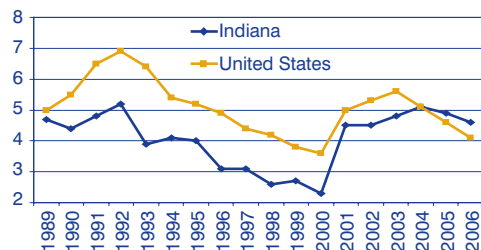


### inside

- Guarded Optimism for 2007 1
- Coasts Cost Most: Monthly Homeowner Costs 2
- Growth Regions: A Side by Side Comparison 3
- Monthly Metrics: Indiana's Economic Indicators 6
- Regional Labor Force and Unemployment Rates 7
- The Butcher, the Baker and the Candlestick-Maker Revisited: Indiana's New Skills-Based Career Clusters 8
- A Nation in Debt: U.S. International Investment 10
- Baltic States Part III: Estonia 11

### October Unemployment

Indiana's October unemployment rate has dropped from its most recent peak of 5.1 in 2004 to 4.6 in 2006. The U.S. unemployment rate has seen an even larger decline in that time, dropping from the same rate in 2004 to 4.1 percent in 2006.



### Life Sciences Collaboration

On February 2, 2007, the IU Kelley Healthcare and Life Sciences Initiative will be hosting its third of four free conferences. The focus of this conference will be on the combination of products in the life sciences industries. Attendees will hear from a world-renowned physician experienced in combination therapies, as well as from academic researchers in the field.

**Reserve your seat today:** The conference is free, but space is limited. To register or learn more about the conference, visit [www.kelley.iu.edu/lifesc/home.htm](http://www.kelley.iu.edu/lifesc/home.htm).

## Guarded Optimism for 2007

What is in store for next year's economy? To help answer this question, Indiana University's Kelley School of Business partnered with local economists and traveled the state in November to share national, international and state forecasts. The following are the panel's highlights:

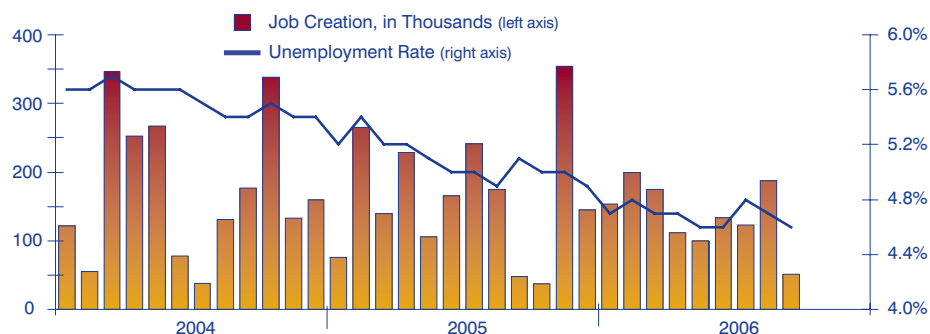
- Growth in gross domestic product (adjusted for inflation) is expected to be about 3 percent, a little slower than in 2006. Inflation (measured by the Consumer Price Index) will decrease slightly to about 3 percent.
- The nation will add about 1.7 million jobs next year, and the unemployment rate may decline slightly.
- The overall housing market will continue to weaken nationally (to a lesser extent in Indiana) but will not experience a total collapse.
- Despite continuing expenditures on Iraq, the government budget deficit will remain about the same.
- The federal funds rate will remain at 5.25 percent for most of the year. The prime rate will also remain

stable, but mortgage rates may rise a little.

- Rising costs of inputs and employee benefits will slow corporate profits to around 6 percent to 8 percent, a smaller rise than in 2006.
- International trade will grow but will not significantly reduce the large trade deficit.
- Employment in Indiana will increase by 20,000 to 25,000 jobs, slower growth than the national average.
- Indiana's manufacturing jobs are forecasted to grow slowly. Jobs in professional and business services, health and education services, and construction are positioned to grow.
- Major risks to the outlook derive from uncertainty about energy prices, the potential problems in the housing sector, and possible destabilizing deficits in the government deficit and the trade balance.

Look for detailed projections in the upcoming *Indiana Business Review*, available online in late December at [www.ibrc.indiana.edu/ibr](http://www.ibrc.indiana.edu/ibr).

**FIGURE 1: U.S. JOB CREATION AND UNEMPLOYMENT RATES, 2004 TO 2006**



# Coasts Cost Most: Monthly Homeowner Costs

No homeowner would deny that monthly costs for mortgage, insurance, taxes and utilities take a big chunk of monthly income. Folks living in South Gate, California (southeastern Los Angeles County) might heartily attest to that, with 68 percent of income going to monthly owner costs. Put another way, 68 cents of every dollar of income reported in the survey went, on average, to monthly owner costs.<sup>1</sup>

**TABLE 1: CITIES WITH THE HIGHEST HOMEOWNER COST-TO-INCOME BURDEN**

| State         | City                 | Cost-to-Income Ratio |
|---------------|----------------------|----------------------|
| California    | South Gate           | 68.2                 |
| New Jersey    | Newark               | 65.1                 |
| California    | El Monte             | 63.0                 |
| California    | Hayward              | 63.0                 |
| California    | Baldwin Park         | 62.5                 |
| New Jersey    | Paterson             | 62.4                 |
| Illinois      | Cicero*              | 62.3                 |
| New Jersey    | Elizabeth            | 61.1                 |
| California    | Murrieta             | 60.4                 |
| Massachusetts | Lawrence             | 60.0                 |
| California    | Richmond             | 59.9                 |
| Florida       | Hialeah              | 59.7                 |
| Florida       | Miami                | 58.0                 |
| California    | Hemet                | 57.7                 |
| California    | Daly                 | 57.6                 |
| California    | Hawthorne            | 57.2                 |
| California    | Escondido            | 57.1                 |
| California    | Vallejo              | 57.0                 |
| California    | El Cajon             | 56.8                 |
| California    | East Los Angeles CDP | 56.4                 |
| California    | Inglewood            | 56.3                 |
| Puerto Rico   | Mayagüez zona urbana | 56.2                 |
| California    | Norwalk              | 56.2                 |
| California    | Salinas              | 56.2                 |
| California    | Oakland              | 55.9                 |
| United States |                      | 34.5                 |

\*Town

Not surprisingly, 17 of the 25 highest burden cities are located in California, all of which have a 55 percent or higher ratio of monthly homeowner costs to income (see **Table 1**). Briefly, these

monthly costs include mortgages, real estate taxes, insurance, utilities and any association fees.<sup>2</sup> **Table 2** shows the top 10 states with the highest and lowest cost-to-income ratios.

While the average costs-to-income ratio, as calculated by the American Community Survey, was 34.5 percent nationally, 312 cities and towns included in the survey had ratio's higher than the national average. Data are available for eight Indiana cities, shown in **Table 3**. At 40.4 percent, the city of Hammond has the highest costs-to-income ratio, while Fort Wayne has the lowest (25.2 percent).

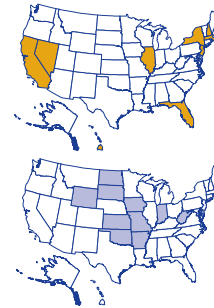
Of the 24 Indiana counties included in the survey, Morgan County, just southwest of Indianapolis, had the highest ratio at 34.7 percent. On the other end of the spectrum, Bartholomew County (southeast of Indianapolis) had the lowest ratio at 18.8 percent (see **Table 4**).

## Notes

1. These newly released figures come from the American Community Survey, currently covering geographic areas with populations of 65,000 or more across the United States.
2. The data on selected monthly owner costs were obtained from questionnaire Item 14 and Items 20 through 24 in the 2005 American Community Survey. The data were obtained for owner-occupied units. Selected monthly owner costs are the sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts on the property (including payments for the first mortgage, second mortgages, home equity loans, and other junior mortgages); real estate taxes; fire, hazard, and flood

**TABLE 2: STATES WITH THE HIGHEST AND LOWEST BURDENS (COST-TO-INCOME RATIO)**

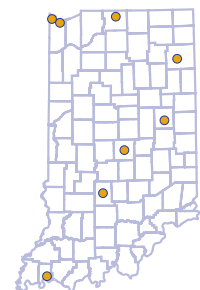
|                  |      |
|------------------|------|
| 1. California    | 47.7 |
| 2. Nevada        | 42.4 |
| 3. New Jersey    | 40.7 |
| 4. Florida       | 40.6 |
| 5. Hawaii        | 39.7 |
| 6. New York      | 38.9 |
| 7. New Hampshire | 37.8 |
| 7. Rhode Island  | 37.8 |
| 9. Massachusetts | 37.3 |
| 10. Illinois     | 37.2 |



|                   |      |
|-------------------|------|
| 42. Missouri      | 26.3 |
| 43. Indiana       | 25.9 |
| 43. Oklahoma      | 25.9 |
| 45. Arkansas      | 25.6 |
| 46. South Dakota  | 25.5 |
| 46. West Virginia | 25.5 |
| 46. Wyoming       | 25.5 |
| 49. Kansas        | 25.4 |
| 50. Iowa          | 24.3 |
| 51. North Dakota  | 21.5 |

