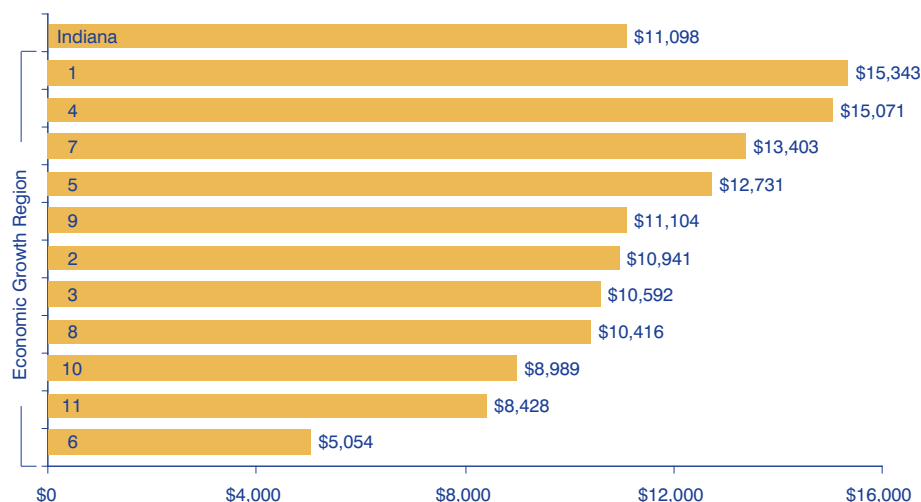
While basic skills are essential for just about any job, cross-functional skills give workers a competitive edge in pursuing high-wage, high-demand occupations and supervisory roles. The need for a broad range of skills is even more important given the major industrial shifts of the U.S. economy—which increasingly demand social skills. Strong growth is expected in professional and business services, as well as the health care and social assistance sector, while smaller growth has been projected in the agricultural and manufacturing sectors.⁶ Even in Indiana, the nation’s most manufacturing-intensive state, the sectors expected to have the largest growth in jobs are health care, professional and business services, and leisure and hospitality.⁷

This study focuses on the skill level increases of “up one level” job transitions for the six cross-functional skills in highest demand in Indiana through 2014.⁸ For the purpose of analysis, these skills have been divided into two groups:

1. “Service skills” composed of instructing, service orientation and social perceptiveness skills
2. “Supervisory skills” composed of coordination, judgment and decision making, and time management skills

Table 1 describes each skill, along with its corresponding level scale anchors.

FIGURE 1: AVERAGE “UP ONE LEVEL” SKILL SALARY INCREASES BY ECONOMIC GROWTH REGION



Source: IBRC, using data from the Indiana Department of Workforce Development and O*NET

TABLE 1: DESCRIPTION OF SKILLS AND SKILL LEVELS

Skill	Description	Level Scale Anchors	Score
Coordination	Adjusting actions in relation to others' actions	Schedule appointments for a medical clinic	2
		Work with others to put a new roof on a house	4
		Work as director of a consulting project calling for interaction with multiple subcontractors	6
Instructing	Teaching others how to do something	Instruct a new employee in the use of a time clock	2
		Instruct a co-worker in how to operate a software program	4
		Demonstrate surgical procedure to interns in a teaching hospital	6
Judgment and Decision Making	Considering the relative costs and benefits of potential actions to choose the most appropriate one	Decide how scheduling a break will affect work flow	2
		Evaluate a loan application for degree of risk	4
		Decide whether a manufacturing company should invest in new robotics technology	6
Service Orientation	Actively looking for ways to help people	Ask customers if they would like cups of coffee	2
		Make flight reservations for customers, using airline reservation system	4
		Direct relief agency operations in a disaster area	6
Social Perceptiveness	Being aware of others' reactions and understanding why they react as they do	Notice that customers are angry because they have been waiting too long	2
		Be aware of how a coworker's promotion will affect a work group	4
		Counsel depressive patients during a crisis period	6
Time Management	Managing one's own time and the time of others	Keep a monthly calendar of appointments	2
		Allocate the time of subordinates to projects for the coming week	4
		Allocate the time of scientists to multiple research projects	6

Note: A score of 2 indicates a "low" level, 4 indicates a "moderate" level and 6 indicates a "high" level.
Source: O*NET

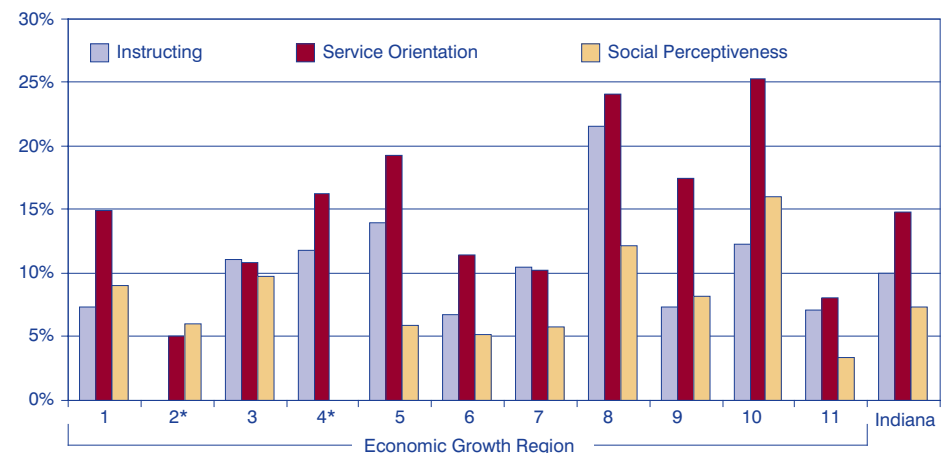
Serving Others Can Serve You as Well

Service skills are not only important for high-wage, high-demand jobs but for these initial job transitions as well. This is no surprise since many higher paid jobs that don't require specialized schooling may still require strong interaction skills—whether with co-workers, clients or students. Across Indiana's economic growth regions, higher skill levels are generally expected for all three of these skills (see **Figure 2**). Moving "up one level" requires increasing instructing skills by 10 percent, service orientation skills by 15 percent, and social perceptiveness skills by 7 percent.

