inContext

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How Innovative Are Indiana's Metro Areas?

In the previous edition of InContext, we presented a new tool for evaluating innovation on a regional basis (see Measuring Regional Capacity for Innovation). This web-based tool was designed for economic development practitioners who are interested in measuring a region's innovative capacity and leveraging that capacity to promote economic growth.[1] This article uses Indiana metros as a case study for using the Innovation Index to explore innovation capacity and innovative activity.

Why Is Innovation Important?

Innovation is a critical capability for regional economies. The innovation index provides some perspective on how well a regional economy translates innovative capacity into prosperity. Innovation turns knowledge into useful products and services. It is fundamental for building prosperity today and in the future. Undifferentiated commodities, such as soybeans, and routine work, such as data entry, will tend to go to the lowest bidder or the cheapest labor—here or abroad. However, when regions innovate, low-value added commodities, such as soybeans, can become higher-value added products like crayons and candles. One of the most important keys to a strong economy is continuous innovation. Having the ability to create new ideas, products and services is a critical element in economic development at the local, regional and state levels.

Until now, economic development practitioners had no practical way to measure the innovation capacity of their local or regional economy. This innovation index represents a breakthrough in regional economic analysis. For the first time, practitioners can examine the capacity of their economy to support innovative companies relative to the nation or other regions. Moreover, users can design their own region by deciding which counties to include in their analysis.

Thus, this tool provides the hard data to develop data-driven development strategies. To be successful with a regional strategy, local leaders face a number of challenges: designing a process of collaboration, defining the practical boundaries of the region, establishing a governance process, defining a common vision, creating shared regional initiatives, making collective investment decisions, agreeing on clear outcomes and metrics, and determining how to evaluate and adjust. Leaders who have access to critical information are able to make better decisions more quickly.

The innovation index lets the practitioner explore innovation in the region by guiding questions and conversations about the region's performance. The data help to focus discussions among regional stakeholders. Generally, the tool provides information about how economic development practitioners and their colleagues in private industry, at

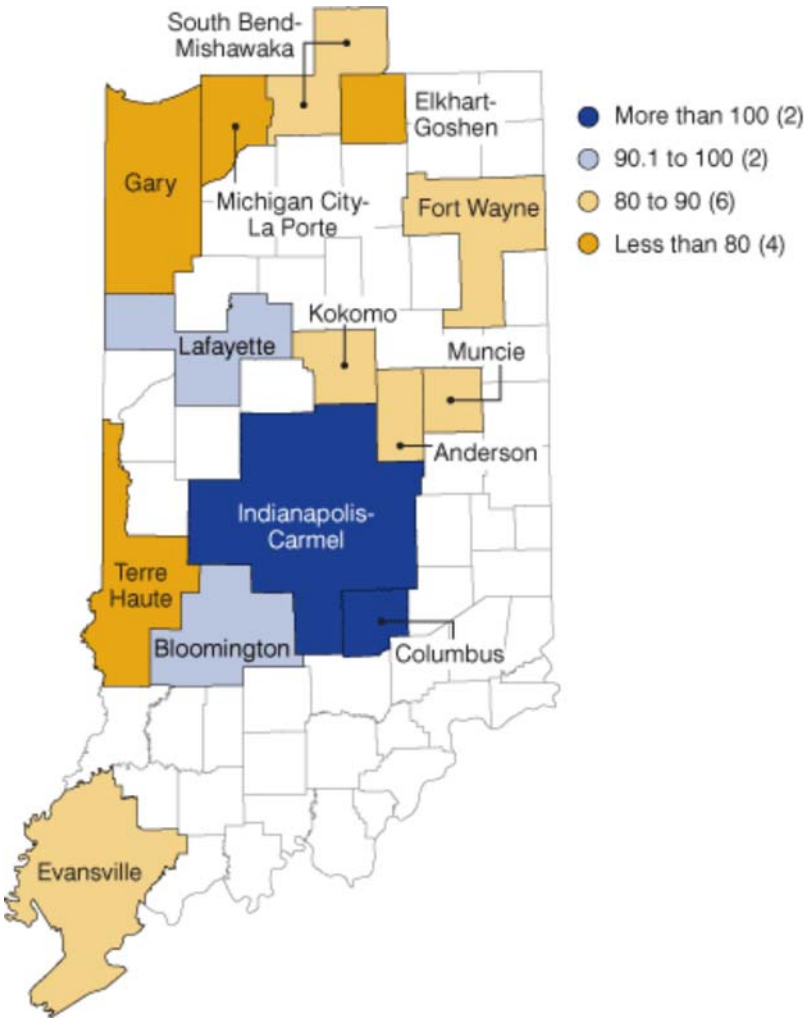
universities and those holding public office can improve their region's innovation capacity. An important goal of creating a durable development strategy is to align, link and focus the region's human energy and resources.

Case Study: Indiana Metros

One application of the innovation index is to guide conversations about a region's strengths and weaknesses, and benchmark performance against other regions in the state. We present Indiana metros to show how an individual might begin the process of collecting and using the data.

The first impression one gets when looking at Indiana's innovation indexes is that, generally speaking, the Hoosier state isn't up to par. Most of the state metros are below the national average. However, as seen in **Figure 1**, Indianapolis-Carmel and Columbus score above 100 on the Innovation Index, exceeding the U.S. average (which is set at 100). At the opposite end of the scale, the three lowest overall scores can be found in northern Indiana: Michigan City, Gary and Elkhart-Goshen.

Figure 1 : Innovation Index Scores by Indiana Metro Area



Note: This article only looks at metros whose central city is within the state, thus excluding Louisville and Cincinnati. However, for the curious, the innovation scores for those metro areas were 83.5 and 102.8,

respectively.
Source: Indiana Business Research Center

The overall index score is derived from 23 indicators that are grouped into the four sub-indexes described below.[2] While Indianapolis-Carmel is the only Indiana metro to exceed the U.S. average on all four sub-indexes, it does not actually take the top spot in any of the individual sub-indexes.

- **Human Capital:** This sub-index suggests the extent to which a county's population and labor force are able to engage in innovative activities. Regions with high levels of human capital are those with enhanced knowledge that can be measured by high educational attainment, growth in young adult age brackets of the workforce (signifying attractiveness to younger generations of workers), and a sizeable number of innovation-related occupations and jobs relative to the overall labor force. The Bloomington metro scores highest on this measure, due largely to the presence of Indiana University. Elkhart-Goshen ranks lowest.
- **Economic Dynamics:** This sub-index measures local business conditions and resources available to entrepreneurs and businesses. Targeted resources such as research and development funds are input flows that encourage innovation close to home, or that, if not present, can limit innovative activity. The Columbus area ranks highest on this measure, while Bloomington ranks lowest.
- **Productivity and Employment:** This sub-index describes economic growth, regional desirability or direct outcomes of innovative activity. Variables in this index suggest the extent to which local and regional economies are thriving and attracting workers seeking particular jobs. The Kokomo metro ranks highest on this measure, while Terre Haute is at the low end of the spectrum.
- **Economic Well-Being:** This sub-index considers the fact that innovative economies improve economic well-being because residents earn more and have a higher standard of living. Decreasing poverty rates, increasing employment, in-migration of new residents and improvements in personal income signal a more desirable location to live and point to an increase in economic well-being. Evansville ranks first among Indiana metros on this measure, while Muncie ranks last.

There is no perfect combination of factors that define an innovative region, but an innovative region could be expected to perform at or better than the nation in at least one category. Half of the 14 metros in the state meet this standard (see **Table 1**).

