

How Green is Indiana?

Many economists, workforce analysts and policymakers across the nation assert that the burgeoning green economy may provide new business and employment opportunities. Mitigating climate change, achieving health benefits from preventing pollution, reducing dependence on foreign oil and exploring new business opportunities and job creation potential are all reasons for studying the green sector.

However, traditional information sources and databases on industries and occupations are currently inadequate to accurately measure the number of green jobs in the economy. This article highlights the results of the first survey of Indiana employers to quantify the number of green jobs in Indiana. It focuses on the number and broad activities of current green jobs in Indiana and serves as a baseline to track future green industry growth.

What Is the Indiana Green Jobs Survey?

In the second quarter of 2010, the Indiana Department of Workforce Development and the Indiana Business Research Center conducted the Indiana Green Jobs Survey. The survey involved a sample of 13,520 firms, more than half of which responded. Survey respondents represented a broad spectrum of private as well as public sector industries.

This research was conducted as part of the Driving Change Project, which was funded by the U.S. Department of Labor's Employment and Training Administration.²

Defining Green Jobs

The survey asked employers about the green jobs at their locations. The following definitions of "green" helped respondents determine whether a job was green or not:

- **Green Economy:** Industries providing products or services related to renewable energy, increased energy efficiency, clean transportation and fuels, agriculture and natural resource conservation, and pollution prevention or environmental cleanup.
- Green Jobs: Primary occupations engaged in generating a firm's green-related products or services, as well as other support jobs created by the firm's green-related revenue.
- **Green-Related Industry:** An industry likely to contain firms that produce parts, products or services related to the green economy. Industries and firms were classified as green-related based on their primary product or service, not based on whether they were taking internal steps to use less energy or be more environmentally responsible.
- **Green-Related Occupations:** Green-related industries frequently use job titles that are green or green-related. These green-related occupations have a variety of educational and skill levels, such as:
 - Scientists and engineers involved in energy research
 - Skilled production workers in manufacturing
 - · Critical occupations at small, start-up firms, such as technical sales staff
 - Construction laborers and skilled trade workers used in LEED construction projects

Survey Results

Indiana currently has an estimated 46,879 direct green jobs. **Table 1** shows the distribution of those jobs among five core green activity areas. Green jobs accounted for 1.7 percent of total employment in Indiana.

Table 1: Summary of Indiana Direct Green Jobs by Core Area

| Core Area | Direct Green Jobs | Percentage of All Direct Green Jobs |
|--|-------------------|--|
| Total Direct Green Jobs | 46,879 | 100.0% |
| Increasing Energy Efficiency | 15,715 | 33.5% |
| Agriculture and Natural Resource Conservation | 10,334 | 22.0% |
| Pollution Prevention and Environmental Cleanup | 9,003 | 19.2% |

| Renewable Energy Production | 4,152 | 8.9% |
|--|-------|-------|
| Clean Transportation and Fuels | 2,234 | 4.8% |
| Green Jobs Not Assigned to a Core Area | 5,442 | 11.6% |

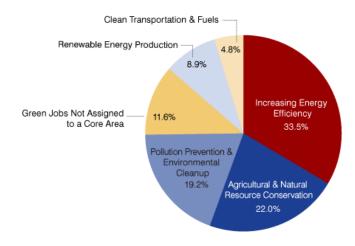
Most of the information collected in the survey reflects only "direct" green jobs: those employees whose *primary* function is the production of green-related products or services for a particular firm. The presence of direct green business activities, however, may also generate additional jobs to support those direct green activities. These support jobs range from accounting staff to human resources staff to clerical staff. For example, a manufacturing firm may have 20 machinists building wind turbine blades, as well as one accountant and two clerical positions that support the wind turbine business. Without the wind turbine blade revenue, the three support jobs would not exist.

Thus, in addition to collecting data on the number of direct green jobs, the survey asked firms to quantify the number of jobs that support their green business activities. The survey results show that an additional 17,437 jobs support green business activities in Indiana.

Green Jobs by Core Green Area

Core areas illustrate the primary green business activities that generate jobs in the Indiana economy. **Figure 1** presents the distribution of green jobs in Indiana by core area according to the survey results.

Figure 1: Distribution of Indiana Direct Green Jobs by Core Area



Source: IBRC, using Indiana Green Jobs Survey data

Considering the importance of the auto industry in Indiana, the clean transportation and fuels core area accounts for a surprisingly small share of the state's green jobs, less than 5 percent of the total. However, bear in mind that Indiana produces many auto parts that may or may not be a component of a green vehicle.

In contrast, increasing energy efficiency (most closely associated with the construction industry) accounted for 33.5 percent of green jobs in Indiana. The next largest area was agriculture and natural resource conservation, with 22 percent of the state's green jobs.