This increase in service skills is most pronounced in Region 8 (Bloomington and surrounding counties) where job transitions required high increases in all three skills—22 percent in instructing, 24 percent in service orientation and 12 percent in social

perceptiveness. This is expected since all but five of the 25 "up one level" occupations in Region 8's "up one level" report require higher skill levels in two or more of these service skills. On average, service skill increases were lowest in Region 11 (Evansville and surrounding counties) and Region 2

(South Bend and surrounding counties). In fact, Region 2 was the only region whose job transitions did not require improvement in instructing skill. Also noteworthy is the fact that there was no average increase in social perception skill for Region 4 (Lafayette and surrounding counties), even though

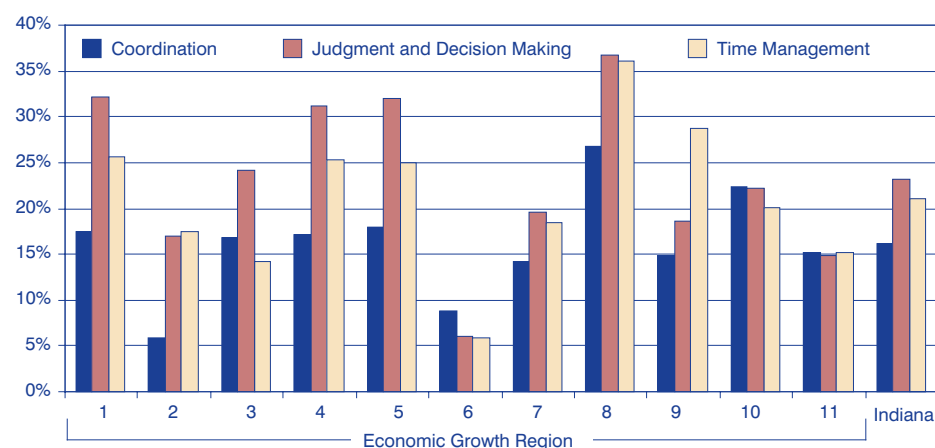
FIGURE 2: AVERAGE "UP ONE LEVEL" SKILL INCREASES IN INSTRUCTING, SERVICE ORIENTATION AND SOCIAL PERCEPTIVENESS BY ECONOMIC GROWTH REGION

*There was no substantial difference in the required skill levels for instructing in EGR 2 and social perception in EGR 4
Source: IBRC, using data from the Indiana Department of Workforce Development and O*NET

“up one level” jobs there still required average increases of 12 percent in instructing and 16 percent in service orientation.

Looking more closely at all 255 job transitions listed in the regional “up one level” reports, we find that 70 percent of these job transitions expect higher skill levels for instructing, almost two-thirds in service orientation and social perceptiveness and 44 percent require higher skills in all three of these key service skills. To illustrate this point, consider the job of cashier—one of the most popular occupations on the regional frequently listed job lists. The “up one level” report for Region 11 reports that workers employed as cashiers, with a low annual salary averaging \$10,920 per year, can make the transition to pharmacy aide (\$19,009 per year) without extensive formal training. While making this transition only requires a small increase in social perceptiveness (3 percent), skill requirements for service orientation and instruction increase 20 percent and 36 percent, respectively. Another example can be found in Region 8 where maids and housekeeping cleaners (\$11,700 per year) can make the move to home health aide (\$20,333 per year) with short-term on-the-job training. However, this transition would expect them to increase their instruction skills by 30 percent, service orientation skills by 29 percent and social perceptiveness skills by 57 percent. Even in the manufacturing industry, some job transitions require improved service skills such as the suggested move from stock clerk to shipping, receiving and traffic clerk in Region 2 (South Bend and surrounding counties). This transition leads to an average salary increase from \$19,718 to

FIGURE 3: AVERAGE “UP ONE LEVEL” SKILL INCREASES IN COORDINATION, JUDGMENT AND DECISION MAKING, AND TIME MANAGEMENT BY ECONOMIC GROWTH REGION



Source: IBRC, using data from the Indiana Department of Workforce Development and O*NET

\$27,258 per year but requires increases in instructing (32 percent), service orientation (23 percent) and social perceptiveness (31 percent).

Only 12 percent of “up one level” job transitions to higher paying jobs require no improvement in any of these service skills—a function of both the job market and the specific nature of certain occupations. One rare case is the suggested move from forklift/ industrial truck operator (\$21,320 per year) to truck driver (\$36,406 per year) in Region 3 (Fort Wayne and surrounding counties). Truck drivers are relatively well paid across Indiana partly due to high demand. However, truck drivers often conduct long-haul solitary trips, involving less interaction with co-workers than forklift operators, perhaps the reason behind their lower service skill requirements.

Improving Skills for More Responsibility

Moving “up one level” often involves earning a supervisory position within the same occupational field or moving into jobs with higher accountability. While such promotion often involves a track record of solid work experience,

workers can also expect the need to show improvement in the key supervisory skills of coordination, judgment and decision making, and time management. **Figure 3** illustrates this fact, showing that across all regions, job transitions expect much higher skill levels in coordination (16 percent), judgment and decision making (23 percent) and time management (21 percent).

Once again, job transitions in Region 8 expect the highest skill increases in all three supervisory skills: 27 percent in coordination, 37 percent in judgment and decision making, and 36 percent in time management. Here, three of the listed “up one level” transitions involve promotion to a supervisory role and virtually all others involve higher responsibility, such as the move from hand packager to delivery truck driver or from retail salesperson to information clerk. Supervisory skill increases were lowest overall in Region 6 (Richmond and surrounding counties) where none of the required skill increases were higher than 10 percent.

Examining all 255 job transitions more closely, we find that three-quarters require higher coordination

skills, 72 percent require higher skill in judgment and decision making and time management, and 57 percent require higher skills in all three skills. Region 5 (Indianapolis and surrounding counties) and Region 6 (Richmond and surrounding counties) provide classic examples of transitions to supervisory roles that require appropriate increases in supervisory skills. The move in Region 5 from restaurant cook (with an average salary of \$18,720 per year) to supervisor of food preparation and serving workers (\$26,656) requires an 11 percent increase in coordination and time management skills, along with a 25 percent increase in the judgment and decision making skill. In Region 6, truck drivers (\$40,300) promoted to supervisor of transportation operators (\$48,395) are expected to increase their coordination skill by 29 percent, judgment and decision making skill by 32 percent, and time management skill by 27 percent. There are also examples where workers who move to positions of greater responsibility must also improve these supervisory skills. Take industrial workers employed as weighers, measurers, checkers and samplers in Region 1 (northwest Indiana). The “up one level” report suggests that workers in these roles who earn average wages of \$25,759 per year can make the move to become production, planning, and expediting clerks (\$40,474) with only short-term on-the-job training. However, their required skill levels would need to increase by 22 percent for coordination and more than double for judgment and decision making (up 149 percent) and time management (up 154 percent).

As with service skills, very few “up one level” job transitions (13 percent) require no improvement in any of these three supervisory skills. Typical examples of this rare situation are cases where a worker changes jobs to perform similar tasks in an

industry that pays higher wages, such as the move from general maintenance repairer to automotive body repairer, which is suggested in several regions’ “up one level” reports. There is even a highly unusual example in Region 9 (Bartholomew and surrounding southeastern counties) in which the “up one level” occupation has substantially higher wages yet notably lower skill level requirements for these supervisory skills. Here, shipping and receiving clerks (\$18,720) could make the transition to postal service mail carrier (\$43,250 per year)—an occupation with skill requirements that are 17 percent lower for coordination, 41 percent lower for judgment and decision making and 18 percent lower for time management. Workers making this transition may find that they are less accountable for the work of others than when they were clerks while benefiting from higher (often federally determined) wage rates of mail carriers.

