

### inside

The Demand for Soft Skills: Key Skills for Indiana's Growing Occupations through 2014

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

Monthly Metrics: Indiana's Economic Dashboard

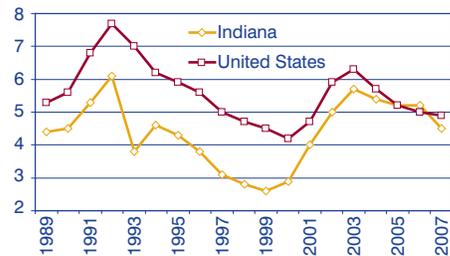
Regional Labor Force and Unemployment Rates

Recovery and Restructuring: The Indiana Economy from 2001 to 2005

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

### 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

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

1  
3  
5  
6  
7  
11

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

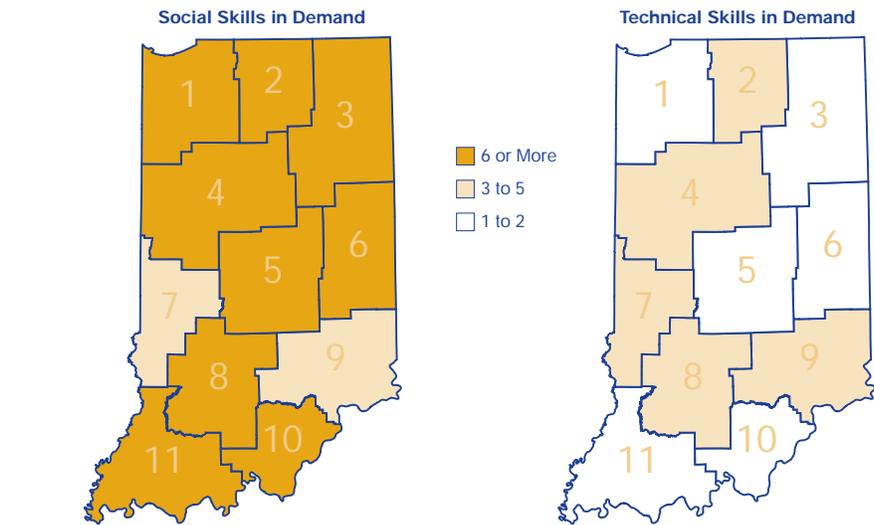
then standardized into a score from 1 to 100 so that the higher the score, the higher the potential gap between the supply and demand for the particular skill.<sup>3</sup>

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*