Indiana's green jobs span across a wide range of industries. Construction, services and trade accounted for well over 60 percent of green jobs. Of the 17 industries presented in **Table 2**, only six industries were engaged in manufacturing and accounted for a mere 6,660 of the 40,160 jobs detailed in the table.

Table 2: Top Indiana Industries Generating Direct Green Jobs

| | | | | Green Jobs as a Percent of |
|-------|----------|------------|------------|-------------------------------|
| NAICS | Industry | Green Jobs | Total Jobs | Industry |

| | | | | Employment |
|-----|--|--------|---------|------------|
| 238 | Specialty Trade Contractors | 10,411 | 76,681 | 13.6% |
| 561 | Administrative and Support Services | 5,826 | 132,113 | 4.4% |
| 541 | Professional, Scientific, and Technical Services | 5,322 | 94,278 | 5.6% |
| 423 | Merchant Wholesalers, Durable Goods | 4,483 | 69,569 | 6.4% |
| 924 | Administration of Environmental Quality Programs | 2,809 | 4,475 | 62.8% |
| 325 | Chemical Manufacturing | 1,947 | 29,337 | 6.6% |
| 236 | Construction of Buildings | 1,872 | 30,525 | 6.1% |
| 336 | Transportation Equipment Manufacturing | 1,709 | 78,736 | 2.2% |
| 332 | Fabricated Metal Product Manufacturing | 1,350 | 45,696 | 3.0% |
| 811 | Repair and Maintenance | 919 | 25,800 | 3.6% |
| 111 | Crop Production | 781 | 5,950 | 13.1% |
| 921 | General Government Administration | 704 | 86,073 | 0.8% |
| 333 | Machinery Manufacturing | 687 | 36,143 | 1.9% |
| 321 | Wood Product Manufacturing | 592 | 11,481 | 5.2% |
| 326 | Plastics and Rubber Products Manufacturing | 374 | 31,210 | 1.2% |
| 221 | Utilities | 295 | 17,081 | 1.7% |
| 112 | Animal Production | 82 | 5,410 | 1.5% |
| 999 | All Other Combined Industries | 6,716 | 449,615 | 1.5% |

Source: IDWD, using QCEW second quarter 2009 data for total jobs; IBRC, using Indiana Green Jobs Survey data for green jobs

Green Jobs by Occupations

Table 3 lists the occupations in Indiana with the most green jobs, according to the survey results.

There does not appear to be a common theme among the more prominent green occupations in Indiana. Landscaping and groundskeeping workers reported the largest share of green-related jobs in Indiana, accounting for about more than 6 percent of Indiana's green employment. There was a smattering of production occupations (manufacturing), construction jobs and transportation and material handling occupations.

Counterintuitively, occupations that are obviously green, such as environmental scientists and specialists and environmental engineers, command a smaller share of the occupation ledger at about 1 percent each. This may be explained by the fact that these positions are taken up by comparatively fewer, but more highly qualified, individuals.

Also surprisingly, agriculture-related jobs do not appear to be an important source of green jobs in Indiana. Agriculture-related occupations supplied about 4 percent of green jobs reported in the survey.

Table 3: Leading Indiana Direct Green Occupations

| soc | Occupation | Total Direct Green Jobs | Percent of Total Direct Green Jobs |
|---------|--|----------------------------|--|
| n/a | Total, All Green Occupations | 46,879 | 100.0% |
| 37-3011 | Landscaping and groundskeeping workers | 2,990 | 6.4% |
| 47-2111 | Electricians | 1,906 | 4.1% |
| 41-4012 | Sales representatives, wholesale and manufacturing, except technical and scientific products | 1,629 | 3.5% |
| 17-2051 | Civil engineers | 1,511 | 3.2% |
| 47-2131 | Insulation workers, floor, ceiling, and wall | 1,501 | 3.2% |
| 49-9021 | Heating, air conditioning, and refrigeration mechanics and installers | 1,375 | 2.9% |
| 43-9061 | Office clerks, general | 1,307 | 2.8% |
| 53-7062 | Laborers and freight, stock, and material movers, hand | 1,269 | 2.7% |
| 45-2092 | Farmworkers and laborers, crop, nursery, and greenhouse | 1,057 | 2.3% |
| 37-2011 | Janitors and cleaners, except maids and housekeeping cleaners | 1,041 | 2.2% |
| 51-1011 | First-line supervisors/managers of production and operating workers | 918 | 2.0% |