Table 1 : Innovation Index and Sub-Index Scores for Indiana Metros

Metro Area	Innovation Index	Human Capital	Economic Dynamics	Productivity and Employment	Economic Well Being
Indianapolis-Carmel	102.5	101.5	105	101.5	101.1
Columbus	100.2	83.4	108.4	109.4	98

Metro Area	Innovation Index	Human Capital	Economic Dynamics	Productivity and Employment	Economic Well Being
Lafayette	93.6	95.3	79.9	105	95.1
Bloomington	90.3	108.4	71	90	95.1
Kokomo	89.1	78.1	76.8	111.5	91.6
Fort Wayne	87.9	94.9	75.2	91.6	93.9
Evansville	85.7	88.4	75.6	87.8	101.8
South Bend-Mishawaka	85.2	89.7	72.8	87.5	101.7
Muncie	82.2	88.2	77.1	78.6	90.2
Anderson	81.9	77.2	78.7	84.4	97.8
Terre Haute	78.8	83.7	71.5	75.7	95.8
Elkhart-Goshen	78.7	72.2	76.1	80.7	99.7
Gary	77.7	72.9	72.4	82	94.9
Michigan City-La Porte	77.6	74.3	73.6	80.6	90.7

Note: Click on headers to sort data. Shaded cells indicate values above the U.S. average (i.e., greater than 100).

Source: Indiana Business Research Center

Which Indicators Matter Most?

In order to address the question, it would be helpful to quickly define innovation and offer a measure for innovation outcomes. In short, innovation puts ideas into action with the result of increasing compensation and profits.[3] From a business perspective, innovation only makes sense if it increases profits. Innovation also increases productivity and, typically, as productivity increases, so do wages. Therefore, we use growth in GDP per worker, which includes both wages and profits, as a way to measure innovation results.

Based on statistical analysis, we found that four measures appear to matter most, or, in statistical language, have a positive and significant relationship to innovation:[4]

- Change in high-tech employment share
- Average small establishments per 10,000 workers
- Percent of population, ages 25-64, with some college or an associate's degree
- Population growth rate for ages 25-44

Every metro in the state scored above the U.S. average on at least one of these four variables. Interestingly enough, the Gary metro, which scored quite low on the overall Innovation Index, scores slightly above the U.S. average on three of these four indicators.

Virtually all of the state's metros fared well regarding high-tech employment change (though admittedly most were working from a relatively low base to begin with). Fewer

metros compared favorably to the United States when it came to the small establishments per worker ratio.

Conclusion

The dilemma every regional leadership team must resolve is how to direct limited resources that will produce the desired outcomes for the region in the long-term. This is no small feat, since the leadership team must weigh the likely returns with associated risks and returns (as well as questions of returns for whom). Hard data, whether the innovation index or other means to assess a region's capabilities, help regional leaders focus the strategic dialogue on the issues that matter. One might say that the quality of the information drives the quality of decisions.

The capstone in successful regional collaboration is reaching agreement on the region's strategic priorities. The regional team explores the region's assets, strengths and weaknesses and identifies a range of strategic opportunities and threats. Implementing the strategic priorities will leverage the region's existing economic strengths, shore up weaknesses and direct the region's economy into higher pay-off activities.

A region's performance in terms of the innovation index, and the data components that make it up, can potentially result in some interesting discussions. One might ask why, with the state's flagship university, doesn't the Bloomington metro have a higher innovation score? One might conclude that the Bloomington metro isn't converting its intellectual and human capital into new products, services, income and jobs.

Digging deeper into the data raises some questions about Kokomo. While it is well below the national average on the higher-level indexes, it scores remarkably well in patents—a classic measure of innovation outcomes. The remaining outcome measures seem to indicate that this fertile ground for patent creation is not generating high levels of profits and compensation. Or, it may mean that, with the respectable growth in high-tech employment, one may see prosperity start to rebuild in the city. On the other hand, that fact that net migration is below the national average and that the young adult population measure is also below the national average may indicate that the brainpower creating the patents is not actually living in Kokomo.

These two examples may represent a phenomenon in Indiana as a whole—the Hoosier state isn't taking advantage of its brainpower. The "state context" sub-index present data which are only available on a state level. Indiana does well in terms of science and engineering graduates (scoring a 107), yet many peer states do better in terms of indicators of economic progress. Again, the index may shed some light. The vast majority of the metros do poorly in terms of venture capital and research and development. Remove Eli Lilly from the Indianapolis equation, and, one speculates, Indianapolis would also lag the country. Further digging on why Indiana falls short on the venture capital front may spawn some interesting dialogue among businesses and government policymakers about how to revitalize new business and job creation.

We have provided a brief overview about how economic development practitioners can use the new innovation index tool and, using the innovation indexes of Indiana metro areas as examples, how practitioners can start the strategic process of identifying a region's

strengths, weaknesses, opportunities and threats. With focused energy and insight, Indiana can recapture its lost ground.

Notes

1. The Innovation Index is available at www.statsamerica.org/innovation. For more background on the topic, see the article "Measuring Regional Capacity for Innovation" in the January-February issue of *InContext*. The Innovation Index was developed as part of a recent study conducted for the U.S. Economic Development Administration and done in collaboration with Purdue Center for Regional Development, Strategic Development Group,Inc., the Rural Policy Research Institute, and Economic Modeling Specialists, Inc.
2. A state context sub-index is also provided that includes indicators only available at the state level, but it is not used to calculate the overall index score.
3. The vast majority of value added is comprised of compensation and profits. In economics, value added refers to the returns to the factors of production—primarily labor and capital—that increase the value of a product and corresponds to the incomes received by labor and the owners of capital.
4. In addition, the change in broadband density variable proved to be statistically significant in a model that focused on a smaller time span (2002-2007).

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Indiana's Small Business Snapshot

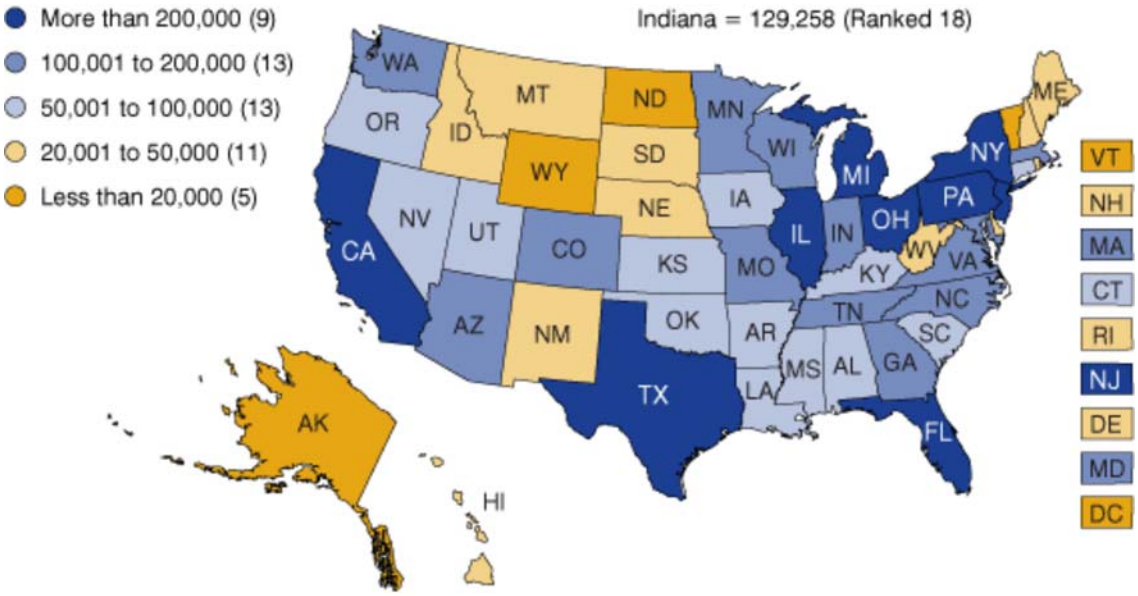
Since helping small businesses has been in the news recently, let's take a look at Indiana's makeup of small establishments. Before proceeding, it is important to note that the definition of a small business varies. Depending on the industry, the Small Business Administration (SBA) defines small business in terms of either the number of employees or the average annual receipts. Where employment is used as the measure, often establishments with up to 500 employees fit the small business definition (especially where the manufacturing sector is concerned), and even up to 1,500 employees in a very limited number of cases.[1]

For the purposes of this article, we will focus on the smallest establishments in Indiana from the employment perspective—those with fewer than 20 employees. Ongoing research by the Indiana Business Research Center has found that the share of establishments with fewer than 20 employees relative to the total number of workers in the region had a positive and significant influence on gross domestic product per worker.[2] Therefore, these establishments are worth a closer look.