From “Up One Level” to High-Wage, High-Demand Jobs

This two-part series stresses the point that to earn more, you must learn more—even for modest “up one level” job transitions. Workers in frequently listed jobs who would like to start climbing the career ladder should consult their region’s “up one level” report and consider the need for increasing basic and cross-functional skills. An excellent place for any upwardly mobile Hoosier to start is his or her local WorkOne center. Here, you can plan career strategies, evaluate current skills and receive training resources—often free—to prepare for the next level.⁹

Of course moving “up one level” need only be the first step for workers who would like to move on toward the many high-wage, high-demand jobs available in Indiana.¹⁰ A commitment

to lifelong learning includes formal training through college programs and technical institutes and skill-based learning non-degree workshops and seminars. Many of these opportunities are often available at public libraries and local adult education centers. Even getting more active in your community by mentoring adults and children or organizing a neighborhood association can help develop service and supervisory skills that may not be possible at a current job. Rather than letting education end at grade school, today’s mobile workers should continue to take advantage of lifelong learning opportunities.

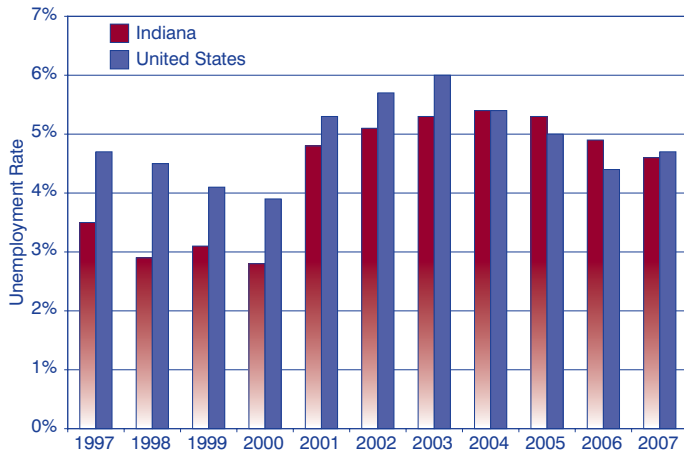
Notes

1. Adapted from: Organization for Economic Co-operation and Development (OECD), “Lifelong Learning and Human Capital,” Policy Brief, July 2007. Available at www.oecd.org/dataoecd/43/50/38982210.pdf.
2. “Up One Level” reports are available for all 11 Economic Growth Regions in the “Publications” section of the Indiana Department of Workforce Development website: www.hoosierdata.in.gov/nav.asp?id=29. This analysis makes use of the reports available for second quarter (April through June) 2007.
3. Allison Leeuw and Vicki Seegert, “Putting Feet on Research: Applying Skill Pathway Analysis to Workforce Development,” *InContext*, May 2007: 1-3.
4. For more details, see Michael F. Thompson, “Moving ‘Up One Level’: Improving Job Prospects by Developing Basic Skills,” *InContext*, December 2007: 7-9.
5. The Occupational Information Network (O*NET) determined these required skill levels through surveys of incumbent workers and occupational experts. The O*NET database is a public resource developed by the U.S. Department of Labor, Employment and Training Administration. It is available at www.onetcenter.org/database.html
6. Jay M. Berman, “Industry Output and Employment Projections to 2014,” November 2005, 128(11): 45-69.
7. Jerry N. Conover, “Indiana [Outlook for 2008]” *Indiana Business Review*, 82(4): 11-13.
8. These skills are also called “specialized” skills. The top 12 skill demands are listed in: Michael F. Thompson, “The Demand for Soft Skills: Key Skills for Indiana’s Growing Occupations through 2014,” *InContext*, September 2007: 1-2.
9. A full list of WorkOne centers and a wide range of other resources for job seekers is available on the Indiana Department of Workforce Development website: www.in.gov/dwd/2401.htm.
10. The Indiana Department of Workforce Development has created “Hoosier Hot Jobs” listings for every region across Indiana: www.in.gov/dwd/2564.htm.

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

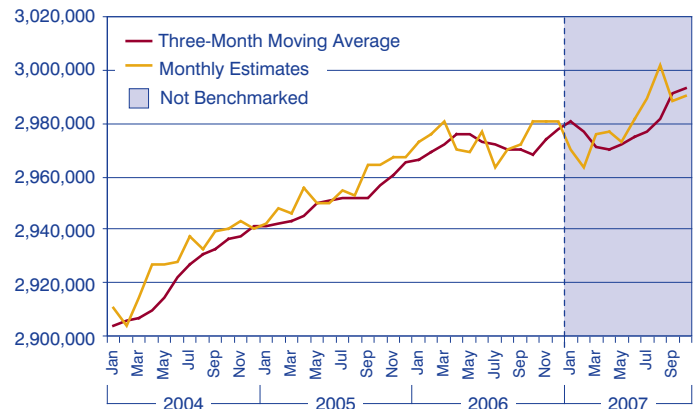
Monthly Metrics: Indiana's Workforce Dashboard

OCTOBER UNEMPLOYMENT RATES



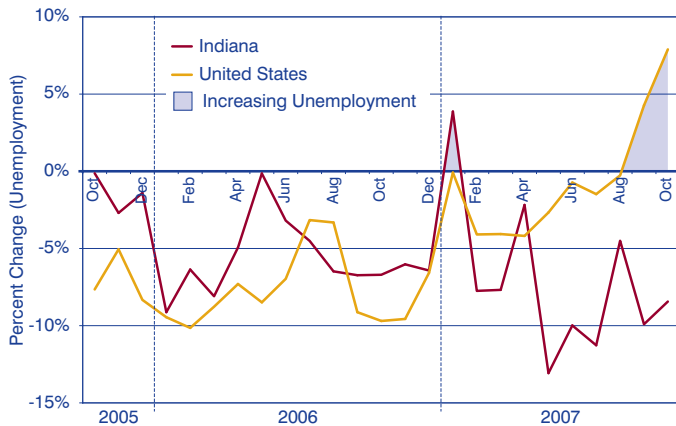
*seasonally adjusted
Source: IBRC, using Bureau of Labor Statistics data