| 17-2141 | Mechanical engineers | 873 | 1.9% |
|---------|---|-----|------|
| 11-1021 | General and operations managers | 811 | 1.7% |
| 51-2092 | Team assemblers | 630 | 1.3% |
| 49-9042 | Maintenance and repair workers, general | 616 | 1.3% |
| 47-1011 | First-line supervisors/managers of construction trades and extraction workers | 589 | 1.3% |
| 47-2181 | Roofers | 570 | 1.2% |
| 43-3031 | Bookkeeping, accounting, and auditing clerks | 568 | 1.2% |
| 47-2031 | Carpenters | 548 | 1.2% |
| 53-3032 | Truck drivers, heavy and tractor-trailer | 520 | 1.1% |
| 17-2071 | Electrical engineers | 501 | 1.1% |
| 11-9021 | Construction managers | 495 | 1.1% |
| 19-2041 | Environmental scientists and specialists, including health | 474 | 1.0% |
| 49-3023 | Automotive service technicians and mechanics | 473 | 1.0% |
| 51-4081 | Multiple machine tool setters, operators, and tenders, metal and plastic | 469 | 1.0% |
| 17-2081 | Environmental engineers | 457 | 1.0% |
| 11-9141 | Property, real estate, and community association managers | 425 | 0.9% |
| 11-3011 | Administrative services managers | 401 | 0.9% |
| 45-2041 | Graders and sorters, agricultural products | 389 | 0.8% |
| 41-4011 | Sales representatives, wholesale and manufacturing, technical and scientific products | 369 | 0.8% |

Table 4 displays the distribution of green-related occupations by core area. Energy efficiency is the largest core green area in terms of direct jobs. The majority of occupations in the energy efficiency area are construction-related, with electricians and insulation workers leading the occupation list.

Agriculture and natural resource conservation is Indiana's second largest core area for occupations. In keeping with Indiana's many farms, nurseries and greenhouses, the state has a significant number of farm workers and material movers. The largest occupation in the core area is landscaping and groundskeeping workers. This core area represents almost 80 percent of all the direct green jobs for this occupation.

The dominance of Indiana's automobile industry is not very evident from the green job titles in clean transportation and fuels, with only two production occupations making the top five occupations list in this core area. Relatively few engineers inhabit Indiana's clean transportation and fuels core area, but one can speculate that as demand and production of fuel-efficient and alternative fuel vehicles continues to grow, the share of jobs involved with the research, engineering and production in this core area will likely increase.

Table 4: Top Five Occupations in Each Core Green Area

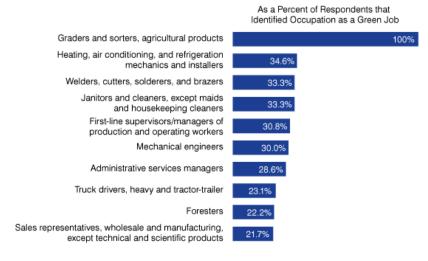
| soc | Occupation | Total Direct Green Jobs | Direct Green Jobs in Core Area | Share of Core Area Direct Green Jobs by Occupation |
|------------------------------|--|----------------------------|--------------------------------------|---|
| Increasing Energy Efficiency | | | 10,065 | |
| 47-2111 | Electricians | 1,906 | 1,885 | 98.9% |
| 47-2131 | Insulation workers, floor, ceiling, and wall | 1,501 | 1,501 | 100.0% |
| 49-9021 | Heating, air conditioning, and refrigeration mechanics and installers | 1,375 | 1,224 | 89.0% |
| 17-2051 | Civil engineers | 1,511 | 1,197 | 79.2% |
| 41-4012 | Sales representatives, wholesale and manufacturing, except technical and scientific products | 1,629 | 1,178 | 72.3% |
| Agricultural a | nd Natural Resource Conservation | | 6,306 | |
| 37-3011 | Landscaping and groundskeeping workers | 2,990 | 2,377 | 79.5% |
| 45-2092 | Farmworkers and laborers, crop, nursery, and greenhouse | 1,057 | 1,008 | 95.4% |
| 53-7062 | Laborers and freight, stock, and material movers, hand | 1,269 | 523 | 41.2% |