How Many?

In all, Indiana had 152,858 establishments in 2007, with 129,258 of those being small businesses (defined here as having fewer than 20 employees). This ranked Indiana 18th among states and the District of Columbia in the sheer number of small businesses (see **Figure 1**).

Figure 1: Number of Small Business Establishments, 2007

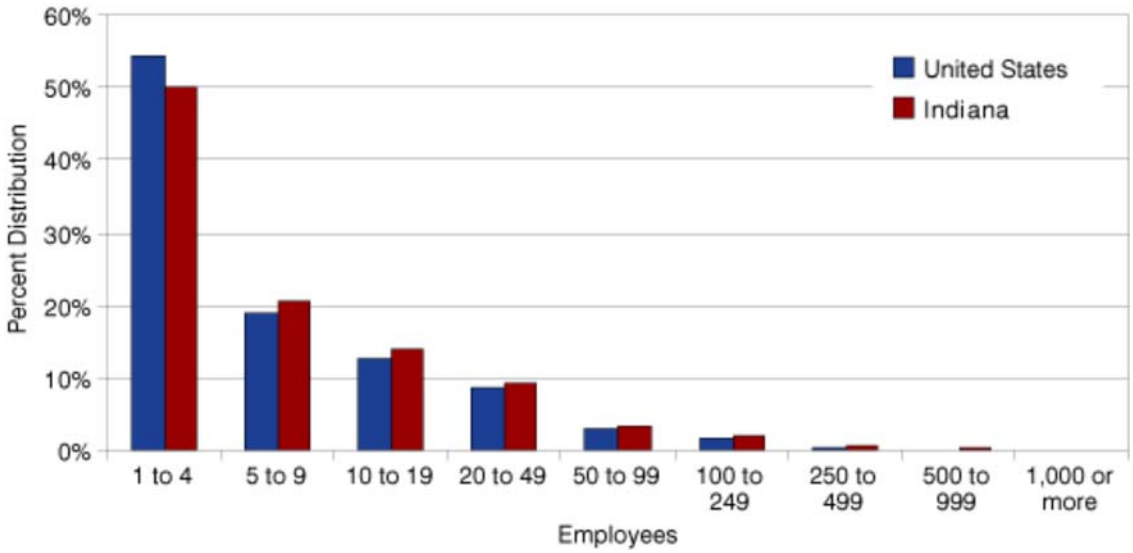


Note: A small business is defined as having fewer than 20 employees

Source: IBRC, using U.S. Census Bureau County Business Patterns

In 2007, 84.6 percent of all Indiana's establishments were small businesses (with one to 20 employees), employing nearly 632,000 people (that's 24 percent of all workers). About half of all small businesses in Indiana employed four or fewer people, another 20 percent of those establishments employed five to 10 people, and about 14 percent employed 10 to 19 people. Compared to the United States, Indiana had a higher proportion of establishments in every size class except businesses with one to four employees (see **Figure 2**).

Figure 2: Percent of All Establishments by Number of Employees in Indiana and the United States, 2007



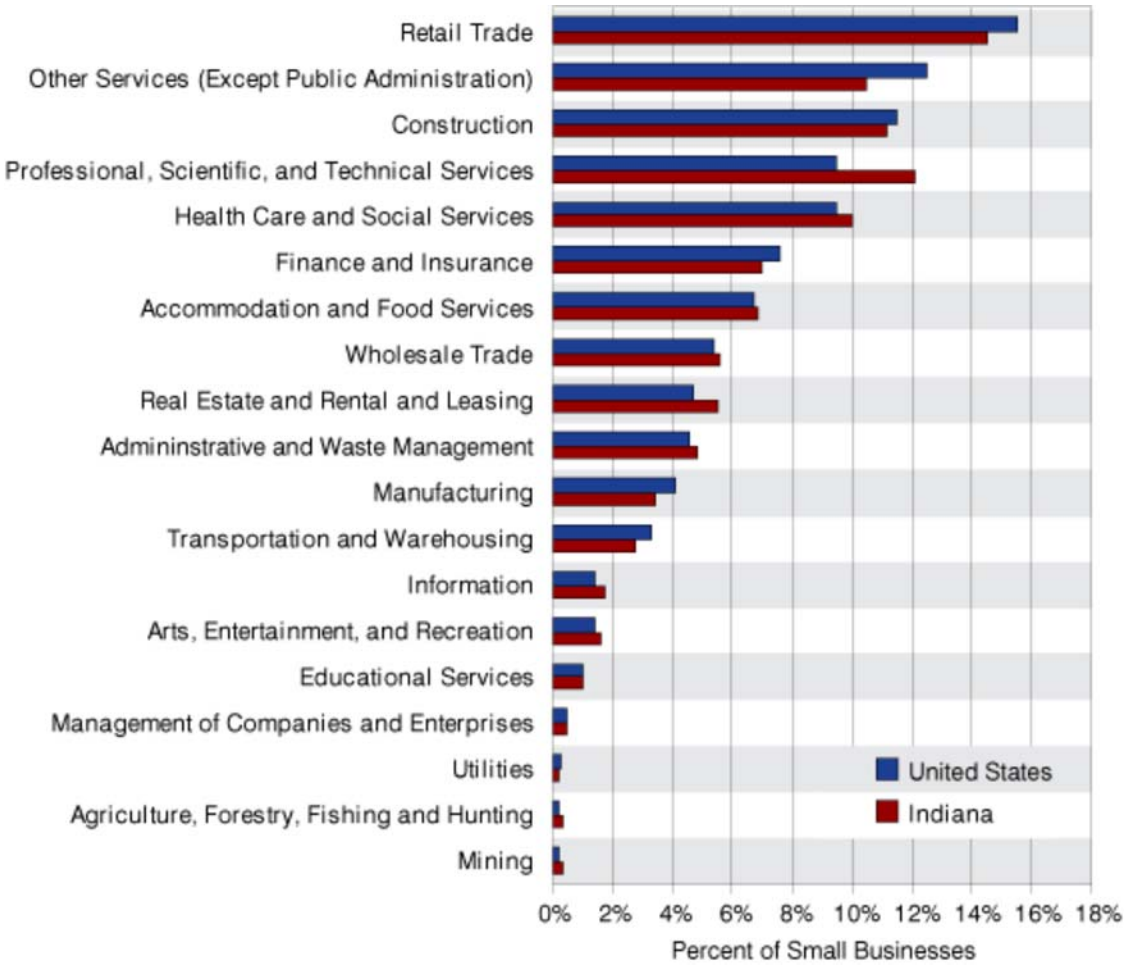
Source: IBRC, using U.S. Census Bureau County Business Patterns

Which Industries?

Of the small businesses in Indiana, the retail trade industry had the most establishments (right at 20,000 establishments). Other services (including such industries as repair and maintenance; personal and laundry services; and religious, grant-making, civic, professional, and similar organizations) also make up a relatively large portion of small business in Indiana, with 12.5 percent of all small businesses in the state. Construction has the third highest number of small businesses, with more than 14,800 establishments.