CURRENT INDIANA EMPLOYMENT AND MOVING THREE-MONTH AVERAGE



*seasonally adjusted
Source: Current Employment Statistics

PERCENT CHANGE IN PERSONS UNEMPLOYED FROM THE PREVIOUS YEAR*



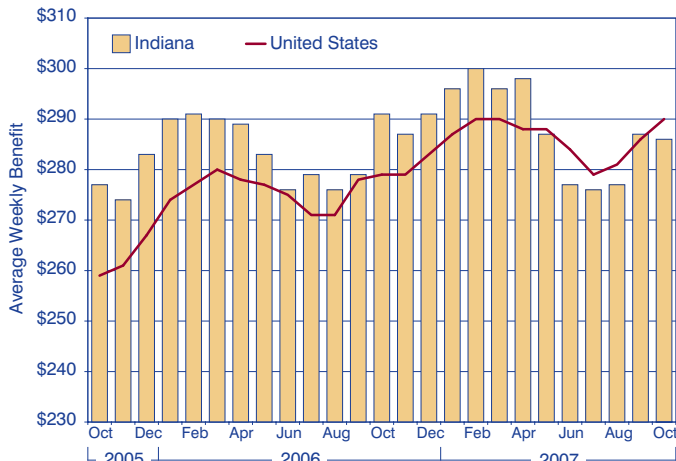
*seasonally adjusted
Source: IBRC, using Bureau of Labor Statistics data

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

Industry	Indiana		United States
	Change in Jobs	Percent Change	Percent Change
Total Nonfarm	9,000	0.3	1.8
Natural Resources and Mining	200	2.9	5.8
Leisure and Hospitality	3,200	1.1	3.8
Educational and Health Services	3,200	0.8	3.7
Other Services	800	0.7	1.1
Trade, Transportation and Utilities	3,000	0.5	1.6
Professional and Business Services	1,100	0.4	3.3
Information	100	0.3	0.9
Financial Activities	200	0.1	0.9
Government	-1,000	-0.2	1.0
Manufacturing	-5,900	-1.0	-1.5

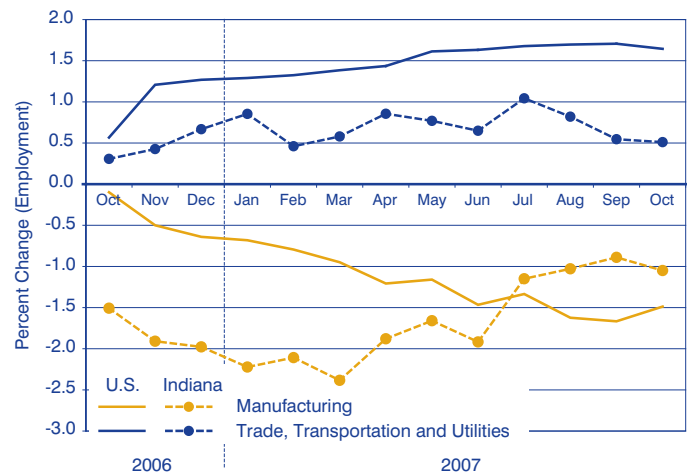
*October of each year, seasonally adjusted
Source: IBRC, using Bureau of Labor Statistics data

AVERAGE BENEFITS PAID FOR UNEMPLOYMENT INSURANCE CLAIMS



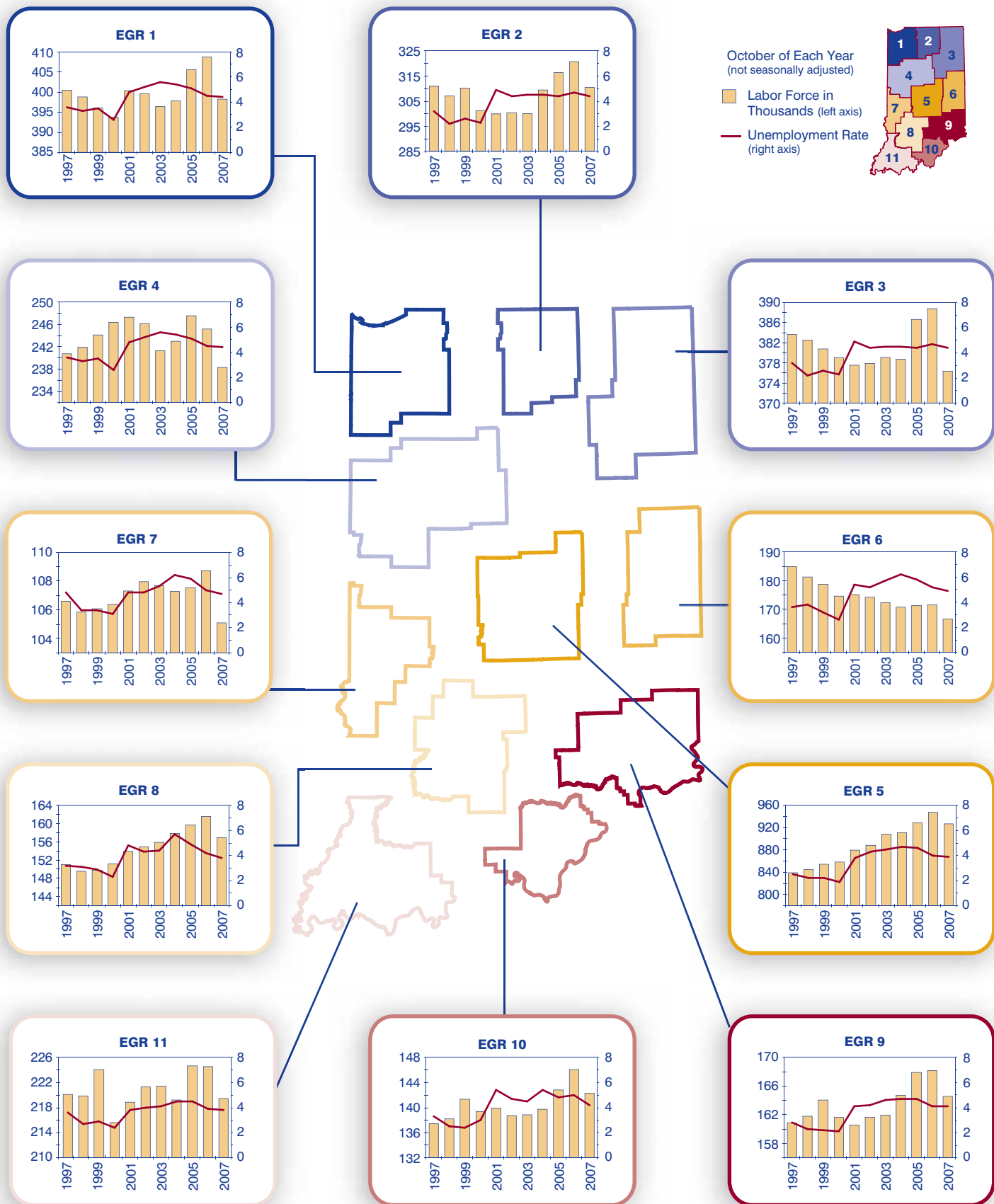
Source: IBRC, using U.S. Department of Labor data

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



The Evansville Metro Story: Told by STATS Indiana

The New Year brings with it many new things (in addition to resolutions that are meant to be broken). As part of the re-launch of STATS Indiana, the new year brings innovative ways to access data. The USA Counties and Metros Side by Side feature provides a useful way to compare any U.S. county or metro to another county, metro, micro, state, nation or custom area. It is available directly at www.stats.indiana.edu/uspr/a/sbs_profile_frame.html or by clicking the “USA Counties and Metros Side by Side” link from the STATS Indiana home page. While this function allows for a comparison of up to four geographic areas, this series of articles will only use three: an Indiana metro, Indiana and the United States. There will be 16 articles in this series, one for each metro in Indiana (see **Figure 1**). This month, we will focus on the Evansville metro.