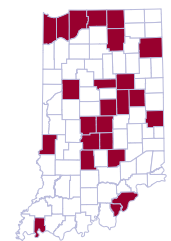
**TABLE 3: INDIANA CITIES IN THE SURVEY**

|              |      |
|--------------|------|
| Hammond      | 40.4 |
| Gary         | 36.1 |
| Muncie       | 35.1 |
| South Bend   | 34.8 |
| Evansville   | 28.2 |
| Indianapolis | 26.4 |
| Bloomington  | 25.7 |
| Fort Wayne   | 25.2 |



**TABLE 4: INDIANA COUNTIES IN THE SURVEY**

|            |      |             |      |
|------------|------|-------------|------|
| Morgan     | 34.7 | Johnson     | 25.5 |
| Lake       | 31.8 | Vanderburgh | 25.3 |
| Delaware   | 31.4 | Howard      | 24.8 |
| Kosciusko  | 29.5 | Tippecanoe  | 22.4 |
| Grant      | 29.0 | Hamilton    | 21.9 |
| Madison    | 28.9 | Allen       | 21.7 |
| Hendricks  | 28.1 | Clark       | 21.4 |
| Monroe     | 27.3 | Bartholomew | 18.8 |
| LaPorte    | 27.2 |             |      |
| Porter     | 27.0 |             |      |
| Vigo       | 27.0 |             |      |
| Floyd      | 26.6 |             |      |
| Marion     | 26.4 |             |      |
| Wayne      | 26.3 |             |      |
| St. Joseph | 26.1 |             |      |
| Elkhart    | 25.7 |             |      |



insurance on the property; utilities (electricity, gas, and water and sewer); and fuels (oil, coal, kerosene, wood, etc.). It also includes, where appropriate, the monthly condominium fee for condominiums and mobile home costs (installment loan payments, personal property taxes, site rent, registration fees and license fees).

—Carol Rogers, Executive Editor, Indiana Business Research Center, Kelley School of Business, Indiana University.

# Growth Regions: A Side by Side Comparison

Throughout the course of 2006, we have provided an overview of each of the 11 economic growth regions (EGRs). To wrap up this series, we will take a look at how the EGRs compare to each other and the state of Indiana as a whole. Because of the dynamics of Indiana's capital city and surrounding counties, EGR 5

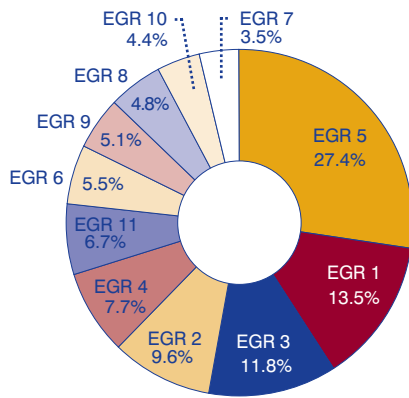
often shows up at the extreme of each comparison.

## Population

Since Indianapolis is the largest city in the state and is located in EGR 5, it isn't too surprising that more than one in every four Hoosiers (27.4 percent of the state's population in 2005) call this region home. EGR 1 made up the

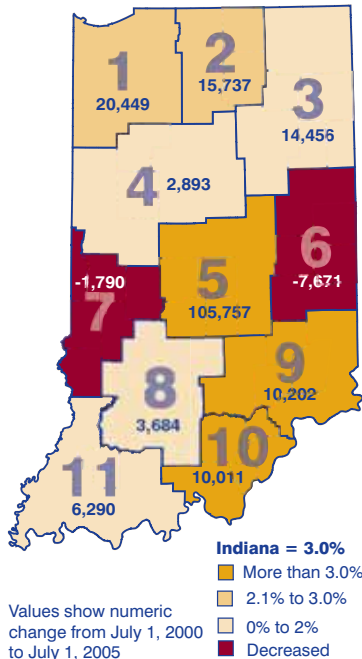
next largest portion of the state, with 13.5 percent of Indiana's 6.3 million people, which can be attributed in large part to its proximity to Chicago. EGR 7 is home to the fewest number of Hoosiers, making up only 3.5 percent of the state's population (see **Figure 1**). Major cities (that is, with a population of at least 35,000) can be found in each region (see **Figure 2**).

**FIGURE 1: POPULATION DISTRIBUTION, 2005**



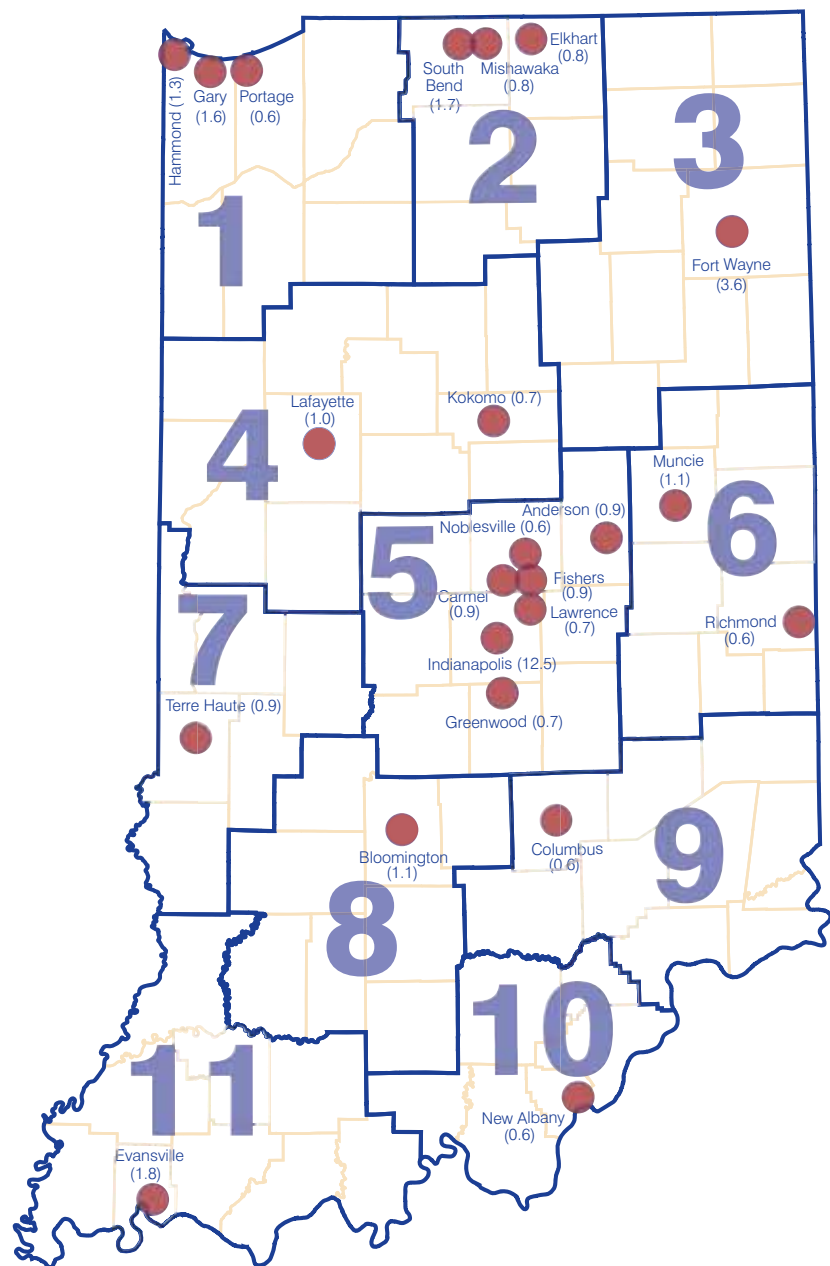
Source: IBRC, using U.S. Census Bureau data

**FIGURE 3: CHANGE IN POPULATION BY REGION, 2000 TO 2005**



Source: IBRC, using U.S. Census Bureau data

**FIGURE 2: PERCENT OF STATE'S POPULATION IN INDIANA'S MAJOR CITIES, 2005**



Source: IBRC, using U.S. Census Bureau data

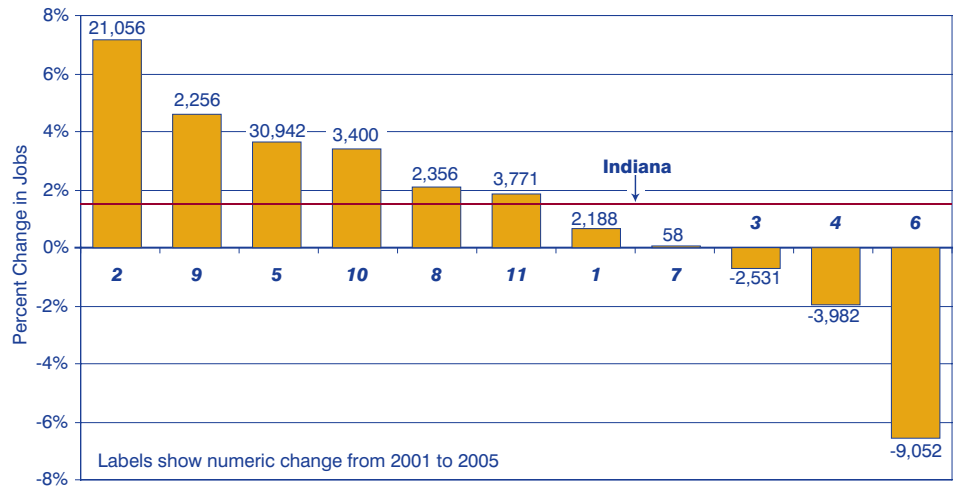
Since 2000, three regions have increased in population faster than the state's 3 percent rate, Regions 5, 9 and 10. Meanwhile, Regions 6 and 7 actually decreased in population over that time period (see **Figure 3**).