Overall, the distribution of small businesses across industry sectors in Indiana was not so different from the United States, though a few industries stand out. Retail trade establishments had a higher percentage in Indiana than the United States. On the other hand, higher-paying industries such as finance and professional, scientific and technical services had higher proportions of establishments in the United States than in Indiana (see **Figure 3**).

Figure 3: Percent of Small Businesses by Industry, 2007



Source: IBRC, using U.S. Census Bureau County Business Patterns

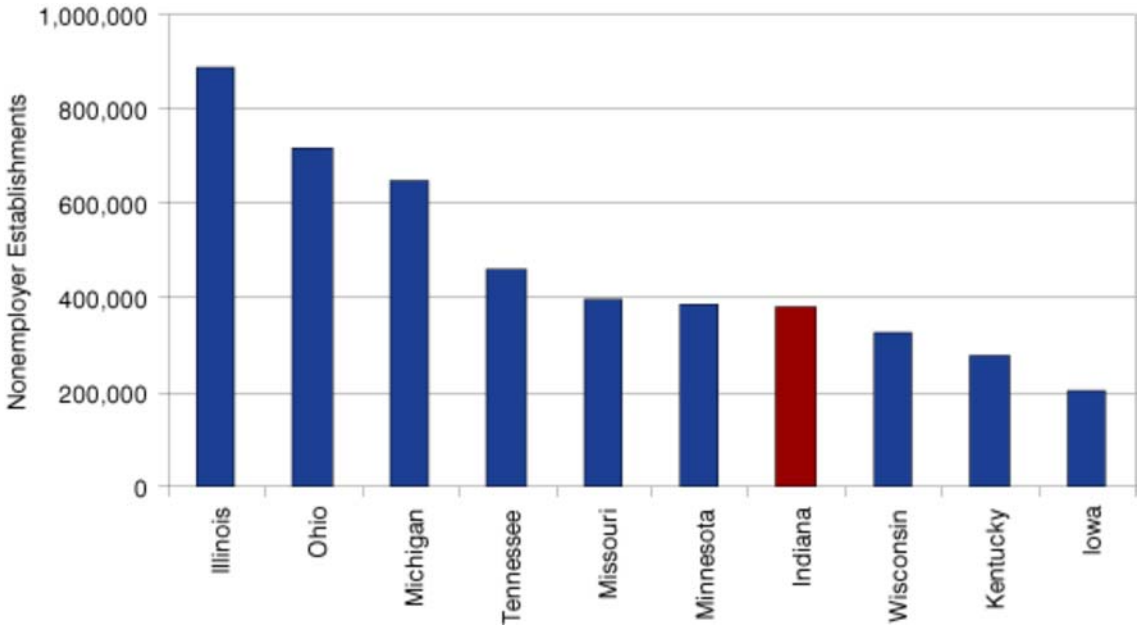
How Big Is the Payroll?

How do these small businesses fare in terms of economic activity? The annual payroll of all businesses with less than 20 employees in Indiana added up to $18.8 billion in 2007. This total averaged out to about $29,825 per small business employee. Across the United States, average annual payroll for small business employees was $35,485 in 2007.

What about the Self-Employed?

Not included in the establishment data above are data about self-employed people with no employees on the payroll (known as nonemployer establishments). There are nearly two and a half times as many of these self-employed establishments (379,813 establishments) as there are total establishments with a payroll. Indiana's number of nonemployer establishments ranked the state 21st nationally and seventh among its Midwestern neighbors (see **Figure 4**).

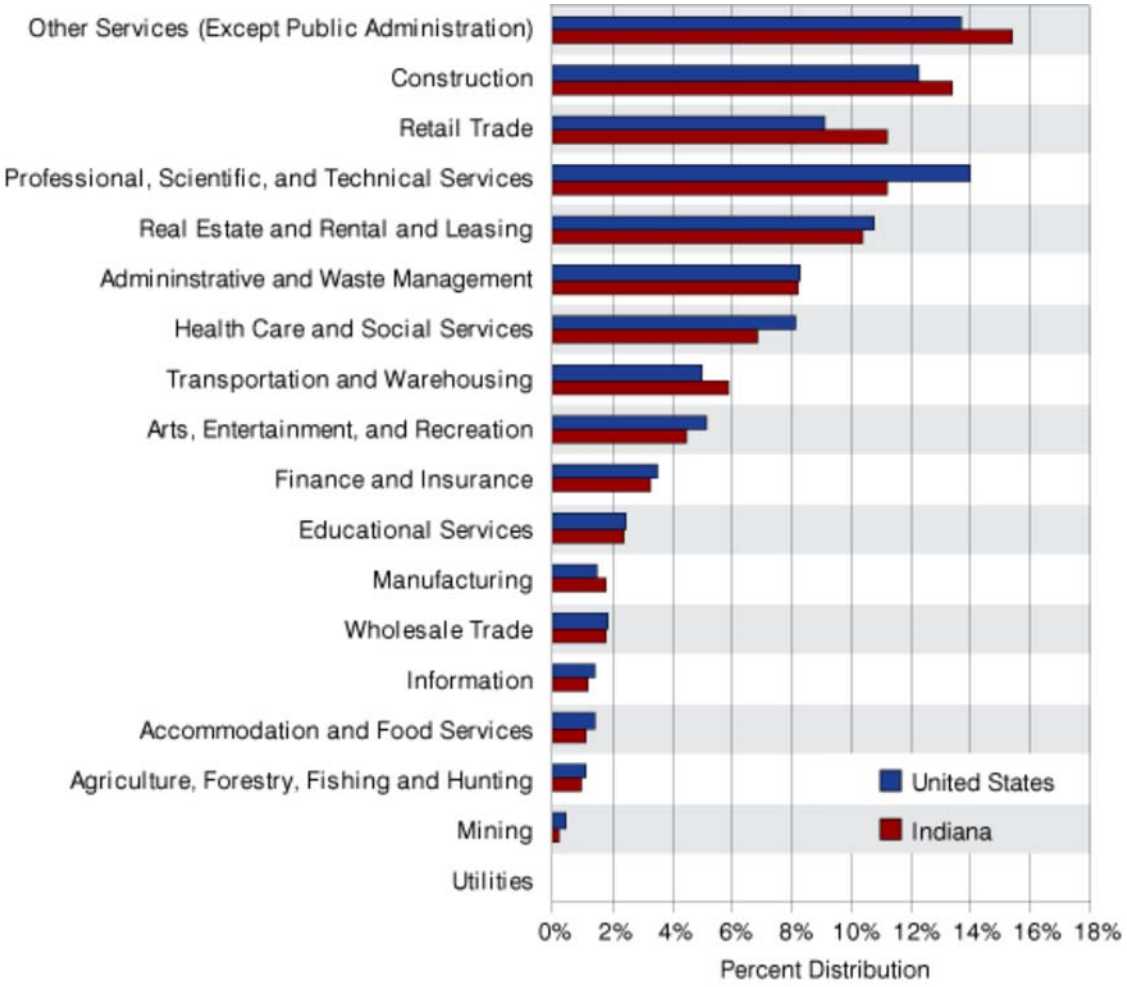
Figure 4: Number of Nonemployer Establishments in Midwestern States, 2007



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

Other services, construction and retail trade were the three industries with the highest proportion of establishments with no employees. Nationally, retail trade barely made the top five for establishments with no employees, being outdone by professional, scientific and technical services; other services; construction; and real estate (see **Figure 5**).