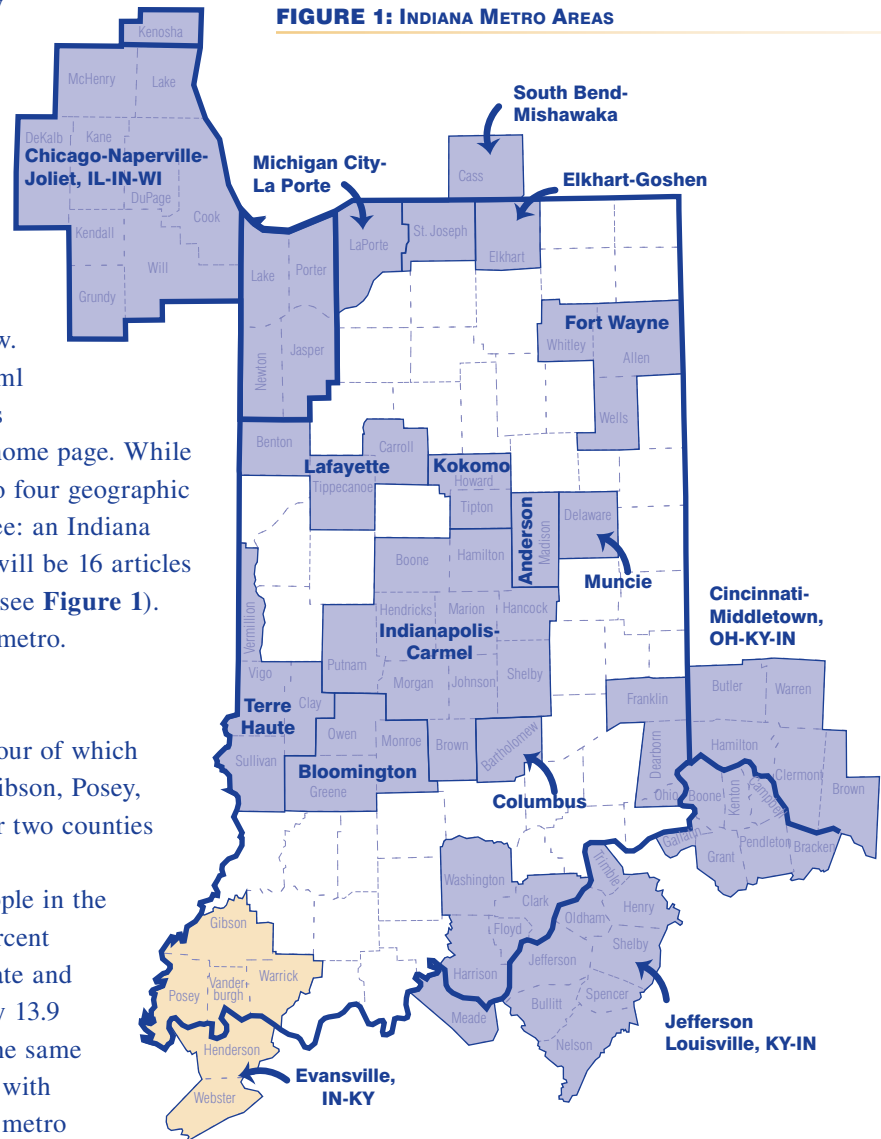
The Area

The Evansville metro includes six counties, four of which are contained within Indiana’s boundaries: Gibson, Posey, Vanderburgh and Warrick counties. The other two counties (Henderson and Webster) are in Kentucky.

There were slightly more than 350,000 people in the Evansville metro in 2006, a growth of 7.8 percent since 1990. This growth rate lags both the state and the nation, which saw populations increase by 13.9 percent and 20.3 percent, respectively, over the same period. This fact could have something to do with Evansville’s aging population: the Evansville metro has a higher percentage of people in the 45-64 age group and the 65 and older age group compared to Indiana and the United States (see **Figure 2**). This higher percentage of older adults coupled with a smaller proportion of young adults (26.2 percent) when compared to the state (27.6 percent) and nation (28.1 percent), has the potential to adversely affect Evansville’s labor force.

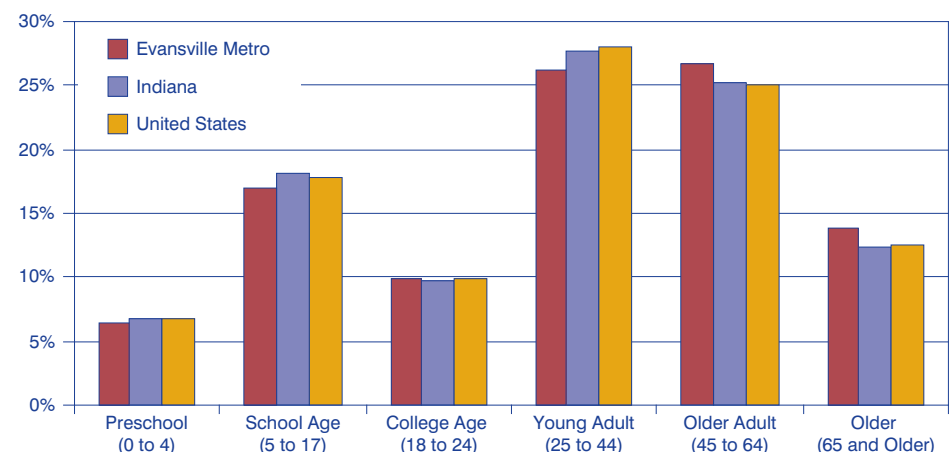
On average, Evansville metro residents have a little more room to roam before running into another person than Indiana overall, with about 153 people per square mile. That’s about 23 fewer people per square mile

FIGURE 1: INDIANA METRO AREAS



Source: Indiana Business Research Center

FIGURE 2: PERCENT OF TOTAL POPULATION IN EACH AGE GROUP, 2006



Source: STATS Indiana

when compared to the state, but about 68 more people per square mile than the national level.