## Jobs

Regions 5 and 3 employed the highest number of people in the fourth quarter of 2005, with more than 879,000 and 344,000, respectively. At the other end of the spectrum, EGR 7 employed the fewest number of people (about 85,000). This isn't too surprising considering Region 7 is also the smallest in population.

Since the fourth quarter of 2001, Indiana has seen a 1.5 percent increase in jobs. Six EGRs (Regions 2, 5, 8, 9, 10 and 11) surpassed this growth rate. At the same time, Regions 3, 4, and 6 experienced a decline in jobs

**FIGURE 4: CHANGE IN JOBS BY REGION, 2001:4 TO 2005:4**



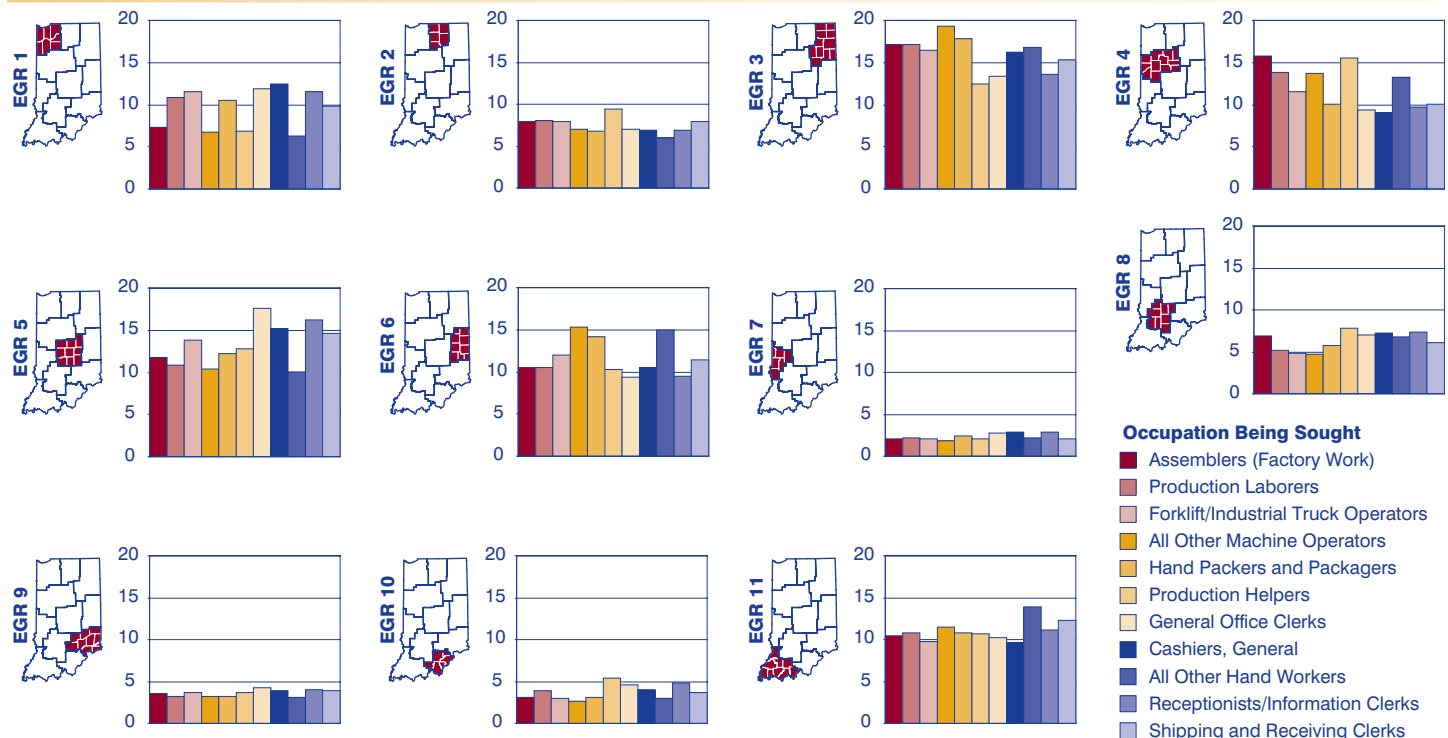
Source: IBRC, using Bureau of Labor Statistics data

since 2001, the worst of which was experienced in EGR 6 (see **Figure 4**).

The Indiana Department of Workforce Development maintains a website used to generate reports about which jobs are most sought-after in Indiana. According to the report

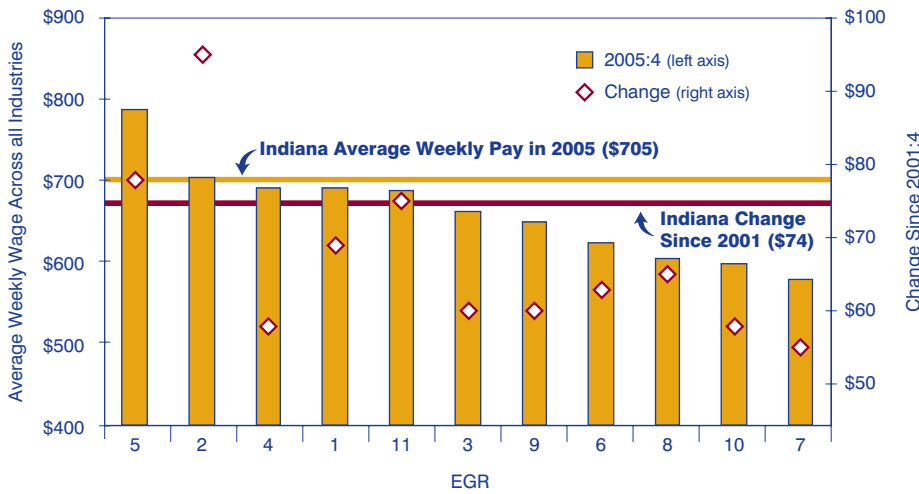
issued on September 10, 2006, most Hoosiers using the system are looking for assembly work (in factories) and production jobs. In fact, these were the top two jobs being sought after in every economic growth region. When looking at data for the top 20 occupations from

**FIGURE 5: PERCENT OF STATE TOTAL LOOKING FOR JOBS IN SPECIFIC OCCUPATIONS BY REGION, SEPTEMBER 2006**



Source: IBRC, using Department of Workforce Development data

**FIGURE 6: AVERAGE WEEKLY WAGES, 2005:4**



Source: IBRC, using Bureau of Labor Statistics data

each region individually, 11 showed up in every one. **Figure 5** shows these occupations as a percent of the state total by region.

### Wages

Corresponding to the pattern seen with employment, EGR 5 paid the highest average weekly wage in the fourth quarter of 2005 while EGR 7 paid the lowest, \$788 per week vs. \$579 per week (see **Figure 6**). Compare this to Indiana’s average of \$705 each week.

Since 2001:4, EGR 7 has also seen the smallest change in average weekly wages, increasing by only \$55. The good news, however, is that every region did increase wages over the four-year span. Indiana’s change in wages

during that time was \$74. Only three regions improved wages by more than that amount, including Regions 2, 5, and 11, with increases of \$95, \$78 and \$75, respectively.

### Commuting

For the reasons mentioned previously, it is not surprising that EGR 5 sends out and receives more workers than any other region, with 22,787 people leaving EGR 5 for other regions within the state and 47,290 people coming into EGR 5 to work. EGR 6 actually sends out nearly as many workers as EGR 5, with about 22,770 workers leaving EGR 6 and working elsewhere within the state (see **Figure 7**). Region 2 comes in second place on the receiving end,

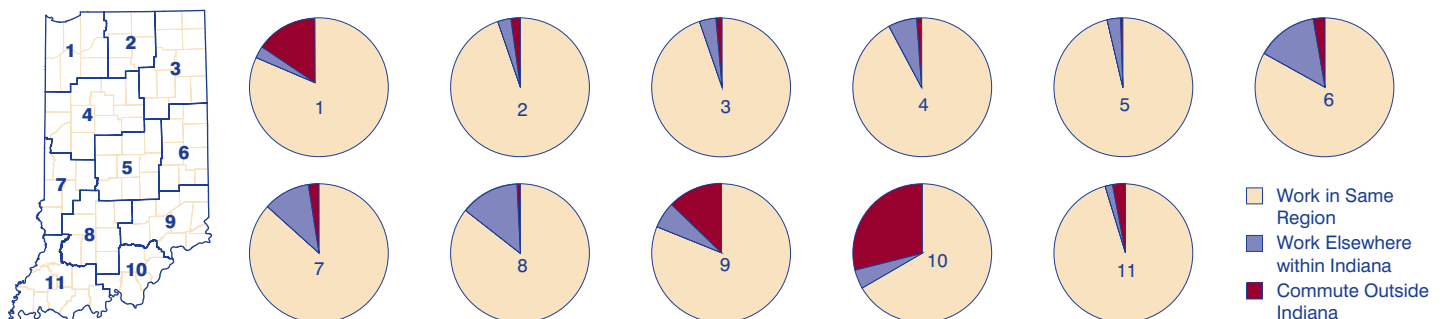
bringing in about 17,870 people from the other EGRs.