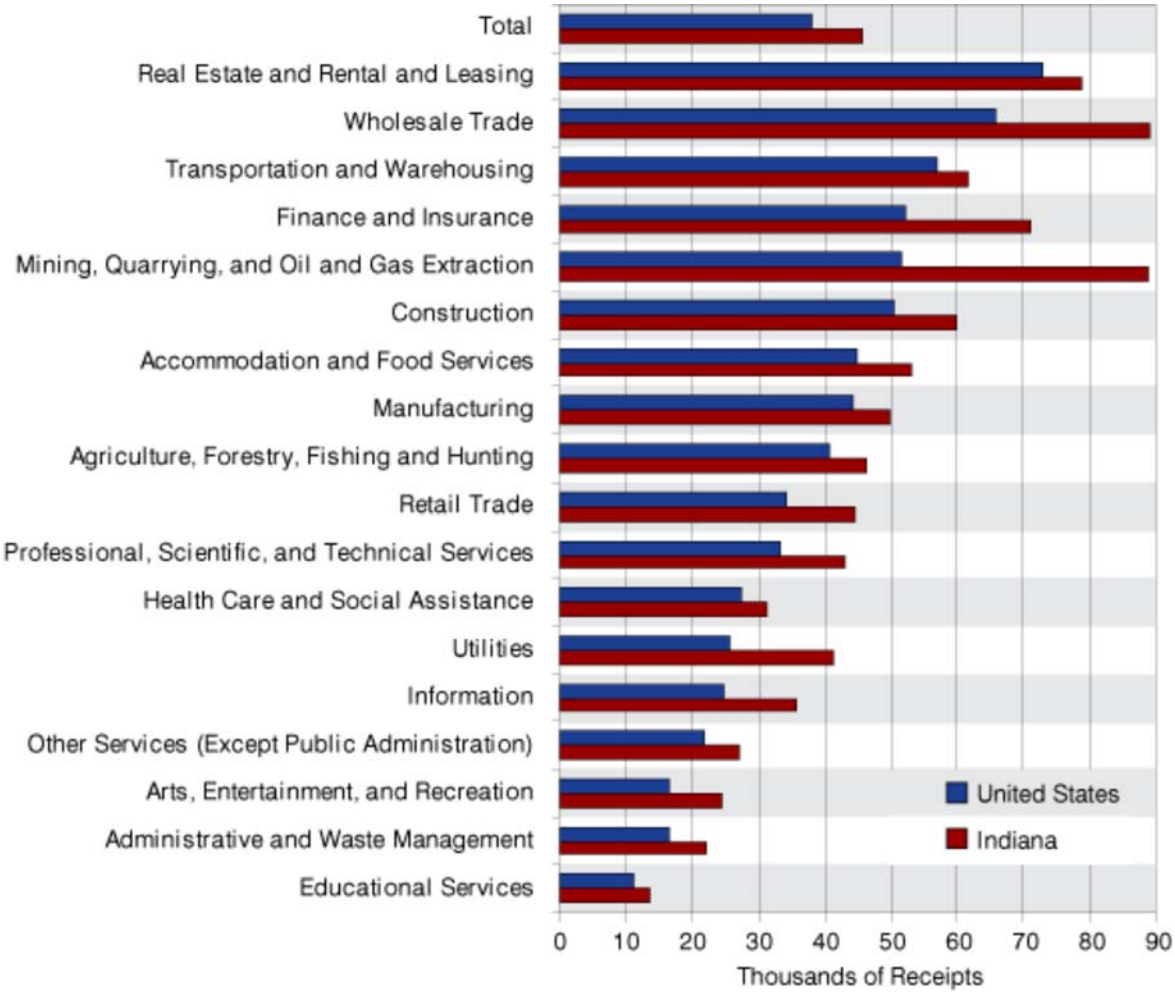
Figure 5: Nonemployer Establishments by Industry as a Percent of Total Nonemployer Establishments, 2007



Source: IBRC, using U.S. Census Bureau County Business Patterns

The average receipts per nonemployer establishment in Indiana were $37,915, compared to U.S. receipts of $45,688 per establishment. [3] This trend held true across all major industry sectors (see **Figure 6**).

Figure 6: Receipts per Nonemployer Establishment in Indiana and the United States, 2007



Source: IBRC, using U.S. Census Bureau County Business Patterns

Learn More

About 24 percent of Hoosier workers are employed by small businesses with fewer than 20 people, making it a vital part of the economy. For additional information on small businesses in your ZIP code, county, or metro, visit the Census Bureau's County Business Patterns page at www.census.gov/econ/cbp/.

Notes

1. www.sba.gov/idc/groups/public/documents/sba_homepage/serv_sstd_tablepdf.pdf
2. Visit www.statsamerica.org/innovation/innovation_index/research.html for more information on this research, which was made possible by a grant from the U.S. Economic Development Administration.
3. This includes gross receipts, sales, commissions, and income from trades and businesses, as reported on annual business income tax returns. Business income consists of all payments received for services rendered by nonemployer businesses, such as payments received as independent agents and contractors.

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The Year that Counts: 2010

Every 10 years a census is conducted to count everyone living in the United States and this is the year.

Why count everyone? There was a compelling reason the founding fathers made the census a constitutional mandate: representation in the United States Congress. Since the first census count was conducted in 1790, most people living in America have told the federal government how many people live in their house, with decade-by-decade additions to the point that the 1960 census asked about washers, dryers and televisions.[1]

This year, in fact this spring, we will all receive a very short census form, one with just 10 questions on it. Nothing about how many cars we drive or if we have a telephone. Instead, we will be asked some pretty straightforward questions about things that anyone passing our home on a summer day would notice about us.

What's on the Form?

To make the case for its simplicity, the following provides a question-by-question description with an attempt to explain the reasoning of the questions. An interactive sample of this form is available on the Census Bureau's 2010 website.

1. **How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?**
   Number of people **=**

One misconception about the census is that everyone gets a census questionnaire. Actually, every household gets a questionnaire and the person who fills it out fills it out for everyone living in that household. A household could be one person, for example an elderly grandmother living alone. She would fill it out indicating just one person. However, another household might be much larger, for example a retired couple whose daughter and two grandchildren live with them. In that case, the response to the question would be five.

2. **Were there any additional people staying here April 1, 2010 that you did not include in Question 1?** ***Mark all that apply.***

   Children, such as newborn babies or foster children

   Relatives, such as adult children, cousins, or in-laws

   Non-relatives, such as roommates or live-in baby sitters

   People staying here temporarily

   No additional people

Here the form asks us to indicate if there are newborn babies or foster children; cousins or in-laws, etc. Why? Because while question one is pretty simple, some

folks might over-think it and answer two people because the house they own is in just their two names. For whatever reasons, sometimes people don't put the actual number of people living in the home, so question 2 is a way to find that out.

3. Is this house, apartment, or mobile home — *Mark ONE box.*

Owned by you or someone in this household with a mortgage or loan?
Include home equity loans.

Owned by you or someone in this household free and clear (without a mortgage or loan)?

Rented?

Occupied without payment of rent?

You may think this question is new and in response to the recent housing crisis, but it's actually been part of the form since 1890. Homeownership rates have long been critical information for monitoring the economic well-being of our country and our communities. Of course, the data collected in 2010 will help us understand much more clearly what the effect of the housing bubble has been all across America.

4. What is your telephone number. *We may call if we don't understand an answer.*
Area Code + Number

This one seems pretty innocuous, but some people might be hesitant to answer. The reason for the telephone number is so that the Census Bureau can contact the household if they don't understand an answer or if the form was incomplete.

5. Please provide information for each person living here. Start with a person living here who owns or rents this house, apartment, or mobile home. If the owner or renter lives somewhere else, start with any adult living here. This will be Person 1.
What is Person 1's name? *Print name below.*

Two important points can be made about this particular question. First, the person who is filling out the form does so for everyone in the household. Second, they do need to fill in their name and then the names of Person 2, and Person 3, and so on. Why names? Well, this helps to insure that the census doesn't double count people and it helps the person filling out the form ensure they write everyone in. We do want the census count to be accurate.