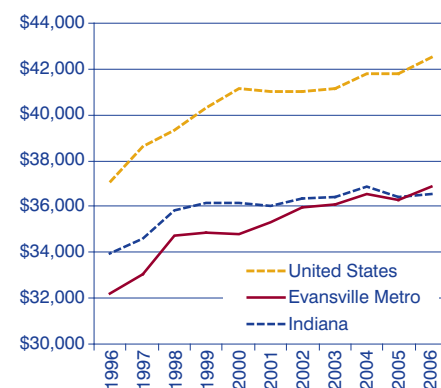
Jobs and Wages

As many Hoosiers are aware, Indiana's manufacturing sector employs a higher proportion of workers (19.6 percent) than in the nation overall (10.6 percent). The Evansville metro is no exception. In fact, of Evansville's 170,865 total covered employment jobs, 19.9 percent (or 34,020 jobs) were in manufacturing in 2006 (see **Figure 3**). Health care and social services was next in line for the highest proportion of jobs, making up 12.8 percent of total covered employment in the Evansville metro. Retail trade employed the third highest proportion of workers, coming in at 10.9 percent for the metro. These three industries—manufacturing, health care and social services, and retail trade—ranked among the top three in the Evansville metro, Indiana and the United States.

One industry that stands out as relatively odd for its proportion of jobs in the Evansville metro is the educational services industry, employing 2.4 percent of workers. Compare that to 8.3 percent and 8.8 percent of workers in Indiana and the United States, respectively. This industry ranked fourth for its proportion of workers in the state and nation, but 11th for the metro. However, it is important to note that some counties are not included in the Evansville figures due to federal nondisclosure requirements, so that 2.4 percent figure does not tell us much.

Wages across all industry sectors in Indiana and the Evansville metro are lower than the nation's wages. In 2006, the Evansville metro was doing better than Indiana in terms of wages, coming in at 86.7 percent of U.S. wages. Indiana paid workers 85.9 percent of the national level. What's the difference in dollar terms? Average wages were \$42,535 in the United

FIGURE 4: AVERAGE ANNUAL WAGES, 2006



Source: STATS Indiana

States, \$36,533 in Indiana and \$36,860 in the Evansville metro.

The good news is that overall wages have increased in each area from 1996 to 2006. In Evansville, this change (a 14.5 percent increase) was similar to that of the United States (a 14.8 percent increase). Meanwhile, Indiana grew at about half the nation's rate, or 7.7 percent, widening the gap between wages in the state and the United States (see **Figure 4**).

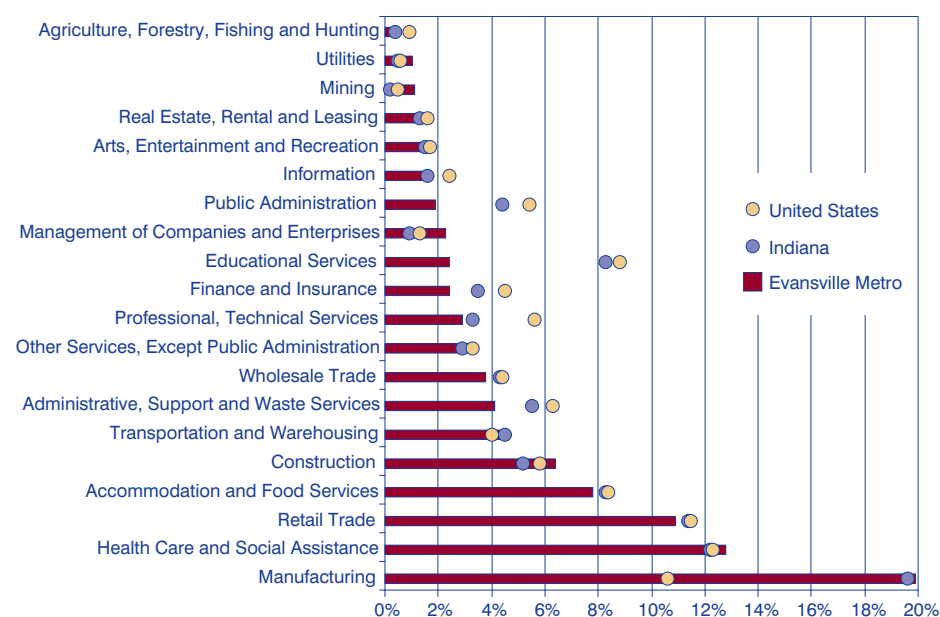
Conclusion

Over the past 10 years, the Evansville metro economy has grown. The metro's population, number of jobs and wages paid to workers have all increased. Comparing the area to the state and nation, however, gives a more interesting perspective: While the Evansville metro economy has sometimes grown faster than Indiana's economy, it has often lagged the nation.

These comparisons are easily made using data from the USA Counties and Metros Side by Side feature, and these side by side profiles have even more to offer. For housing, the labor force, commuting data and more, visit STATS Indiana today.

—Molly Manns, Associate Editor, Indiana Business Research Center, Kelley School of Business, Indiana University

FIGURE 3: INDUSTRY WAGES AS A PERCENT OF TOTAL NONFARM WAGES, 2006



Source: STATS Indiana

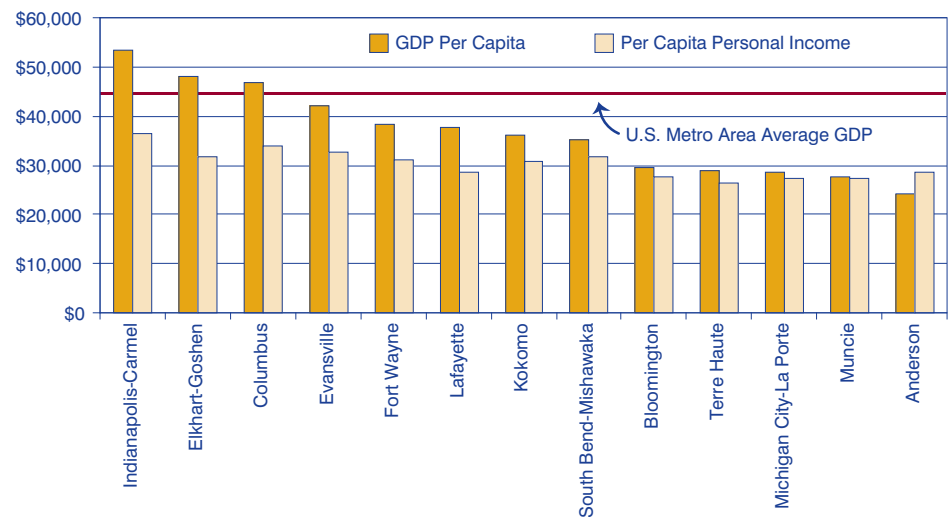
Gross Domestic Product by Metropolitan Area

A recent release by the U.S. Bureau of Economic Analysis (BEA) provides new insights into the nature of Indiana's local economies. In September 2007, BEA introduced the gross domestic product (GDP) by metropolitan area estimates covering 2001 to 2005. GDP, which is widely considered the most comprehensive measure of total economic activity, tracks the market value of final goods and services produced within a given area.