Indiana sends out approximately 146,900 workers to other states, and 39.1 percent of those people reside in EGR 1. More than 85 percent of the commuters leaving EGR 1 are heading to Chicago. In fact, 34.5 percent of all people commuting from Indiana to out of state are working in Cook County, Ill., home to the Windy City. EGR 10, which includes part of the Louisville metro area, was next in line for the number of workers sent to other states, making up 25.3 percent of the commuters who leave the state.

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

“More than 85 percent of the commuters leaving EGR 1 are heading to Chicago. In fact, 34.5 percent of people commuting from Indiana to out of state are working in Cook County, Ill., home to the Windy City.”

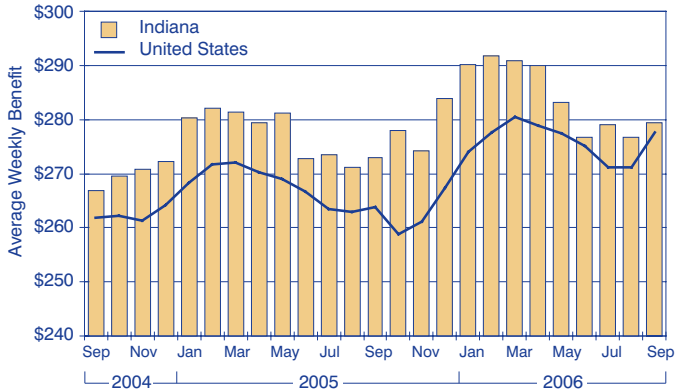
**FIGURE 7: MOST WORK IN THEIR REGION OF RESIDENCE: COMMUTING PATTERNS FOR INDIANA’S 11 ECONOMIC GROWTH REGIONS, 2000**



Source: IBRC, using U.S. Census Bureau data

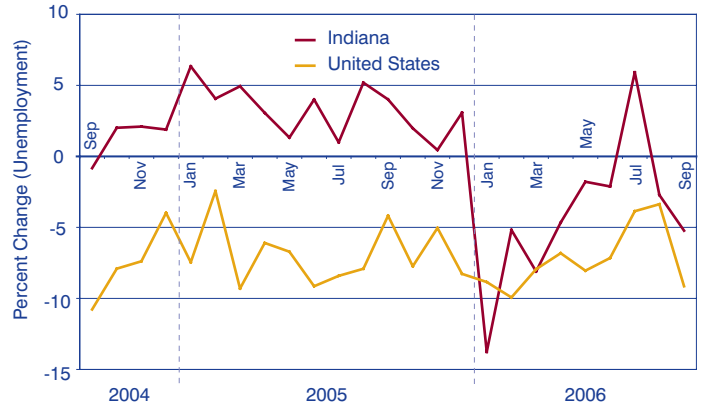
# Monthly Metrics: Indiana's Economic Indicators

## AVERAGE BENEFITS PAID FOR UNEMPLOYMENT INSURANCE CLAIMS



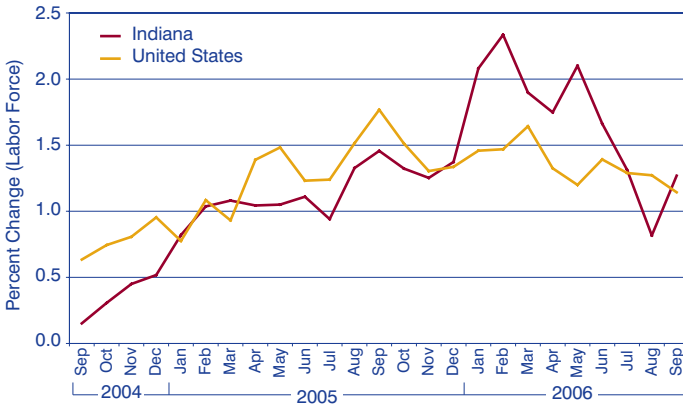
Source: IBRC, using U.S. Department of Labor data

## PERCENT CHANGE IN UNEMPLOYMENT FROM THE PREVIOUS YEAR\*



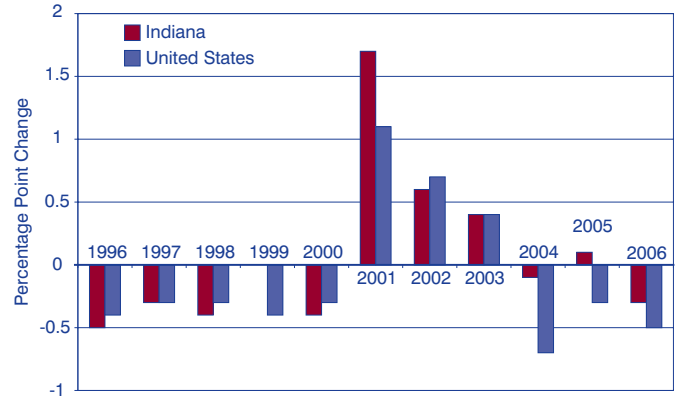
\*seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics data

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



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

## CHANGE IN UNEMPLOYMENT RATE FROM SEPTEMBER OF PREVIOUS YEAR\*



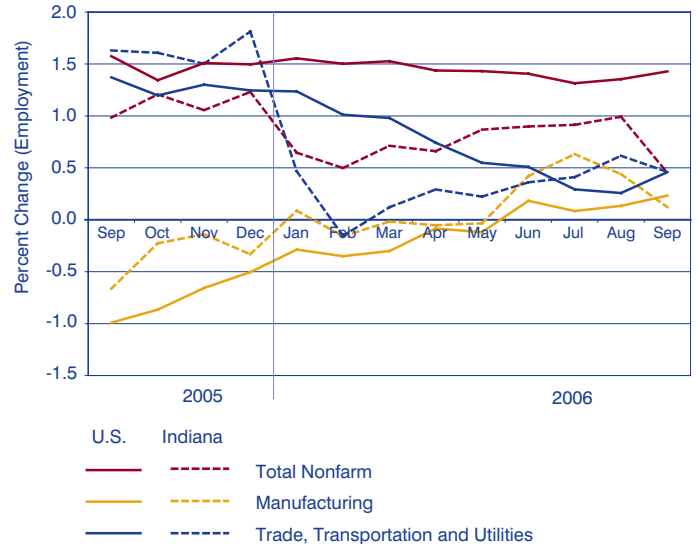
\*seasonally adjusted  
Source: IBRC, using Bureau of Labor Statistics data

## CHANGE IN EMPLOYMENT BY INDUSTRY SUPER-SECTOR, 2005 TO 2006\*

| Industry                            | Indiana        |                | United States  |
|-------------------------------------|----------------|----------------|----------------|
|                                     | Change in Jobs | Percent Change | Percent Change |
| Total Nonfarm                       | 13,400         | 0.5            | 1.4            |
| Financial Activities                | 3,000          | 2.2            | 2.3            |
| Information                         | 800            | 2.0            | -0.4           |
| Leisure and Hospitality             | 4,400          | 1.6            | 2.3            |
| Natural Resources and Mining        | 100            | 1.4            | 8.4            |
| Other Services                      | 1,500          | 1.4            | 0.7            |
| Trade, Transportation and Utilities | 2,700          | 0.5            | 0.5            |
| Educational and Health Services     | 1,500          | 0.4            | 2.2            |
| Professional and Business Services  | 400            | 0.1            | 2.5            |
| Manufacturing                       | 700            | 0.1            | 0.2            |
| Government                          | -4,600         | -1.1           | 0.9            |