6. What is Person 1's sex? *Mark ONE box.*

Male

Female

Again, pretty straightforward—mark male or female. This is one of the oldest questions (it appeared on the very first U.S. census form in 1790).

7. What is Person 1's age and what is Person 1's date of birth? *Please report babies as age 0 when the child is less than 1 year old.*

A series of boxes are presented to fill in age of the person on April 1, 2010. There are three squares available for that, as more and more people are living into

three-digit territory nowadays. The other set of boxes is there to fill in the actual month, day and year of birth. This is a way of double-checking the data, especially for those under one year of age—for some reason, parents are reluctant to put in age "0."

8. Is Person 1 of Hispanic, Latino, or Spanish origin?

No, not of Hispanic, Latino, or Spanish origin

Yes, Mexican, Mexican Am., Chicano

Yes, Puerto Rican

Yes, Cuban

Yes, another Hispanic, Latino, or Spanish origin

First asked a mere forty years ago, this question attempts to learn about the in-migration of people from Latino countries.

9. What is Person 1's race? *Mark one or more boxes*
Indicates a space provided to print specific name of race.

White

Black, African Am., or Negro

American Indian or Alaska Native*

Asian Indian	Japanese	Native Hawaiian
Chinese	Korean	Guamanian or Chamorro
Filipino	Vietnamese	Samoan
Other Asian*	Other Pacific Islander*	Some other race*

A question about race has been on the census form since the first census in 1790. According to the Census Bureau's publication *Factfinder for the Nation*, "the concept of color or race in the censuses has never denoted any scientific definition of biological stock. "White" and "Black" persons have been identified in every decennial census since 1790. American Indians were first enumerated as a separate group in the 1870 census; however, until 1890, those in the Indian Territory or on reservations were not included in the official U.S. population count used for congressional apportionment. Data have been collected on the Chinese population since the 1870 census, and on the Japanese beginning in 1890." The race question is posed after the question about Hispanic origin because Hispanic or Latino is not considered a race.

However, we have found in recent censuses that people who identify themselves as Hispanic also tend to write in "Hispanic" or another similar term in the race question. Note that since 1960, all questions have been "self-identification," meaning the person responding to the form determines what race he or she is. Prior to 1960, census takers determined the race of persons in the household being counted.

10. Does Person 1 sometimes live or stay somewhere else?

No

Yes	
In college housing	For child custody
In the military	In jail or prison
At a seasonal or second residence	In a nursing home
For another reason	

This final question is really a way for the Census Bureau to check accuracy and to insure the person responding didn't inadvertently count either fewer or more people living in the household. An example might be that a person included as living in the household is actually a college student who lives most of the year on a campus in another city or state. Sometimes, parents think that if their college student is a dependent, they need to count them as living in the household. For census purposes, this is absolutely not the case—only people living in the household much or all of the year should be included on the census form.

But Wait, It's Actually More than 10 Questions!

If there is more than one person living in the household, the person filling out the form needs to answer questions about them as well. So in reality, while there might only be 10 questions, eight of the 10 apply to all the people living in the household.

Bottom Line

If everyone fills out the form and mails it back quickly, we can accomplish two things: (1) get a better count and (2) save our tax dollars by not spending lots of money on follow-up for folks who don't respond. A good count is also good for all Hoosiers—it will ensure we get proper representation in Congress and that we get our fair share of federal funding for schools, hospitals, streets, roads and highways, housing, and a host of other funding that flows through government programs.

Hundreds of communities in Indiana, including at the state-level, have formed Complete Count Committees to help promote the census.The state-level Complete Count Committee has members from a broad spectrum of organizations and agencies, with Mark Everson serving as the committee chair.

More information about how the Census is working in Indiana is available at www.census.indiana.edu. For more information, please e-mail census@indiana.edu or contact Carol O. Rogers, the State's census liaison at rogersc@indiana.edu.

Important Dates

March 2010

Census forms are mailed or delivered to households.

April 2010

National Census Day: Use this day as a point of reference for sending your completed forms back in the mail.

April-July 2010

Census takers visit households that did not return a form by mail.

December 2010

By law, the Census Bureau delivers population information to the President for apportionment.

March 2011

By law, the Census Bureau completes delivery of redistricting data to states.

Notes

1. More information about the history of the census is available at www.census.gov/history/www/through_the_decades/.

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Where Can I Find Commuting Data?

Understanding the relationship between where people live and where people work is necessary for a variety of analyses. Commuting data at the county-level is readily available from a variety of sources, but this article will focus on how you can use the Local Employment Dynamics (LED) data from the Census Bureau to better understand commuting flows for smaller units of geography, such as cities, ZIP codes or school districts.

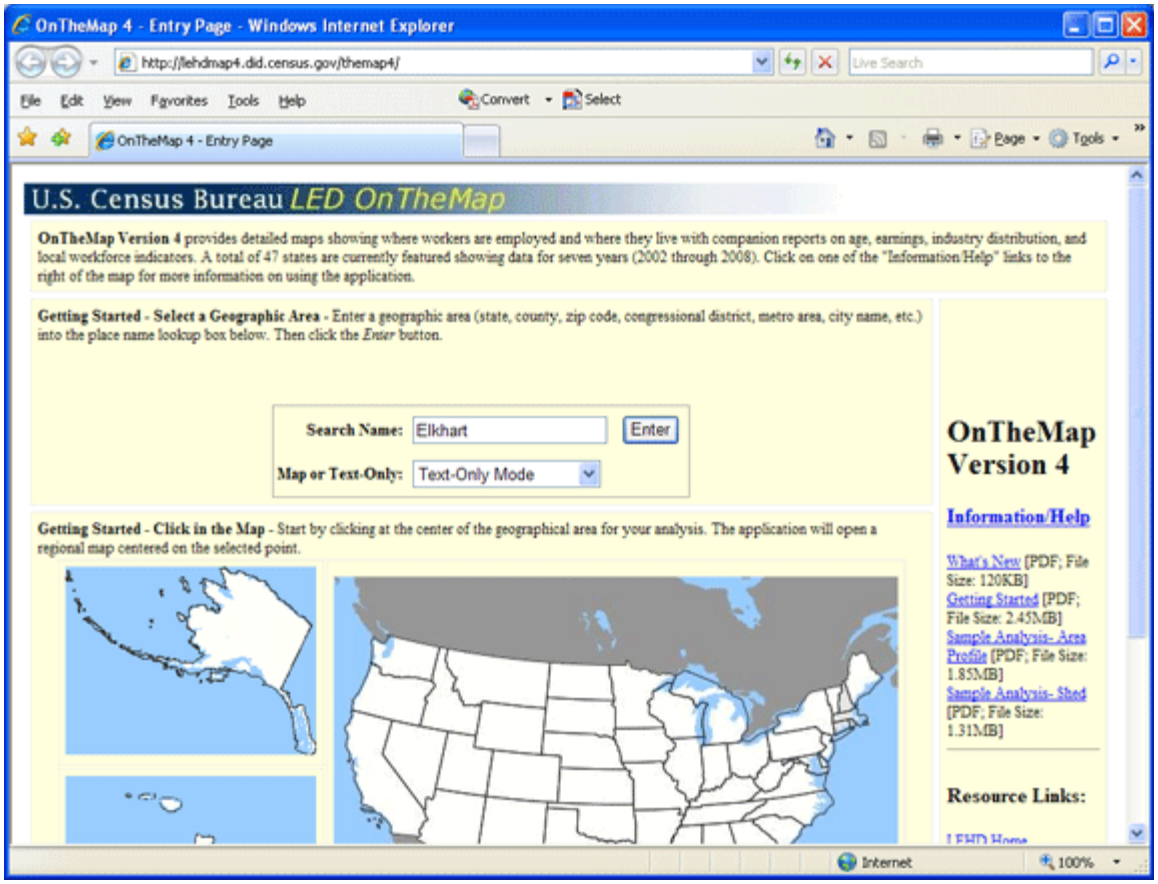
The Census Bureau recently released OnTheMap Version 4. This tool provides data about where workers are employed and where they live with companion reports on age, earnings, industry distribution and local workforce indicators. Data are available for 47 states with coverage from 2002 through 2008.[1]

The map interface itself is somewhat cumbersome, so this article walks you through how to actually bypass the maps and access the data tables more quickly. (However, for those who are interested in using the map interface, several tutorials are available on the site.) For purposes of this article, we will look at where people who work in the city of Elkhart live.