| 43-9061 | Office clerks, general | 1,307 | 466 | 35.7% |
|-----------------------------|---|-------|-------|--------|
| 11-9141 | Property, real estate, and community association managers | 425 | 418 | 98.4% |
| Pollution Prev | ention and Environmental Cleanup | | 5,870 | |
| 37-2011 | Janitors and cleaners, except maids and housekeeping cleaners | 1,041 | 952 | 91.5% |
| 37-3011 | Landscaping and groundskeeping workers | 2,990 | 597 | 20.0% |
| 53-7062 | Laborers and freight, stock, and material movers, hand | 1,269 | 555 | 43.7% |
| 11-1021 | General and operations managers | 811 | 446 | 55.0% |
| 17-2081 | Environmental engineers | 457 | 427 | 93.4% |
| Renewable Energy Production | | | 2,429 | |
| 51-8091 | Chemical plant and system operators | 280 | 280 | 100.0% |
| 51-1011 | First-line supervisors/managers of production and operating workers | 918 | 248 | 27.0% |
| 43-9061 | Office clerks, general | 1,307 | 247 | 18.9% |
| 41-4011 | Sales representatives, wholesale and manufacturing, technical and scientific products | 369 | 200 | 54.2% |
| 49-9042 | Maintenance and repair workers, general | 616 | 183 | 29.7% |
| Clean Transpo | rtation and Fuels | | 1,348 | |
| 51-4081 | Multiple machine tool setters, operators, and tenders, metal and plastic | 469 | 345 | 73.6% |
| 53-3021 | 021 Bus drivers, transit and intercity | | 297 | 100.0% |
| 49-3023 | Automotive service technicians and mechanics | 473 | 167 | 35.3% |
| 17-2141 | Mechanical engineers | 873 | 140 | 16.0% |
| 51-2092 | Team assemblers | 630 | 96 | 15.2% |

Filling Vacancies

Figure 2 shows the percentage of employers that, having identified the occupation as a direct green job, expected recruitment difficulties in the future. With the exception of mechanical engineers and foresters, the occupations that employers anticipated difficulty in recruiting were those with low to medium levels of specialized skills and education.

Figure 2: Green Occupations Where Employers Anticipate Potential Recruiting Difficulties

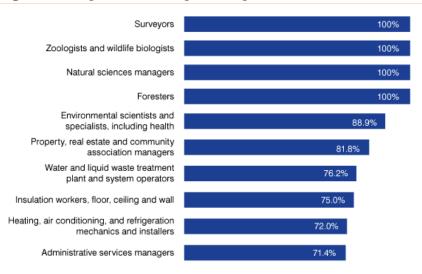


Source: IBRC, using Indiana Green Jobs Survey data

Unique Skills

Figure 3 shows the 10 occupations that more than 70 percent of responding employers identified as requiring unique green skills. This has implications for training programs, as individual green occupations will differ in their need for specialized training. This also has implications for incumbent workers who increasingly find themselves working on green projects, as well as potential new green workers hoping to transition into the green economy.

Figure 3: Occupations that Require Unique Skills for Green-Related Projects



Training

In an attempt to measure the future training needs of employers, the survey asked about the likely mix of training required for their green-related workforce. To keep the survey simple, employers indicated the proportions of these future green jobs requiring formal or informal-on-the-job training. Survey respondents expected that nearly 52 percent of their future green-related employee training would be conducted on the job, while only about 21 percent of respondents stated that their training needs would be formal. (Respondents were not required to answer the question or to ensure that the sum of their percentages equaled 100.)

Summary

The green jobs survey provides a glimpse into a phenomenon that, until now, has remained virtually unexamined in the state of Indiana. Green jobs in the Hoosier state currently comprise 1.7 percent of the total workforce. Manufacturing and construction have the greatest concentrations of green jobs in Indiana. These industries, as the experience of the Great Recession shows, are also more sensitive to economic cycles.

But as the green economy expands, Hoosiers may realize a variety of benefits. First, greener energy production will necessitate the manufacture of new equipment for electricity generation. An emphasis on sustainable energy sources would help reduce the state's carbon footprint and improve air and water quality. Expanding green and sustainable energy production would also support national goals of meeting future energy needs while reducing reliance on foreign oil.

Major benefits may also accrue to Indiana's workforce in the form of new and diverse employment opportunities. By moving the economy toward renewable and clean energy, Indiana can establish a more diverse mix of industries and be better positioned to capitalize on growing industries. Indiana's long-term goal has been to increase the diversification of the state economy and invest in the jobs of the future. Existing Indiana companies can also gain by transforming their products, parts and services to supply the expanding green economy.

To read the full report, *Indiana Green Jobs: Employment Prospects in the Green Economy*, visit **www.drivingworkforcechange.org/greenjobs.asp**.

Notes

- 1. The word "assert" was chosen with care as some of the claims made, and the hopes raised, about green jobs have recently been proven unfounded. The results of the green jobs agenda have some people questioning its value, as in Aaron Glantz, "Number of Green Jobs Fails to Live Up to Promises," New York Times, August 18, 2011, www.nytimes.com/2011/08/19 /us/19bcgreen.html, and Jonah Goldberg, "America's 'Green' Quagmire," Los Angeles Times, August 23, 2011, www.latimes.com/news/opinion/commentary/la-oe-goldberg-green-20110823,0,4353091.column.
- 2. Visit www.drivingworkforcechange.org for more information about this consortium.