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

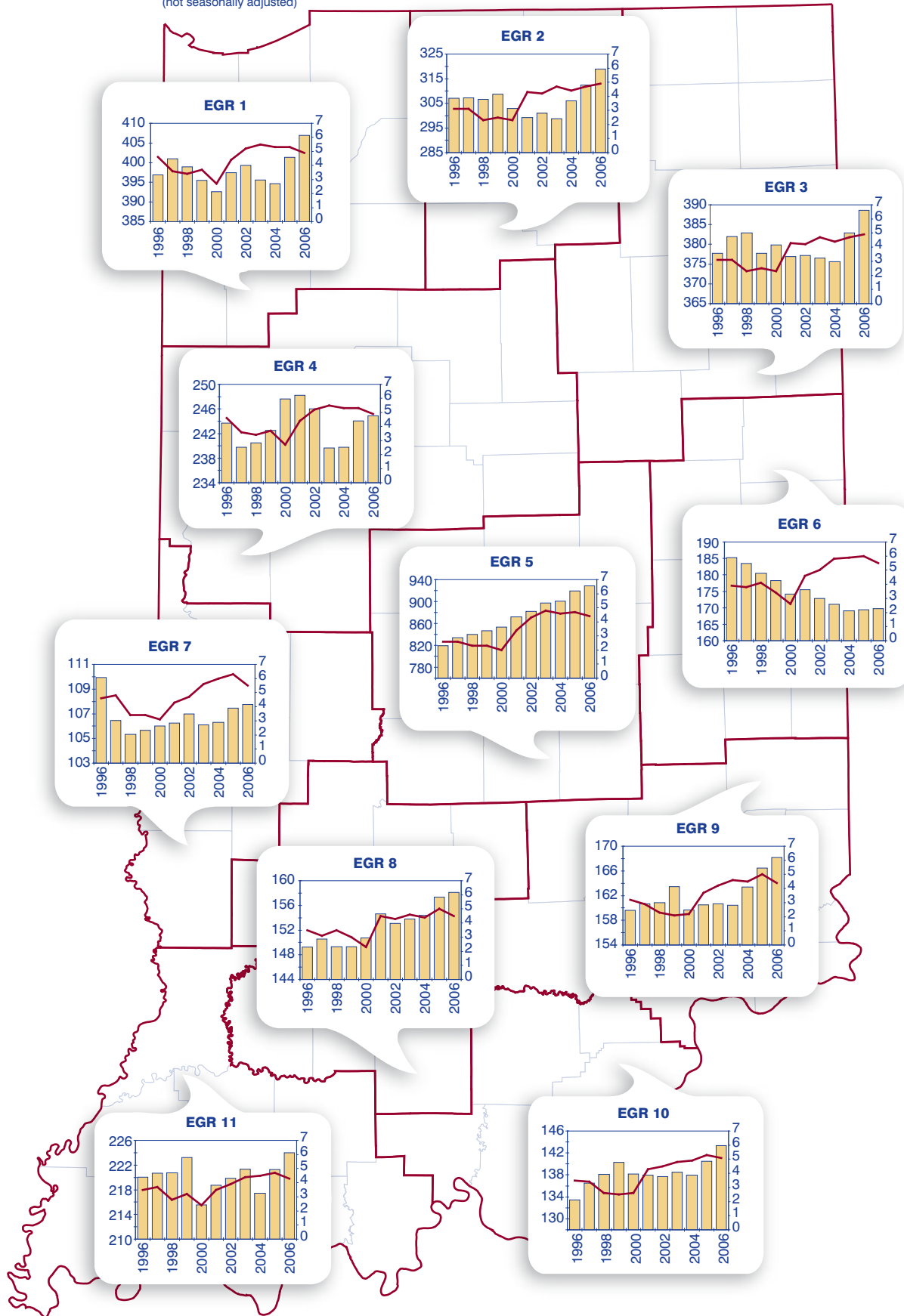
## OVER-THE-YEAR PERCENT CHANGE IN EMPLOYMENT BY SUPER-SECTOR\*



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

# Regional Labor Force and Unemployment Rates

September of Each Year (not seasonally adjusted) ■ Labor Force in Thousands (left axis) — Unemployment Rate (right axis)



# The Butcher, the Baker and the Candlestick-Maker Revisited: Indiana's New Skills-Based Career Clusters

There was a time when people's decisions about what they wanted to do for a living revolved around a particular industry—nursing in hospitals, working in the steel mill, or teaching in schools. Their thinking was often reflected in the idea that they would spend most of their careers with a single employer.

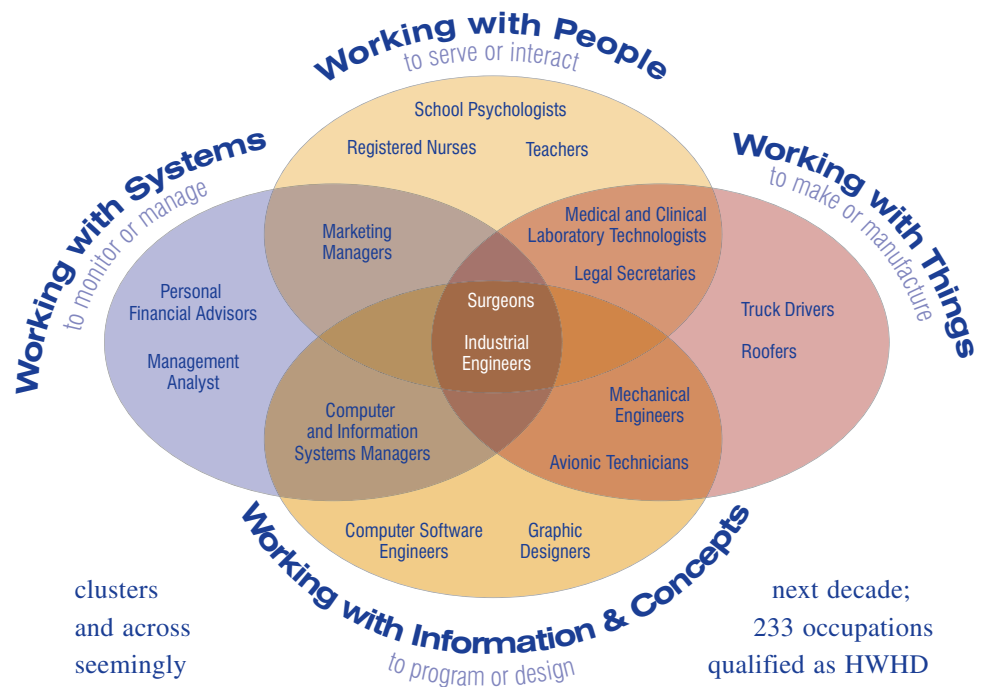
Enter the 21st century, where tenure with an employer is measured in projects or years instead of decades; many individuals shed occupational "skins" several times during their working life, and flexibility is crucial. Today's emerging workforce must prepare for an ever-evolving, quick-paced job market that demands highly-skilled, adaptable and versatile workers. To facilitate the transition of dislocated and entry-level workers into careers based on key transferable skills, the Research and Analysis (R&A) arm of Indiana's Department of Workforce Development (DWD) has developed a new tool for examining the occupations expected to grow in Indiana's economy over the next decade (see **Figure 1**).

## Background

The R&A division's new career clusters are based on the skills necessary for emerging high wage and high demand (HWHD) occupations. This work is tied to Indiana's Strategic Skills Initiative which is designed to create new jobs and raise Hoosier income through innovation and investing in human capital. Developing the skills of Indiana's workforce is vital to the success of the Strategic Skills Initiative and to building Indiana's economy. The goal of this new career cluster model is three-fold:

1. Emphasize skills that are transferable within the career

**FIGURE 1: SELECTED OCCUPATIONS IN INDIANA'S NEW CAREER CLUSTER MODEL**



clusters and across seemingly unrelated occupations and industries.

2. Shape policy and behaviors around Indiana's HWHD occupations and skills through the promotion of skill development programs and curricula.
3. Identify career pathways that lead to HWHD occupations and to prioritize and focus resources on programs and curricula that promote skills leading to those occupations.

## Methodology

The first step was to review a list of more than 700 occupations coded by the Standard Occupational Classification system (SOC). Next, a filter was applied to include only occupations that were both high in wages and high in demand. To fit this criterion, the occupation needed to have an average wage above the state median income of \$27,742 and have a positive projected growth rate over the

next decade; 233 occupations qualified as HWHD throughout Indiana. Finally, the analysis incorporated skills

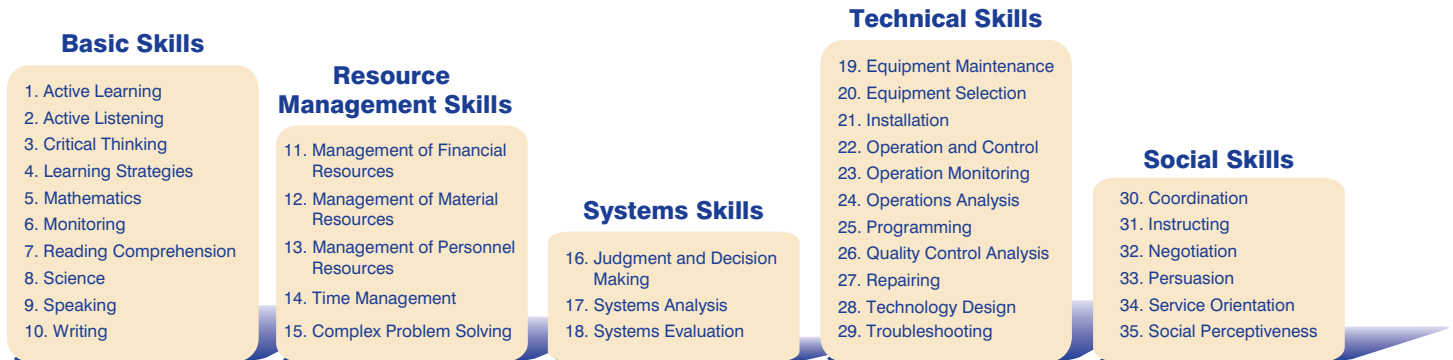
data from the Occupational Information Network (O\*NET), a comprehensive database of worker attributes and job characteristics. O\*NET categorizes knowledge, skills and abilities as worker requirements that represent the developed or acquired attributes of an individual and contribute to occupational performance.<sup>1</sup>

All 717 SOC-coded occupations were included in Indiana's R&A Career Cluster initial analysis, and each occupation was coded with 35 O\*NET occupational skills (see **Table 1**).