The Steps

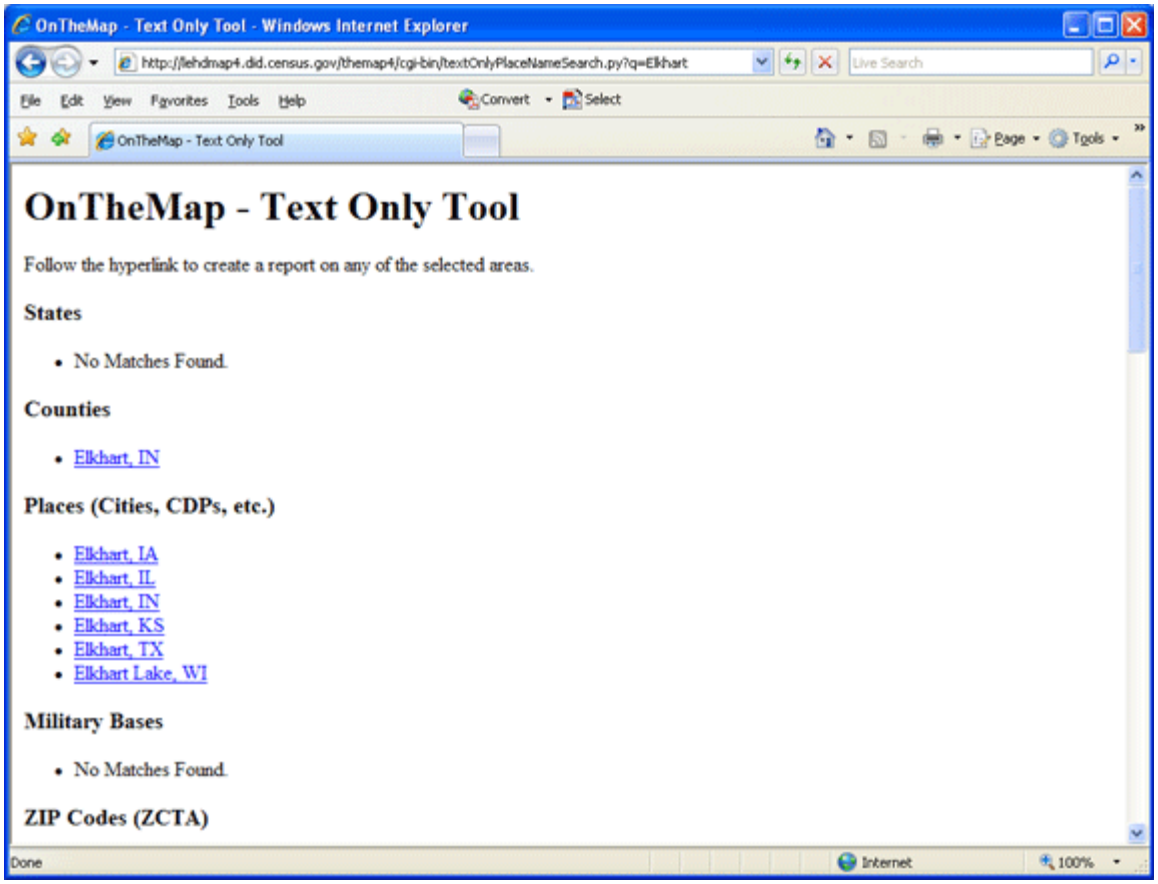
Step 1: Search for a Geographic Area

From the start page, type in your geography in the "Search Name" field. Note: Don't try to be helpful and enter the type of the geography or other limiting factors (such as "Elkhart City" or "Elkhart, IN"). Doing so will cause no matches to be found. Change the "Map or Text-Only" field to text-only mode. Then select "Enter."



Step 2: Choose Geography of Interest

The resulting page provides a list of all the geographies in the database that match what you typed. Select the specific geography of interest.

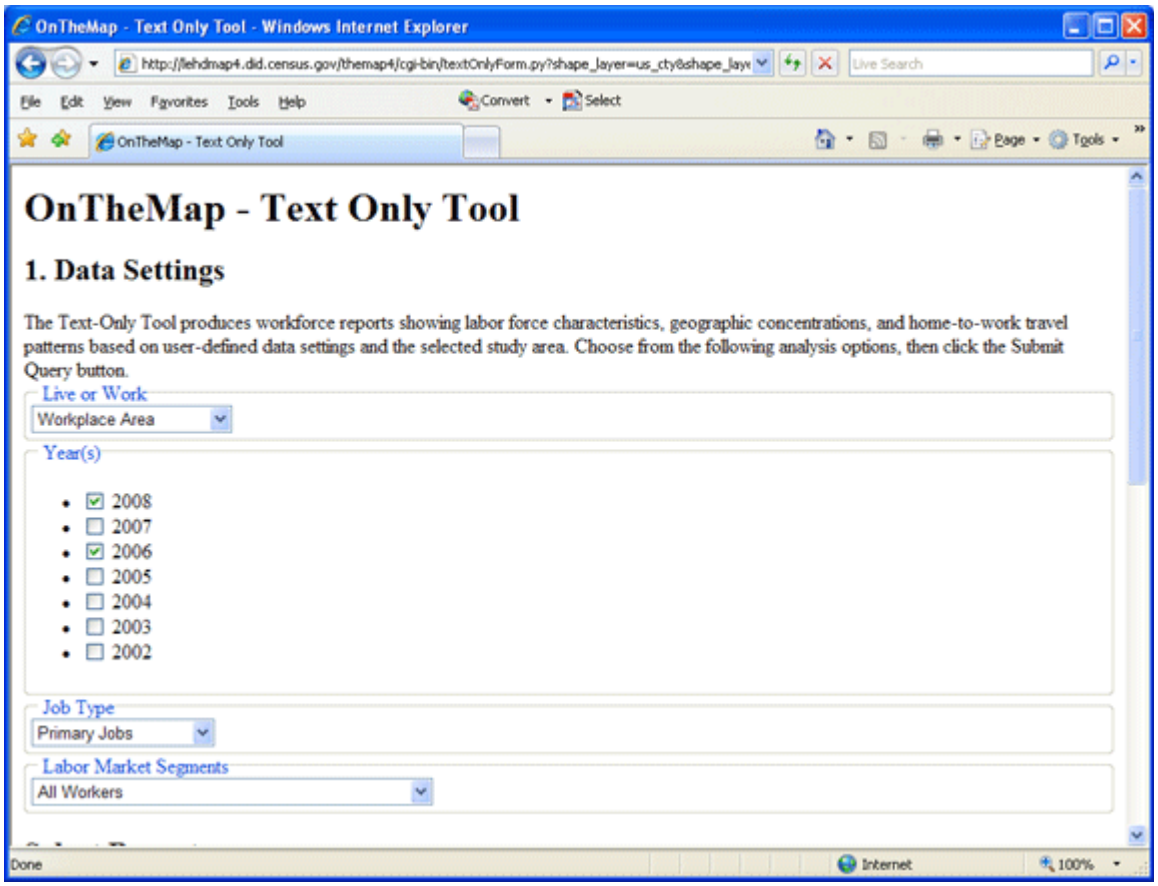


Step 3: Customize Your Data Settings

This is where all of the important data settings occur, so we'll provide some explanation as to the available choices.