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Where Are the Kids? Indiana Households with Children

Indiana was one of a handful of states in the Midwest and Northeast to have more children in 2010 than in the previous decade. Deeper analysis of new Census 2010 results show that those Indiana children are concentrated in fewer households.

We know this because Indiana saw a 2.8 percent drop in family households with children under 18 between 2000 and 2010, equivalent to 21,119 fewer households with kids. One might expect this since more and more Baby Boomers are becoming empty nesters. However, the U.S. saw a 0.4 percent increase in the number of households with children.

Family Composition

Of the 746,717 Indiana households with children under 18 years of age, 67 percent were married couple households, nearly 25 percent were female householders with no husband present and 9 percent were male householders with no wife present (see **Figure 1**).² For the sake of convenience, we will refer to these as single mothers and single fathers; however, one must keep in mind that these categories do not necessarily mean there are no other adults in the household, and cohabiting couples fall within these categorizations.

Single Mother, 182,958

Married Couple, 497,470

Figure 1: Families with Own Children under 18 in Indiana, 2010

Source: IBRC, using Census Bureau data

In fact, nearly half of the single-father households include an unmarried partner. This figure is just 20 percent for single-mother households (see **Table 1**).

Table 1: Single Parent Households with Unmarried Partners, 2010

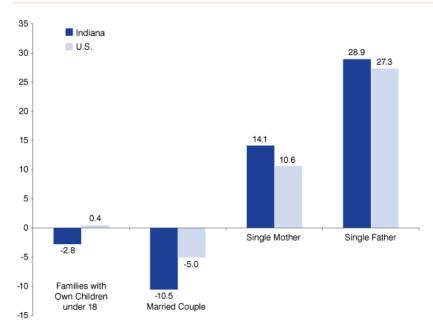
| | All Single-Parent Households | Single-Parent Households that Include an Unmarried Partner | Percent of Single-Parent Households with Unmarried Partners |
|--------------------|------------------------------|---|---|
| Female Householder | 182,958 | 36,927 | 20% |
| Male Householder | 66,289 | 31,815 | 48% |

Source: IBRC, using Census Bureau data

Since Census 2000, both Indiana and the United States have experienced a decline in the number of married couple households with children (see **Figure 2**). Indiana now has 58,643 fewer married couple households with kids, while the number of single-

mother households in the state grew by 22,647 and single-father households increased by 14,877.

Figure 2: Percent Change in Households with Children, 2000-2010



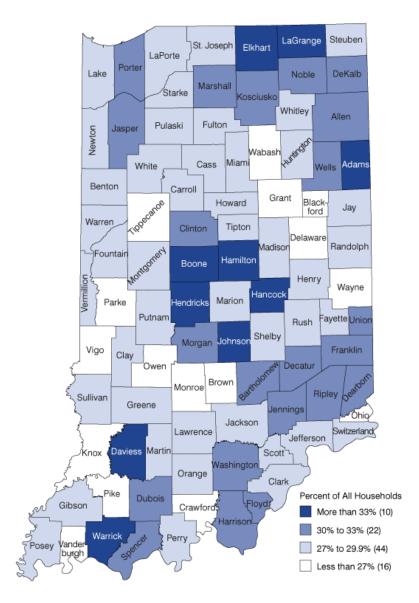
Source: IBRC, using Census Bureau data

Remember that those "single-parent" figures include cohabiting couples. Data limitations prevent us from calculating the growth in unmarried couples with children, but we do know that the total number of cohabiting couples increased by almost 48,000 (38 percent) in Indiana and by 41 percent in the United States between 2000 and 2010.

Families across the State

Hamilton County has the most families with children—41.6 percent of all households in that county are comprised of families with children. **Figure 3** shows that five of the counties with the highest proportion of families with kids are Indianapolis suburban communities.

Figure 3: Families with Children as a Percent of All Households, 2010



Source: IBRC, using Census Bureau data

At the opposite end of the spectrum, we find less than a quarter of households in Monroe, Brown, Delaware and Ohio counties are families with children. Monroe and Delaware counties are undoubtedly impacted by the large student populations at Indiana University and Ball State, while Ohio and Brown counties have older populations.

Learn More

More detail about Indiana households can be found in the 2010 Demographic Profile on STATS Indiana's Census Topic Page.

Notes

- 1. Matt Kinghorn, "Census 2010: Children = Diversity," *InContext*, July–August 2011, **www.incontext.indiana.edu/2011** /**july-aug/article1.asp**.
- 2. The Census Bureau tracks data on "own" children as well as "related" children. All data in this article refer to the presence of the householder's own children.

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Products not Commodities: The Indiana-European Trade Connection

Agriculture is a thriving industry within Indiana, serving as an important contributor to the state's economy as an employer and exporter of agricultural goods. In 2010, Indiana exported \$28.7 billion worth of goods to foreign countries, of which 12 percent was devoted to agricultural products.