There were three skill measurements for each occupation. They were given a rank of skill importance (from 1 to 35), and an importance and level index score based on survey data. The importance score from 1 to 5 (with 1 being not important and 5 being extremely important) was based on the following question: How important is the skill to the performance of your current



**TABLE 1: O\*NET OCCUPATIONAL SKILLS**



Source: Research and Analysis Department at the Indiana Department of Workforce Development

job? If the skill was considered at least somewhat important (2), the employee was instructed to answer the following question as well: What level of the skill is needed to perform your current job? The level scale is from 1 to 7, with 1 being low and 7 being high.

### Statistical Analysis

Clusters were determined through a factor analysis (principal components method) of O\*NET skills plus DWD employment and wage data. This process determined which skills load highly together among the occupations. To determine which skills were especially relevant to particular career clusters, skills were chosen as statistically significant with coefficients of 0.5 or greater. Once the clusters were defined by the skills, all occupations were re-coded and categorized. The occupations have been placed into these skill clusters based on a match of best fit according to the O\*NET coded skill importance and level scores, and by applying theory and knowledge of the

Indiana education system and labor market.

Remembering that the O\*NET skills importance index is scaled from 1 to 5, a score of 2 means that skill is somewhat important and 3 indicates that skill is important. We designated the critical importance score of 2.75, which allowed for variance among the clusters, while maintaining a high importance index score to ensure confidence in the model and accuracy among the occupations that fit into each cluster. This analysis yielded four key skill clusters with associated occupations (see **Table 2**).

This new occupational cluster matrix is designed to guide individuals, educators and workforce professionals to careers and occupations that provide a good “fit” or a faster, smoother transition between seemingly unrelated jobs with similar skills. It builds off the skills, knowledge and strengths these people already possess (or choose to develop). A critical step of this process is to perform a sound assessment of

the individual’s current skills using a tool such as WorkKeys. A second aim involves developing career paths that lead from entry level to better-paying jobs through a planned, logical and layered acquisition of the needed skills and training that equips the individual for the higher level position. These intended uses of the new clusters embody DWD’s goals of growing employment and personal income for Indiana’s workforce.

Additional details on methodology decisions can be found in the online version of this article at [www.incontext.indiana.edu](http://www.incontext.indiana.edu).

### Notes

- O\*NET collects data from a random sample of businesses expected to employ workers in the targeted occupations. From the sample of businesses, a random sample of workers in those occupations are selected to be surveyed using standardized questionnaires.

—Allison Leeuw, *Advanced Economic and Market Analysis Team of Research and Analysis, Indiana Department of Workforce Development*

**TABLE 2: KEY SKILL CLUSTERS**

| Cluster                               | Number and Percent of Occupations | Skills Required  |
|---------------------------------------|-----------------------------------|--|
| Working with People                   | 329 Occupations (46 percent)      | Learning strategies, instructing, social perceptiveness, time management, service orientation, persuasion, monitoring, negotiation and coordination            |
| Working with Things                   | 224 Occupations (31 percent)      | Equipment maintenance, repairing, operation monitoring, troubleshooting, equipment selection, operation and control, installation and quality control analysis |
| Working with Systems                  | 111 Occupations (16 percent)      | Systems evaluation, systems analysis, management of financial resources, management of personnel resources and judgment and decision making                    |
| Working with Information and Concepts | 40 Occupations (6 percent)        | Programming, technology design, operations analysis and complex problem solving  |

Source: Research and Analysis Department at the Indiana Department of Workforce Development

# A Nation in Debt: U.S. International Investment

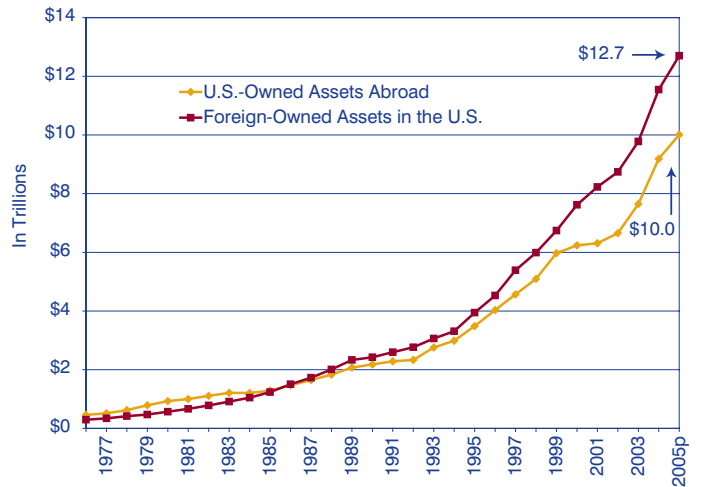
The value of foreign-owned assets in the United States exceeded the nation's foreign-owned investments abroad by almost \$2.7 trillion, according to preliminary data for the end of 2005 from the Bureau of Economic Analysis. As **Figure 1** clearly shows, this gap has widened over the years with 1986 as the first year in which foreign investment in the United States was greater than U.S. investments overseas.

## What Makes Up Our Investment Position?

The United States as a whole owns more than \$10 trillion in assets abroad, using current-cost valuation. Just 3 percent of that was U.S. official reserve assets (such as gold) or other government assets; the remaining 97 percent were U.S. private assets. Americans owned almost \$4.1 trillion in foreign securities, accounting for 42 percent of those private assets. Meanwhile, direct investment abroad (\$2.5 trillion) accounts for 25 percent of U.S.-owned private assets.

Foreign-owned assets in the United States exceed \$12.7 trillion. Seventeen percent of those assets are owned by foreign governments, with U.S. government securities making

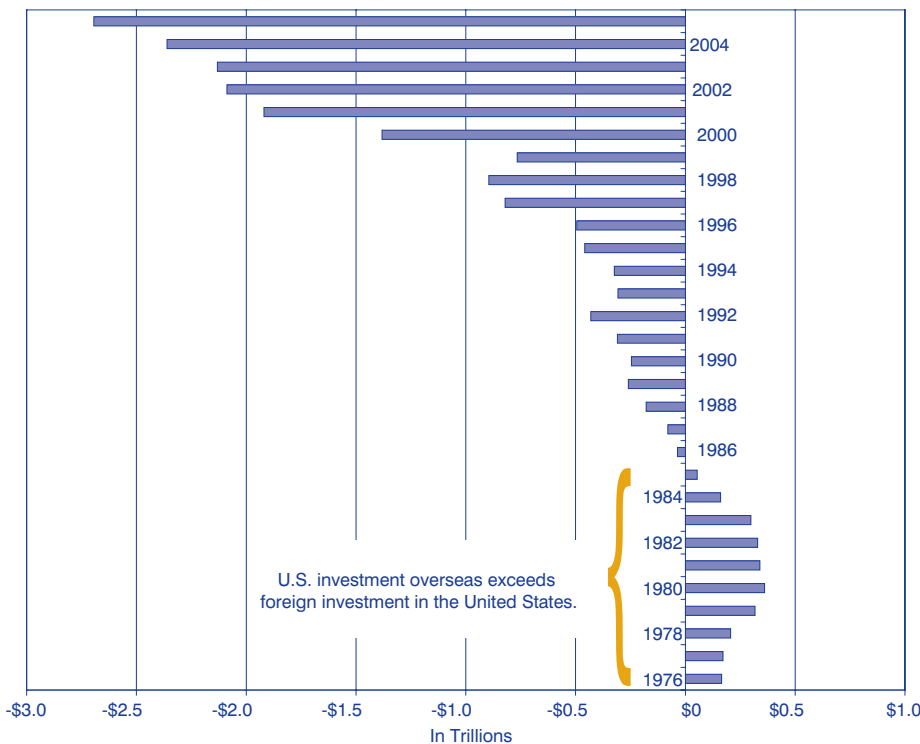
**FIGURE 2: INTERNATIONAL INVESTMENT POSITION OF THE UNITED STATES**



Note: This figure shows direct investment positions valued at current cost. The current-cost method values the U.S. and foreign parents' share of their affiliates' investment in plants and equipment using the current cost of capital equipment, in land using general price indexes, and in inventories using estimates of their replacement cost. Source: Bureau of Economic Analysis

up three-fourths of those assets. Meanwhile, U.S. securities make up 42 percent of the assets in the "other foreign assets" category, with an additional 10 percent held in Treasury securities and U.S. currency. Foreign direct investment in the United States accounts for 18 percent of that category, or a total of nearly \$1.9 trillion.