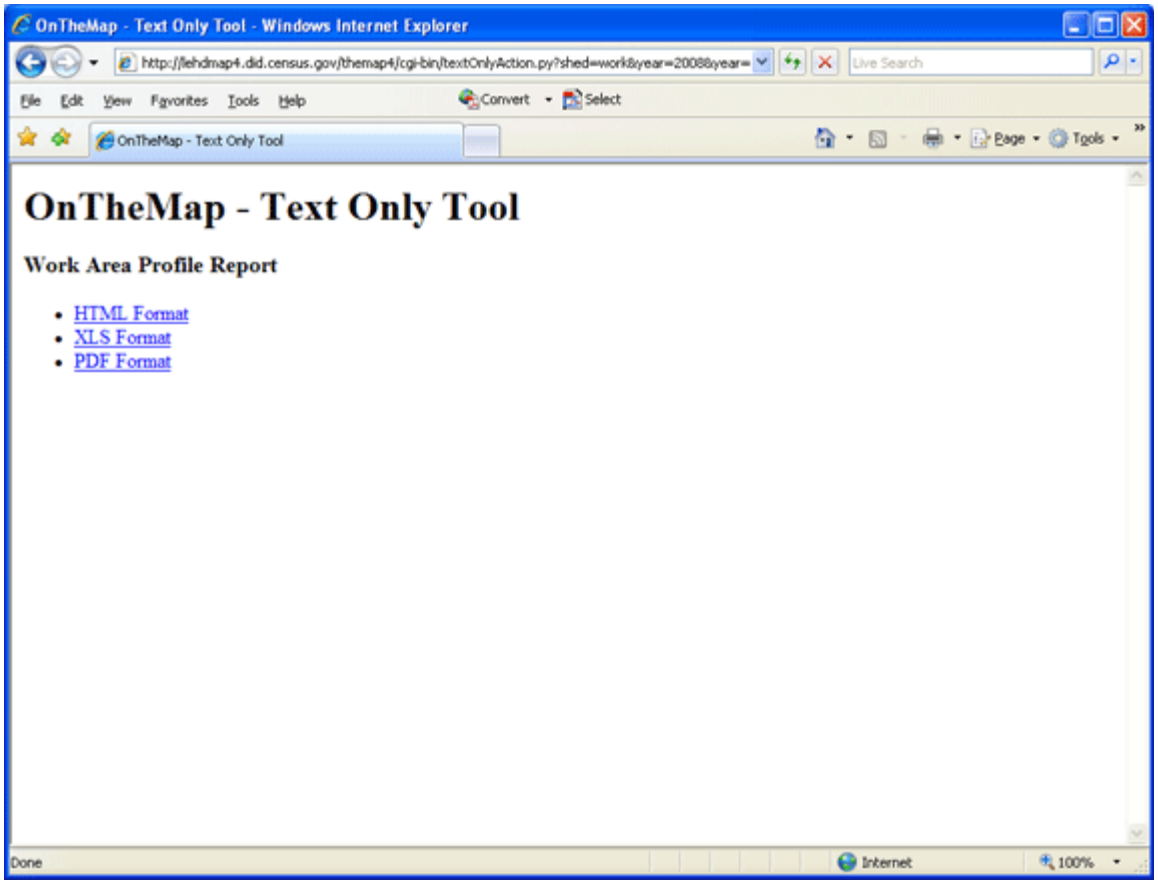
- **Live or Work:** Since we're interested in where Elkhart's workers live, we will select "Workplace Area." However, if we were instead interested in where the people who live in Elkhart work, we would change this to "Home/Residential Area."
- **Year:** Select as many years as you are interested in studying and each will show up as a column in the resulting report. Note: especially where the travel sheds are concerned, choosing several years will slow the performance of the site.
- **Job Type:** Options include all jobs, primary jobs (a primary job is the highest paying job for an individual worker for the year), all private jobs (all jobs in the private sector) or private primary (all primary jobs in the private sector).
- **Labor Market Segments:** Analysis can be limited to the defined age groups, to those with earnings between a certain range or to those working in a given industry class.
- **Report Type:** The Home/Work Area Profile would provide the demographic characteristics of workers in Elkhart. However, since we are interested in commuting patterns, we will select the Home/Work Shed Analysis.
- **Rollups:** When the home/work shed analysis is selected, you will also want to designate rollup areas. This means that if you select ZIP codes as a rollup, you will see the top 10 ZIP codes that sent workers into the city of Elkhart, whereas if you selected county subdivisions (aka townships), you would see the top 10 townships where Elkhart workers lived. For this example, we selected places, counties and ZIP codes.

Note: you must limit your analysis to three rollup areas in order to avoid receiving a server error.



Step 4: Download Report

Once you submit the query, output is available in three formats: webpage (HTML), spreadsheet (XLS) or PDF depending on what suits your purposes.



The Results

Table 1 shows the output for our query, which looked at all jobs for all workers in the city of Elkhart. We see that 21 percent of Elkhart workers lived within the city and 55 percent lived within the county. The most commuters from the city level came from South Bend and Mishawaka. (Remember however that since we are looking at all jobs vs. just primary jobs, people who hold more than one job are being counted more than once).

Table 1: Where Workers Live Who Are Employed in the City of Elkhart

	2008		2006	
	Count	Share	Count	Share
Total All Jobs	39,282	100.0%	40,974	100.0%
By Place				
Elkhart city, IN	8,224	20.9%	9,976	24.3%
South Bend city, IN	2,338	6.0%	2,143	5.2%
Mishawaka city, IN	1,887	4.8%	1,772	4.3%
Goshen city, IN	1,571	4.0%	1,723	4.2%
Granger CDP, IN	1,056	2.7%	1,137	2.8%
Dunlap CDP, IN	861	2.2%	996	2.4%
Simonton Lake CDP, IN	782	2.0%	940	2.3%

Indianapolis city (balance), IN	378	1.0%	317	0.8%
Fort Wayne city, IN	301	0.8%	373	0.9%
Nappanee city, IN	268	0.7%	211	0.5%
All Other Locations	21,616	55.0%	21,386	52.2%
By County				
Elkhart County, IN	21,514	54.8%	24,687	60.3%
St. Joseph County, IN	7,619	19.4%	7,252	17.7%
Cass County, MI	2,451	6.2%	2,295	5.6%
Kosciusko County, IN	665	1.7%	523	1.3%
St. Joseph County, MI	616	1.6%	516	1.3%
Berrien County, MI	586	1.5%	566	1.4%
Marshall County, IN	482	1.2%	384	0.9%
Marion County, IN	414	1.1%	348	0.8%
Allen County, IN	403	1.0%	501	1.2%
Noble County, IN	332	0.8%	365	0.9%
All Other Locations	4,200	10.7%	3,537	8.6%
By ZIP Code				
46514	7,168	18.2%	8,383	20.5%
46516	5,126	13.0%	6,336	15.5%
46517	3,117	7.9%	3,608	8.8%
46528	1,767	4.5%	1,767	4.3%
46526	1,413	3.6%	1,517	3.7%
46544	1,305	3.3%	1,208	2.9%
46507	1,210	3.1%	1,399	3.4%
46530	1,176	3.0%	1,267	3.1%
46561	1,054	2.7%	1,132	2.8%
46545	1,015	2.6%	1,023	2.5%
All Other Locations	14,931	38.0%	13,334	32.5%

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

While OnTheMap does only provide you with detail on the top 10 geographies in each rollup area, this tool is still quite useful for those desiring to analyze commuting patterns at the community level.

Notes

1. Because LED is a voluntary partnership between state labor market agencies and the

Census Bureau, a few states (Connecticut, Massachusetts, New Hampshire, plus the District of Columbia) are not participants.

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