Unfortunately, due to the nature of metropolitan areas, we are not able to get a complete picture of metropolitan economic activity in Indiana. For instance, Lake County, the state's second largest county, is considered part of the Chicago metro. In the southern portion of the state, the Louisville and Cincinnati metro areas include Indiana counties as well.

Not surprisingly, the 10-county Indianapolis-Carmel metro dominates the state in terms of total economic

FIGURE 1: PER CAPITA GDP AND PERSONAL INCOME (CURRENT DOLLARS), 2005



Source: IBRC, using Bureau of Economic Analysis data

activity. As **Table 1** shows, the Indianapolis metro's nearly \$88 billion in output in 2005 accounted for 37 percent of the state total. Put another way, the Indianapolis-Carmel area is responsible for \$1 of each \$2.70 produced in Indiana. Indianapolis ranked as the 30th largest metro in the nation.

The Fort Wayne, Evansville and South Bend-Mishawaka metro areas are other top producers with total output exceeding \$10 billion. In most cases, a metro's share of state GDP is roughly analogous to its share of total population. One exception is Indianapolis, whose 37.1 percent share of total GDP far exceeds its 26 percent share of total population.

TABLE 1: GROSS DOMESTIC PRODUCT, 2005

Metropolitan Area	Metro GDP (Current Dollars, in Millions)	Percent of Indiana GDP (Current Dollars)	Average Annual Change Real GDP Since 2001	Per Capita GDP	
				Current Dollars	National Rank (out of 363)
Indianapolis-Carmel	\$87,645	37.1%	2.7%	\$53,441	24
Fort Wayne	\$15,512	6.6%	1.2%	\$38,379	131
Evansville*	\$14,666	6.2%	2.5%	\$42,012	92
South Bend-Mishawaka#	\$11,176	4.7%	4.0%	\$35,192	178
Elkhart-Goshen	\$9,391	4.0%	6.1%	\$48,091	39
Lafayette	\$6,930	2.9%	4.1%	\$37,767	144
Bloomington	\$5,253	2.2%	3.0%	\$29,555	268
Terre Haute	\$4,873	2.1%	3.0%	\$28,988	278
Kokomo	\$3,646	1.5%	2.6%	\$36,003	169
Columbus	\$3,439	1.5%	2.4%	\$46,719	50
Anderson	\$3,210	1.4%	0.9%	\$27,624	338
Muncie	\$3,173	1.3%	-0.7%	\$24,335	304
Michigan City-La Porte	\$3,139	1.3%	1.3%	\$28,464	289
Total	\$172,053	72.8%	2.7%	\$43,369	
Chicago-Naperville-Joliet (IL-IN-WI)	\$461,374	n/a	1.4%	\$48,840	32
Cincinnati-Middletown (OH-KY-IN)	\$90,963	n/a	2.1%	\$43,503	78
Louisville-Jefferson County (KY-IN)	\$50,108	n/a	1.4%	\$41,405	97

*Includes Henderson and Webster counties in Kentucky

#Includes Cass County in Michigan

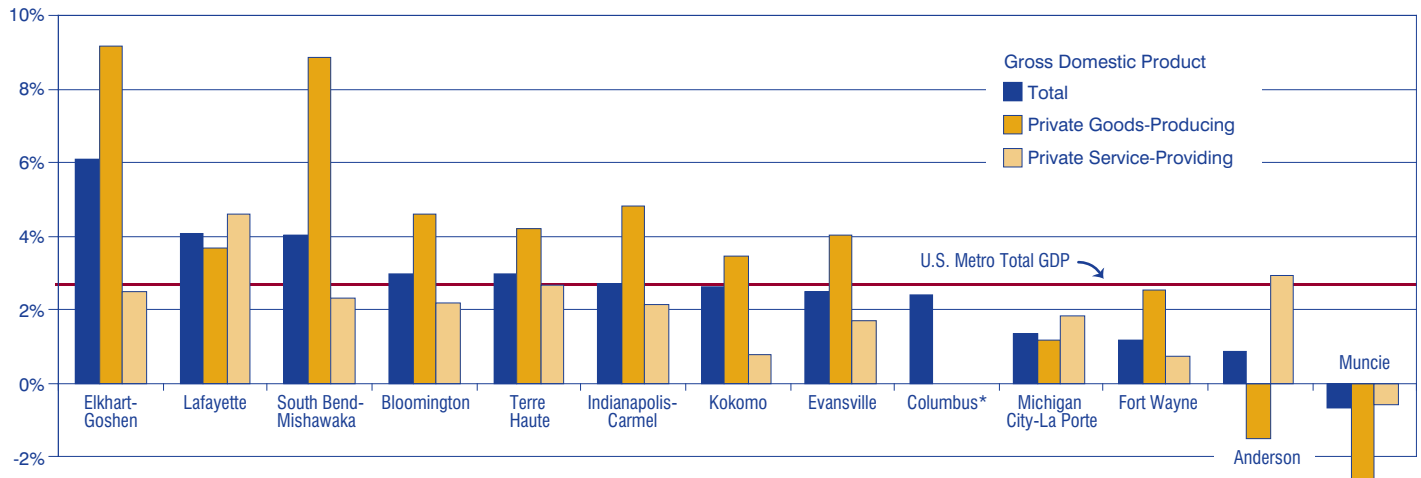
Source: IBRC, using Bureau of Economic Analysis data

Per Capita GDP

A better way to compare areas of differing size is to analyze GDP per capita (see **Figure 1**). Indianapolis-Carmel led the state with a GDP per capita of \$53,441 in 2005 and is followed closely by Elkhart-Goshen (\$48,091) and Columbus (\$46,719). These three communities exceed the national metro average and rank in the top 50 of 363 metros nationwide in GDP per capita. In total, eight of Indiana's 13 metros rank in the top half nationally, which is impressive given Indiana's relatively low cost of living.

It is important to note that per capita GDP differs from per capita personal income in that it includes corporate income and excludes government

FIGURE 2: AVERAGE ANNUAL CHANGE IN REAL GDP, 2001 TO 2005



transfer payments. If a particular community has experienced significant investment by outside companies, a portion of total output will leave the community in the form of corporate profits. As **Figure 1** illustrates, this is the case in many of the state's metro areas. Therefore, personal income is likely a better measure of general standard of living than is per capita GDP.