**FIGURE 1: DIFFERENCE BETWEEN U.S. ASSETS ABROAD AND FOREIGN-OWNED ASSETS IN THE U.S.**



Note: This figure shows direct investment positions valued at current cost. The current-cost method values the U.S. and foreign parents' share of their affiliates' investment in plants and equipment using the current cost of capital equipment, in land using general price indexes, and in inventories using estimates of their replacement cost. Source: Bureau of Economic Analysis

## Change Since Last Year

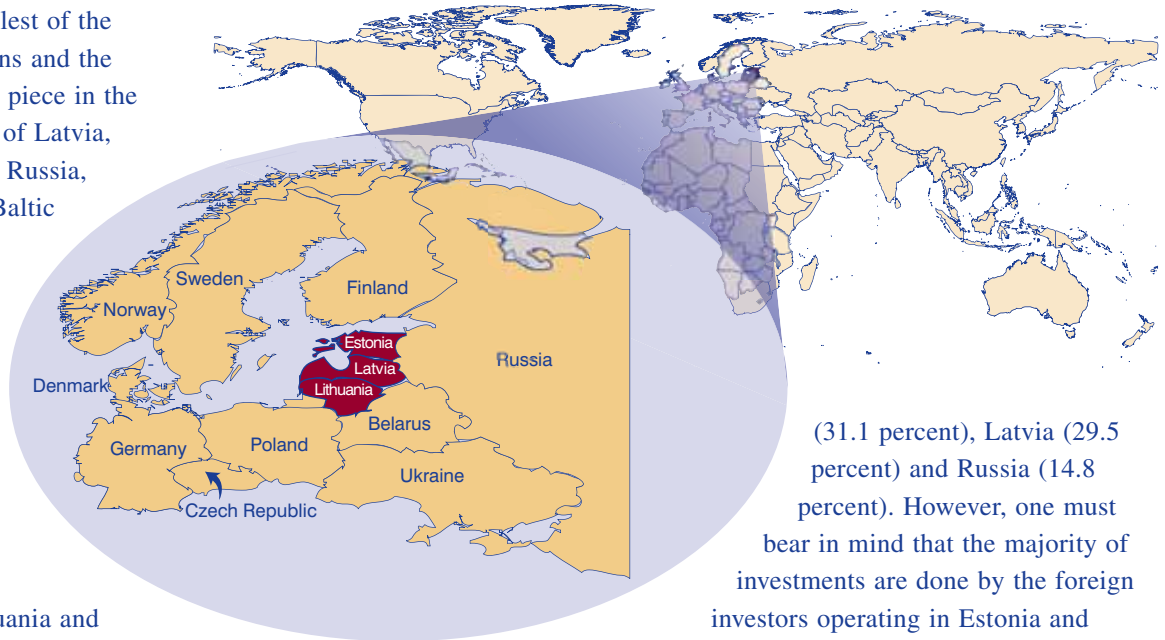
As seen in **Figure 2**, the gap in the U.S. investment position grew larger, with a net change of -\$333 billion since the end of 2004. This is mainly due to foreign purchases of U.S. Treasury securities, as well as the depreciation of most major foreign currencies against the dollar; however, this was somewhat offset by the appreciation of U.S.-owned foreign stocks, which outpaced the appreciation of foreign-owned U.S. stocks.

For more information, visit [www.bea.gov/bea/di/home/iip.htm](http://www.bea.gov/bea/di/home/iip.htm).

—Amber Kostelac, Data Manager Emeritus, and Rachel Justis, Managing Editor, Indiana Business Research Center, Kelley School of Business, Indiana University

# Baltic States Part III: Estonia

Estonia is the smallest of the three Baltic nations and the focus of our final piece in the series. It is located north of Latvia, south of Finland, west of Russia, with Sweden across the Baltic Sea. Estonia shares the same history as other Baltic States regarding its occupation by the Soviet Union, its independence in 1991, and accession to the European Union (EU) and NATO. Nevertheless, the Estonian economy is quite different from Lithuania and Latvia.



Like the other Baltic States, Estonia is experiencing a steep rise in foreign direct investment. Based on fourth quarter data for 2005, foreign direct investment in Estonia grew 26.4 percent from the same quarter of the previous year, and it has risen an astounding 303 percent since the fourth quarter of 2001 (see **Figure 1**). For such a small country, one of the key factors in its success is its location. Finland remains Estonia's closest neighbor and one of its strongest partners, and has contributed slightly more than

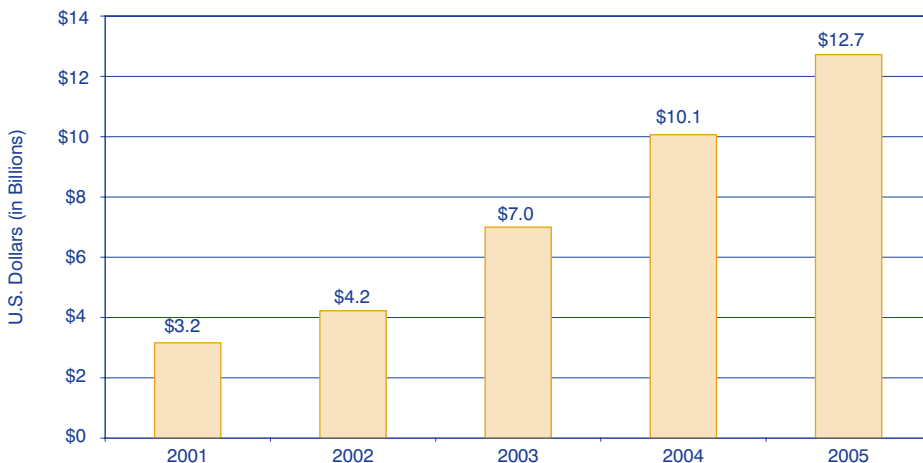
20 percent of the total investment. However, the clear investment leader for Estonia has been Sweden, accounting for 53 percent of the total investment. The United States remained among the top 10 foreign investors along with the Netherlands, Great Britain, Germany, Norway, Russia and Denmark (see **Figure 2**).<sup>1</sup>

Estonia is among the leaders in the region regarding outbound foreign direct investment per capita.<sup>2</sup> During 2005, the biggest portions of the investment flow went to Lithuania

(31.1 percent), Latvia (29.5 percent) and Russia (14.8 percent). However, one must bear in mind that the majority of investments are done by the foreign investors operating in Estonia and seeking further expansion in the region.

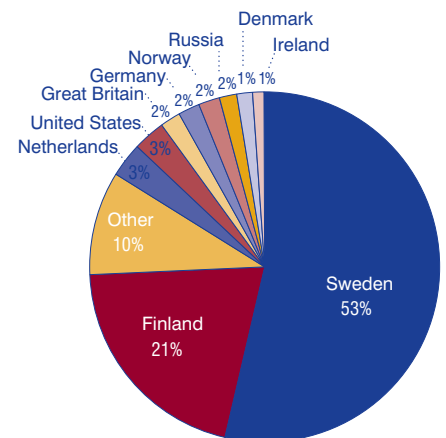
The main reasons foreign investment inside Estonia is growing include low production costs, a comparatively cheap, high-quality workforce, the growing buying capacity of Estonians, as well as close proximity to neighboring states. The Estonian labor force slightly differs from the other Baltic States. Estonia has a high percentage of knowledge-intensive jobs (30.9 percent of all jobs). In comparison, Lithuania (24.7 percent), Latvia (24.7 percent) and other Eastern and Central European countries

**FIGURE 1: FOREIGN DIRECT INVESTMENT IN ESTONIA, DECEMBER 31ST OF EACH YEAR**



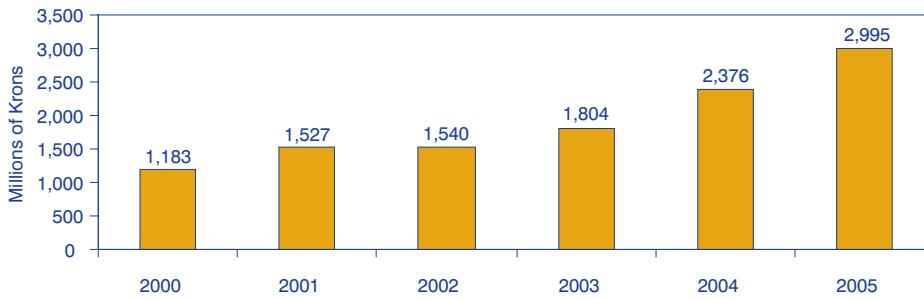
Source: Bank of Estonia

**FIGURE 2: MAIN COUNTRIES INVESTING IN ESTONIA, 2005**



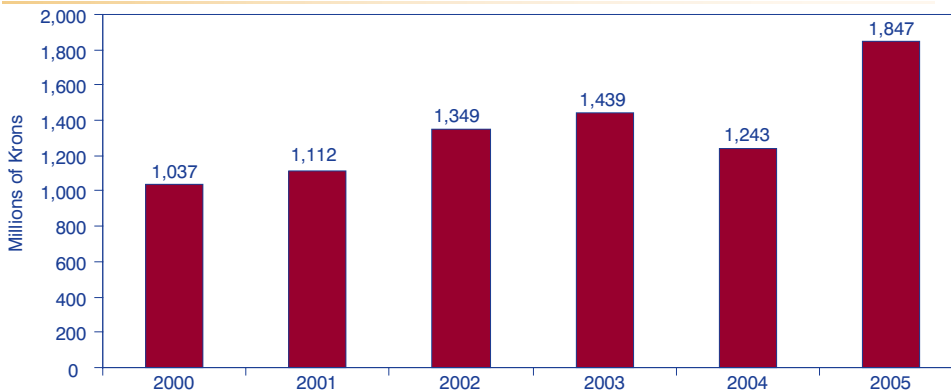
Source: Bank of Estonia

**FIGURE 3: EXPORTS TO THE UNITED STATES FROM ESTONIA, 2000 TO 2005**



Source: Statistical Office of Estonia

**FIGURE 4: ESTONIA'S IMPORTS FROM THE UNITED STATES, 2000 TO 2005**



Source: Statistical Office of Estonia

(Hungary, Slovak Republic, Czech Republic, Slovenia and Bulgaria) have fewer highly skilled jobs.