Eight of Indiana's top 20 export destinations are European Union (EU) countries, reflecting the strong trading relationship between Indiana and the EU for both agricultural and non-agricultural products. This article defines the EU's common agricultural policy and euro zone; highlights the trading trends between the United States and the EU; and explores agricultural and non-agricultural trade trends between Indiana and the EU.

The EU and Its Common Agricultural Policy

There are three fundamental functions of Europe that are critical to trade with Indiana (as well as any other place). The first is the union of European countries, the second is related to the first but is arguably the most important and that is the euro as a common currency. The third is the subsidization of farming in Europe. Each is described below:

- The European Union has grown into an economic community of 27 countries since its informal inception in the 1950s, officially acquiring its moniker in 1993.
- The monetary union (the euro zone) was established in 1999. The euro zone consists of 17 EU member states that have adopted the euro as their common currency (see **Figure 1**).
- The common agricultural policy (CAP) was created following a decade of severe food shortages during and after World War II. An important program for EU farmers and rural development officials, CAP is designed to provide farmers with a reasonable standard of living, consumers with quality food at fair prices and to preserve rural heritage. This is done through an integrated system of measures designed to maintain commodity prices within the EU and subsidize production. In 1984, 71 percent of the EU budget was devoted to CAP, whereas today the program comprises 41.3 percent of the EU budget. By 2013, the CAP budget will shrink again to an expected 33 percent of the EU budget.²

Euro Zone

European Union Countries
Not in the Euro Zone

Restonia

Restonia

Spain

France

Slovakia

France

Slovenia

Cyprus

Figure 1: Euro Zone Countries, 2011

Source: Indiana Business Research Center

Comparing Agriculture Production in the U.S., Indiana and the EU

Within the United States, 2.2 million farms cover 919.8 million acres, making the U.S. a major producer of agricultural goods. In 2007, the U.S. had 335 million acres used for crop production—particularly corn, soybeans and wheat. In 2009, the nation produced \$283 billion worth of agricultural goods, of which 38.3 percent was exported. The nation's top five commodities produced were cattle and calves, corn, soybeans, dairy products and broilers. 4

Indiana is one of the top producers of several commodities, with 61,500 farms covering 14.8 million acres. This equates to 2.8 percent of all farms and 1.6 percent of all farmland in the United States. The state was responsible for 3.1 percent of the value of all agricultural commodities produced in 2009, thanks to its top five commodities of corn, soybeans, hogs, dairy products and chicken eggs. The state is also a large exporter of agricultural products (39.1 percent of total production in 2009), ranking eighth among all states with a value of \$3.4 billion.⁵

Turning our attention to Europe, the EU had 7.31 million farms under single management as of 2007, with 76 percent being distributed between Italy (19 percent), Poland (15 percent), Spain (13 percent), Romania (12 percent), Greece (10 percent) and France (7 percent). Similar to the U.S., the EU has experienced a subtle decline in the number of farms over time. In 2007, roughly 397,400 acres were being utilized for agricultural purposes—accounting for one-third of EU territory. Slightly more than half (51.2 percent) of the utilized agricultural land area is in France, Spain, Germany and the United Kingdom. The EU's top agricultural goods include cereals (wheat, barley, corn, rye and rice), sugar beets, fruits and vegetables, and vineyard products. The EU also raises cattle, pigs, goats and sheep, of which most have seen declines in production (except for pigs and recently veal).

Trade between the U.S. and the EU

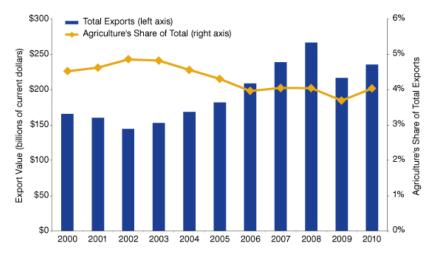
Within the past decade, the EU has had significant growth in its own agricultural exports to its worldwide trade partners, particularly from 2003 through 2007 due to the exchange rate of the euro against the dollar. As of 2009, the EU and U.S. were neck and neck in their shares of agriculture exports.

The U.S. Department of Agriculture's Foreign Agriculture Service (FAS) reports agricultural trade in five categories — consumer-oriented, intermediate, bulk, forest products and fish products. Consumer-oriented products are relatively ready for immediate consumption and include products such as wine and beer, spices, processed fruits and vegetables and cheese. Intermediate goods tend to be products that would help create final goods, such as vegetable oils, live animals, and sugars, sweeteners and beverage bases. Bulk goods would be considered "raw" agricultural products. The other two categories are self-explanatory.