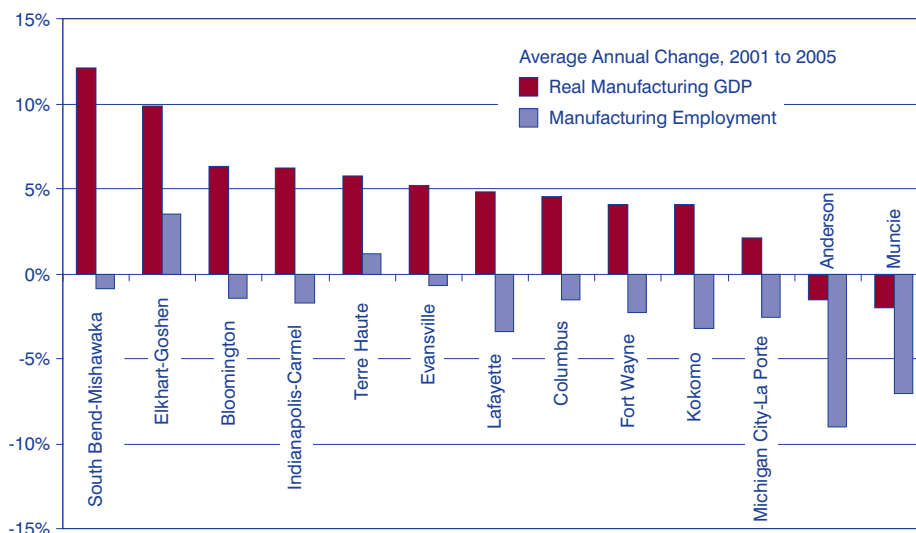
Change in GDP, 2001–2005

Nearly all of Indiana's metro areas have experienced growth in real GDP from 2001 to 2005. Only Muncie has seen a downturn. **Figure 2** highlights the average annual growth in total real GDP as well as in two broadly defined sectors: private goods-producing industries and private service-providing industries. Together, these sectors

account for all non-government output. Goods-producing industries cover manufacturing, construction, agriculture and natural resources; services-providing industries include all trade and service-related activity. Production remains the economic catalyst in Indiana. Growth in goods-producing industries outpaced services in all but four Indiana metros: Lafayette, Michigan City-La Porte, Anderson and Muncie. Of all areas with annual growth rates above 1.5 percent, only Lafayette is spurred more by service activities.

Nine of the state's 13 metros can boast an annual growth rate of greater than 2 percent over this period. Furthermore, nearly half of the state's metros exceed the national metro area growth rate. Of all Indiana metros, though, Elkhart-Goshen is a true success story. Its 6.1 percent annual growth rate over this period ranks 28th nationally. This figure is more impressive considering that, with the exception of Ocean City, N.J., all higher-ranking metros are located in the generally high-growth Sun Belt or Pacific Northwest regions. Elkhart-

FIGURE 3: AVERAGE ANNUAL CHANGE IN REAL MANUFACTURING GDP AND MANUFACTURING EMPLOYMENT, 2001 TO 2005



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With support from the Lilly Endowment,
InContext is published monthly by:

Indiana Department of Workforce Development

Commissioner.....Teresa Voors
Chief Operating Officer.....Martin Morrow
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Indianapolis, IN 46204

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Goshen's position in the RV industry is the primary driver of growth.

Manufacturing is Still King

The growth of real GDP in goods-producing industries seems at odds with the much discussed reality that Indiana is losing manufacturing jobs. How can Indiana increase manufacturing output while decreasing employment? The answer lies in increased productivity.

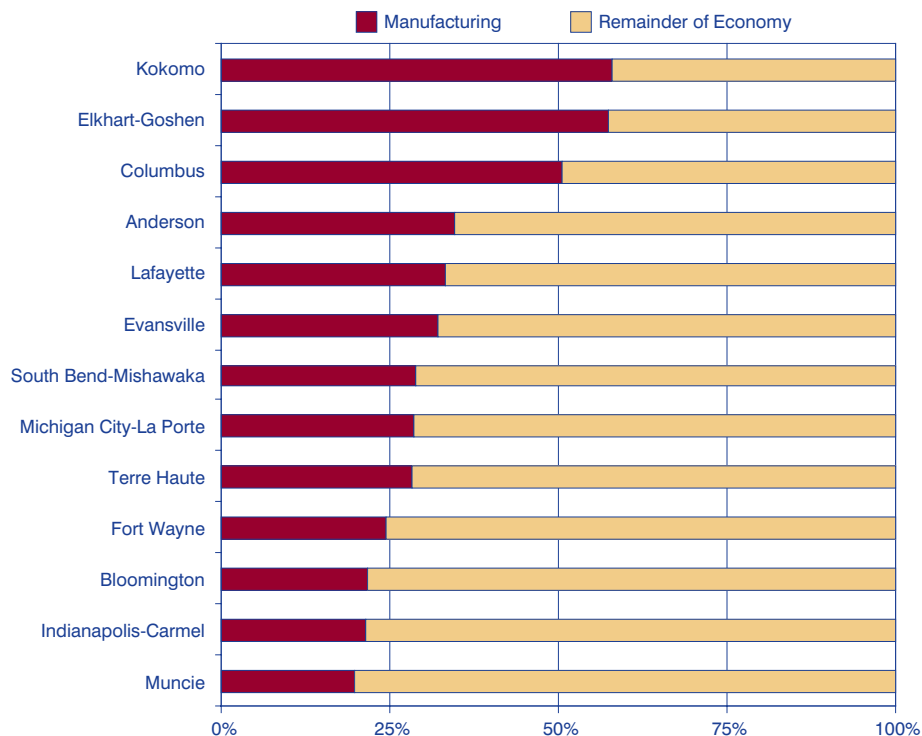
Figure 3 compares the average annual change in manufacturing output to the average annual change of manufacturing employment. All but two metros have seen an increase in manufacturing GDP, yet only two areas have seen an increase in manufacturing employment. The South Bend–Mishawaka metro, for instance,

has experienced a 12 percent annual increase in manufacturing output from 2001 to 2005 while losing employment.

Manufacturing continues to drive the Indiana economy (see **Figure 4**). Manufacturing is the largest industry in terms of output in each of the state's metro areas with the exception of the Bloomington metro, where the government sector (largely Indiana University) edges out manufacturing, 21.8 percent to 21.6 percent. Moving forward, it is important that Indiana maintain its position as a national leader in manufacturing while expanding opportunities in other targeted industries.

—Matt Kinghorn, *Economic Research Analyst, Indiana Business Research Center, Kelley School of Business, Indiana University*

FIGURE 4: MANUFACTURING GDP AS A SHARE OF TOTAL GDP, 2005



Source: IBRC, using Bureau of Economic Analysis data