Foreign investors are primarily investing in Estonia's financial intermediation (45.7 percent), real estate (15.2 percent) and manufacturing (13.3 percent) sectors. The largest banks in Estonia are owned by Swedish and Finnish investors. Foreign investors also tend to invest in telecommunications, transportation and service industries.

One example of the existing potential in Estonia involves the Scandinavian- and Estonian-owned company Skype, which successfully marketed Internet calls (that is, Voice Over Internet Protocol). In 2005, the company was bought by eBay for about \$2.5 billion.

Among the top 50 foreign companies in Estonia in 2006, four are accredited to the United States.<sup>3</sup> The highest

ranked American company is Baltic Rail Services (at sixth place with 32 million euros of investment). It is owned by the Dutch and U.S. companies EEIF Rail/Rail World Estonia. The other three companies accounted for by the United States are Horizon Tselluloosi ja Paberi (13th), Fiesta Real Estate (22nd) and McDonald's (45th).

### **Estonian Trade**

The Scandinavian states are Estonia's best trading partners, especially Finland. In addition, those in Finland heavily travel to Estonia, purchasing services and goods—especially alcohol and tobacco. After Estonia joined the EU, taxes for tobacco and alcohol were abolished. This served as an incentive for Finnish tourists to travel to Estonia and aided in making them the biggest group of hotel and dining service

purchasers while contributing to local trade.

The small size of Estonia limits its ability to produce all the goods needed to become self-sufficient. In addition, during the Soviet period, there were a limited number of Estonian industries and all other needed goods were supplied by the various Soviet Union countries. These are two reasons why Estonia imports more than it exports.

During 2005, however, Estonian exports went up 30 percent. The main export commodities are machinery and equipment, wood and paper, textiles, food products, furniture, metals, and chemical products.

As mentioned before, Estonia's main export partners include Finland (27 percent), Sweden (13 percent) and Latvia (9 percent). The United States accounts for 3 percent of Estonian exports and Estonia's exports to the United States have steadily risen since 2000 (see **Figure 3**).

The main Estonian goods exported to the United States during 2005 were chemical products, textile and textile products, wood and wood products, mineral fuels, mineral oils and their products, and prepared foodstuffs and drinks.

During 2005, Estonian imports increased by 22 percent (see **Figure 4**). The main articles imported to Estonia from the United States were machinery and equipment, means of transport, metals and metal products, and chemical products. Estonia had a positive trade balance with the United States for 2005.

Unfortunately, we cannot track the imports to Indiana due to the many possible places of entry. Nevertheless, we can analyze the exports from Indiana to Estonia. Indiana's exports to the country during 2005 more

## Digital Connections

### InContext

Current workforce and economic news with searchable archives.  
[www.incontext.indiana.edu](http://www.incontext.indiana.edu)

### Hoosiers by the Numbers

Workforce and economic data from the Department of Workforce Development's research and analysis division.  
[www.hoosierdata.in.gov](http://www.hoosierdata.in.gov)

### STATS Indiana

Award-winning economic and demographic site provides thousands of current indicators for Indiana and its communities in a national context.  
[www.stats.indiana.edu](http://www.stats.indiana.edu)

### Indiana Economic Digest

The news behind the numbers, the Digest is a unique partnership with daily newspapers throughout Indiana providing access to daily news reports on business and economic events.  
[www.indianaeconomicdigest.net](http://www.indianaeconomicdigest.net)

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

### Indiana Department of Workforce Development

Commissioner..... Andrew J. Penca  
Research Director..... Hope Clark

10 N. Senate  
Indianapolis, IN 46204

Web: [www.in.gov/dwd](http://www.in.gov/dwd)

### Indiana Economic Development Corporation

Secretary of Commerce .... Mickey Maurer  
Research Director..... Ryan Asbery  
Policy Director ..... David Lips

One North Capitol, Suite 700  
Indianapolis, IN 46204

Web: [www.iedc.in.gov](http://www.iedc.in.gov)

### Indiana Business Research Center

Kelley School of Business, Indiana University

Director..... Jerry Conover  
Executive Editor..... Carol O. Rogers  
Managing Editor..... Rachel Justis  
Graphic Design..... Molly Manns  
Circulation..... Nikki Livingston  
Quality Control..... Shannon Aranj  
and David Landers

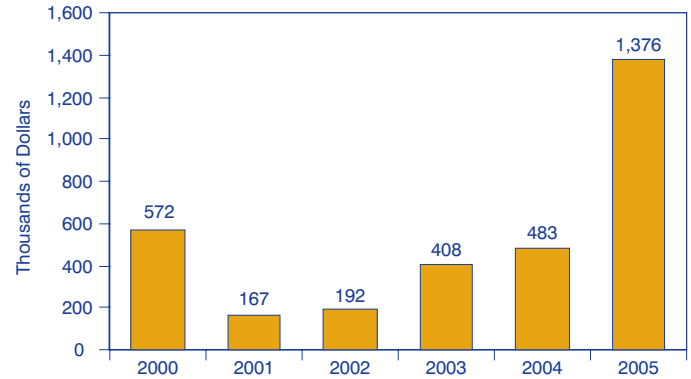
**Bloomington**  
1275 E. Tenth Street, Suite 3110  
Bloomington, IN 47405

**Indianapolis**  
777 Indiana Avenue, Suite 210  
Indianapolis, IN 46202

Web: [www.ibrc.indiana.edu](http://www.ibrc.indiana.edu)  
E-mail: [context@indiana.edu](mailto:context@indiana.edu)

(continued from page 12)

**FIGURE 5: GROWING TREND: EXPORTS FROM INDIANA TO ESTONIA, 2000 TO 2005**



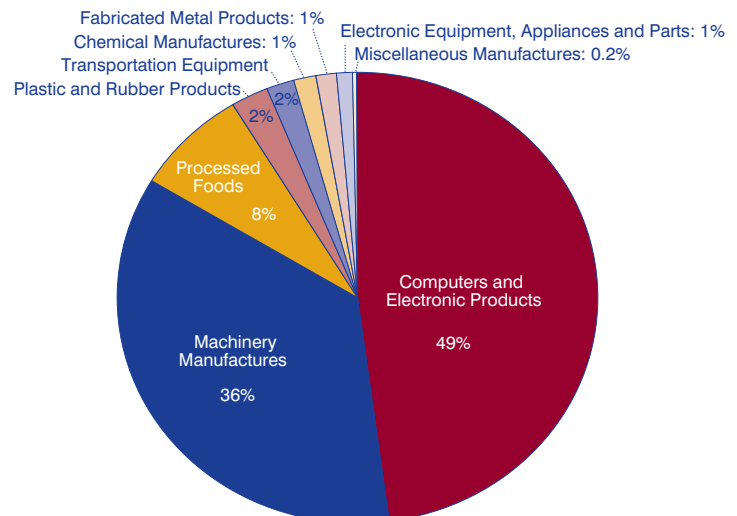
Source: [www.export.gov](http://www.export.gov)

than doubled compared to previous years, increasing by 185 percent (see **Figure 5**). Indiana ranked 23rd among states exporting to Estonia. Virtually half of all Hoosier products exported to Estonia were computers and electronic products, followed by machinery at 39 percent and processed foods at 8 percent (see **Figure 6**).

### Notes

1. Bank of Estonia, [www.eestipank.info/frontpage/en/523+](http://www.eestipank.info/frontpage/en/523+).
2. Estonica, [www.estonica.org](http://www.estonica.org)
3. Companies with Major Foreign Shareholdings in 2006, available online at [www.investinestonia.com/pdf/Major\\_foreign\\_shareholdings\\_2006.pdf](http://www.investinestonia.com/pdf/Major_foreign_shareholdings_2006.pdf)

**FIGURE 6: INDIANA'S EXPORTS TO ESTONIA, 2005**



Source: [www.export.gov](http://www.export.gov)