The European Union is an important trade partner with the United States, importing \$244.4 billion worth of products in 2010.8 Collectively, the 27 EU countries ranked as the second largest importer of U.S. goods, though it often alternates with Canada for the top spot. Of the \$244.4 billion, agricultural products comprise a relatively small 4 percent of exports. The majority of the exported agricultural products are consumer-oriented (37.7 percent), followed by intermediate foods (22.7 percent), bulk goods (21.5 percent), fish products (9.3 percent) and forest products (8.8 percent).

Over time, the percentage of agricultural related exports as a share of all exports to the EU has remained relatively constant, ranging between 4 percent and 5 percent (see **Figure 2**). The 2010 value of EU-destined agricultural exports was \$8.9 billion, making it the fifth largest export destination. Despite being the fifth largest market, the EU only accounts for 7.7 percent of all U.S. agricultural exports worldwide. Historically, the EU has always been a top-five export destination of agricultural goods—even serving as the second largest importer from 1989 through 1998.

Figure 2: U.S. Exports to the EU, 2000 to 2010



Source: WISER Trade and USDA

The U.S. also imports agricultural goods from the EU and did so to the tune of \$15.5 billion in 2010. As of 2009, the U.S. serves as the largest importer of EU goods, accounting for 16.7 percent of all the goods exported from the EU. 10 Of the FAS-defined categories, the bulk of the imported goods from the EU were in the consumer-oriented category (63.1 percent), followed by intermediate goods (28.3 percent), forest products (3.8 percent), seafood (2.8 percent), and bulk products (2.0 percent). The largest share of the imports were devoted to wine and beer (28.8 percent) followed by essential oils (12.7 percent) and other consumer-oriented products (11.0 percent)—this includes carbonated drinks, honey/tea, pet food and other products. Therefore, it is apparent that nearly all of the agricultural goods imported from the EU were either nearly consumption-ready or intermediate products for final goods.

Indiana and EU Trade

In 2010, EU countries imported more than a quarter of Indiana's exports (27 percent) for a total of \$7.7 billion. The EU's share of Indiana's exports has consistently hovered around 20 to 30 percent since 2000, peaking at 29 percent in 2009, primarily due to non-EU countries decreasing their imports of Indiana goods. The euro zone countries have consistently imported the bulk of EU-imported products; in 2010, these countries commanded their largest share yet at 77 percent, or \$5.9 billion. **Figure 3** shows that the EU began its dramatic increase in imports in 2002, experienced a drawback in 2009 and surged again in 2010. The majority of this growth came from the euro zone countries as evidenced by their 22.4 percent average annual growth rate since 2002. The non-euro zone countries also experienced growth, but have reduced their imports since 2008 to yield an average annual growth of 6 percent since 2002.

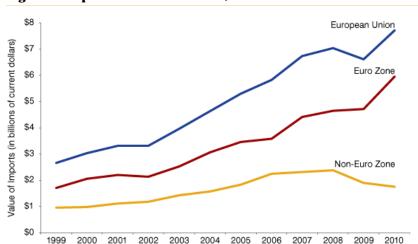


Figure 3: Import Trends into the EU, Euro Zone and Non-Euro Zone, 1999-2010

Source: WISER Trade

Indiana's exports of agricultural products to the EU have grown within the past five years, reaching \$166.8 million in 2010—a six percent growth over 2009. Similar to the national trends, the majority of Indiana's agricultural exports are consumer-oriented

goods (49.6 percent); however, the second-largest category is forest products (27.9 percent) with intermediate goods and raw products comprising the rest of the exports (14.4 percent and 8 percent, respectively). Surprisingly, dextrins—a low molecular weight carbohydrate used for multiple purposes ranging from food processing, textile finishing and pharmaceuticals—comprised the largest share of exports (34.6 percent). Other sizable exports include wood panel products (including plywood) at 18.7 percent, food preparation products at 10 percent and coarse grains (corn) at 7.4 percent. **Figure 4** shows the distribution of Indiana agricultural exports to the European Union in 2010. Mirroring national trends, it is noticeable that half of the exports are already processed before they reach the EU whereas only 8 percent are raw agricultural goods. This may be indicative of Indiana firms also supplying intermediary goods for final goods to be produced within the EU.

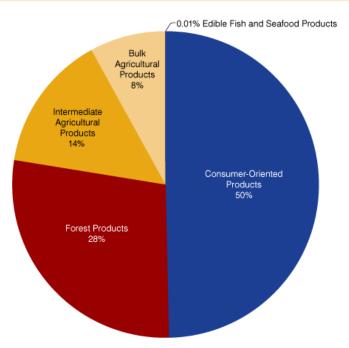


Figure 4: Distribution of Indiana Exports to EU, 2010

Notes: Consumer-oriented products include dextrins, food preparation goods, and other intermediary goods used as an additive to other food products; forest products exclude wood pulp and paper; intermediate agricultural products include essential oils, flours, and other products with minimal processing; bulk agricultural products include corn, sugar cane and shelled peas among other bulk goods and the edible fish and seafood products category is self-explanatory.

Source: Foreign Agriculture Service, USDA

Unfortunately, detailed agricultural import data at the state level are not available from FAS; therefore, WISER Trade was used to estimate the value of imports from the EU into Indiana. In 2010, it is estimated that Indiana imported \$124 million worth of agricultural goods from the EU, a 2.5 percent increase since 2009. Beverages and tobacco products commanded the largest share of the imports (52.1 percent) followed by food products (37.6 percent). Several agricultural imports have seen strong growth since 2009, including beverages and tobacco products (14.7 percent), wood products (26.5 percent), forestry products (468 percent) and fish products (284.2 percent).

Summary

The European Union is a vital trading partner for both the United States and Indiana for agricultural and non-agricultural products. The European Union's CAP supports its farmers through subsidies and price supports, of which the U.S. and Indiana likely feel the impact of policy decisions through changes in its imports and exports of agricultural goods. While the U.S. and Indiana are known for their production of raw commodities, the bulk of the agricultural exports are not in raw commodities—rather in processed or intermediary goods. In the future, it is anticipated that the U.S. and EU will remain neck and neck in their market share of agricultural exports, but the mix of exports may differ greatly.

Notes

- 1. To learn more about Indiana's agriculture industry, see www.incontext.indiana.edu/2010/may-june/article3.asp.
- 2. Future CAP budget details can be found at http://ec.europa.eu/agriculture/faq/cost/index_en.htm.

- 3. The most recent agricultural statistics were obtained from the USDA 2010 Ag Statistics Report, www.nass.usda.gov/Publications/Ag_Statistics/2010/Chapter09.pdf.
- 4. More U.S. facts can be found at www.ers.usda.gov/StateFacts/US.htm.
- 5. More basic state facts can be found at www.ers.usda.gov/StateFacts/IN.htm.
- 6. To learn more about the EU agriculture industry, see http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-ED-10-001/EN/KS-ED-10-001-EN.PDF.
- 7. To learn more, see http://ec.europa.eu/agriculture/publi/map/index_en.htm.
- 8. Due to the USDA having the most comprehensive data for raw agricultural trade activity, this data was combined with WISER Trade data with adjustments made to avoid duplicate reporting for agricultural products.
- 9. The \$8.9 million figure only includes consumer-oriented, intermediate and bulk goods exports. To include forest and fish products, this value would increase to \$10.9 million.
- 10. To learn more, visit http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-GI-10-002/EN/KS-GI-10-002-EN.PDF.

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Measuring the Size and Scope of Government in Indiana and Across the U.S.

The first data from the Census of Governments are scheduled for release beginning in August 2012.

We in the data business are glad since these data provide the only nationwide, comprehensive tally of the number and types of government units and what they spend our tax money on. These data allow apples-to-apples comparisons of government spending across an array of services, including schools, police, fire, road, highway and other government functions.

Before we can use the data though, the actual census must be taken. The *Census of Governments* will begin October 2011 with the mailing of the Government Units Survey. That survey collects descriptive information on the basic characteristics of local governments in preparation for the 2012 *Census of Governments*.

Data from this survey will also be used to update and verify mailing addresses and produce the official count of local government units (see **Figure 1**). In 2012, the Census Bureau will request data on the employment and finances of state and local governments.

Public School
Systems,
293

Municipal,
567

Special Districts,
1,272

Town or Township,
1,008

Figure 1: Indiana's Local Government Composition, 2007

 $Note: Marion\ County\ is\ not\ included\ in\ the\ county\ count\ given\ that\ it\ operates\ under\ Unigov.$

Source: Census of Governments

Is this required? Yes. Under Title 13, Section 161, the *Census of Governments* has been conducted for years ending in "2" and "7" since 1957. It is used to:

- Identify the scope and nature of state and local government
- Provide authoritative benchmark figures of public finance and public employment
- Classify local government organizations, powers, and activities
- · Measure federal, state, and local fiscal relationships

Following the activity of governments over time tells a compelling story of the fiscal condition of federal, state, and local government. And in the end, it should help policymakers make informed decisions about government service and spending.

Questions? Let the Indiana Data Center folks know by emailing Katie Springer (kspringer@library.in.gov) or Carol Rogers

(**rogersc@indiana.edu**). You can also go straight to the Census Bureau (**govs.cms.inquiry@census.gov**) or visit the Governments web page at **www.census.gov/govs**.

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