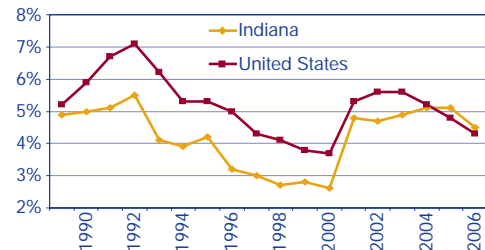


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November Unemployment

Both Indiana and the United States reached their lowest November unemployment rates since the 2001 recession, down to 4.5 percent and 4.3 percent respectively.

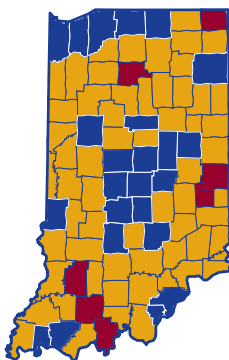


*not seasonally adjusted

Indiana's Rural-Metro Interface

A new way to measure rurality is by classifying counties into three main categories, including metropolitan sphere, rural-metro interface and rural sphere. These classifications are based on rurality and access to the nearest metro area.

The majority (66 percent) of Indiana counties are within the rural-metro interface. For a more detailed report, see "Measuring Rurality" on page 5.



- Metropolitan Sphere
- Rural-Metro Interface
- Rural Sphere

From a Lost Job to a New Career

In today's rapidly transforming economy, dislocations and disruptions are inevitable for various segments of the workforce as employers adapt to changing circumstances. Indiana's Department of Workforce Development (IDWD) assists Hoosiers whose jobs have changed or disappeared prepare for new careers. The Research and Analysis arm of IDWD is looking to new skills-based career clusters to assist workers with those transitions. Skill assessments may direct dislocated workers to new careers that require similar skills in seemingly unrelated occupations or industries.

Based on previous analysis, the department found 10 basic skills important for all employment.¹ It also found other skills that differentiate occupations into four career clusters, or occupational groups, highlighted in last month's issue of *InContext*.² **Table 1** lists the skills that differentiate the four new career clusters.

Which Industries Have the Most Layoffs?

The Mass Layoff Statistics (MLS) program of IDWD uses data from unemployment insurance claims to track major job cutbacks. When an establishment's employees file at least 50 initial claims for unemployment insurance during a consecutive five-week period, IDWD contacts them to determine whether the separations are permanent. A mass layoff is identified, studied and tracked when these separations last more than one month.

Table 2 shows the industry super-sector and specific industries that have had the highest number of separations (layoffs) since 2000. A total of 72,813 layoffs occurred over this six-year period. About 34 percent of these cutbacks have been in manufacturing or trade, transportation and utilities. **Figure 1** depicts the reasons cited by the establishments for the mass layoffs. Company reorganization or some sort of financial difficulty accounts for most

TABLE 1: SKILLS IN EACH OF THE FOUR CAREER CLUSTERS

Cluster	Number of Occupations	Skills
People	329 (46%)	Learning Strategies, Instructing, Social Perceptiveness, Time Management, Service Orientation, Persuasion, Monitoring, Negotiation and Coordination
Things	224 (31%)	Equipment Maintenance, Repairing, Operation Monitoring, Troubleshooting, Equipment Selection, Operation and Control, Installation and Quality Control Analysis
Systems	111 (16%)	Systems Evaluation, Systems Analysis, Management of Financial Resources, Management of Personnel Resources and Judgment and Decision Making
Information and Concepts	40 (6%)	Programming, Technology Design, Operations Analysis and Complex Problem Solving

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

layoffs (58 percent); while overseas relocation and import competition was cited in only a combined 9 percent of cases.

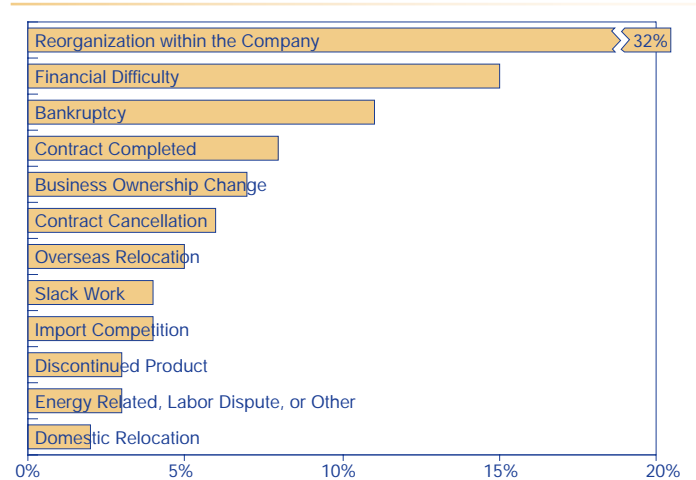
Occupations Lost

Which occupations are at risk within these industries? Mass Layoff Statistics do not provide IDWD with a listing of occupations. However, using staffing patterns developed from the Occupational Employment Statistics program for those industries cited in **Table 1**, the Advanced Economic and Market Analysis section of IDWD (AEMA) derived specific occupations. The 25 occupations AEMA estimates to have lost the most employment (at least 650 separations) are shown in **Table 3**.

Table 3 also shows the skills the workers affected by these mass layoffs possess. How can these skills be updated or reapplied to provide the worker with success in a new career or industry? While industry experience

plays a role in the hiring process, the skills necessary for occupational success often transfer across industries. For example, a general and operations manager whose job in the manufacturing sector has been eliminated may still have the same skills necessary for a different job in another industry, such as health care or construction. Machinists and assemblers working in one sector of manufacturing may have the operational skills (a Things skill) needed in another growing sector or in one of the high-wage and high-growth occupations listed in **Table 4**.

FIGURE 1: PRIMARY REASON FOR SEPARATION



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

New Career Opportunities

To illustrate the practicality of the new skill clusters, we will examine a few possible career path scenarios from the perspective of a worker who has lost his or her job. First, consider the office clerk, whose occupational prospects have diminished with the new technology of the information age. An office clerk has been developing People skills such as service orientation, social perceptiveness and time management. These skills are also vital to the emerging People occupations of legal secretaries and paralegals. Both of these occupations also value time management. However, to follow this career path our office clerk may also need some additional education and training. A postsecondary vocational training degree will be needed to succeed as a legal secretary, and an associate's degree should be acquired to find work as a paralegal. While our office clerk is returning to school, he or she may need to find temporary work in food service or as a cashier. Although this may seem like a setback, in the long run these positions will further develop the worker's People skills

TABLE 2: INDUSTRY SUPERSECTOR WITH THE HIGHEST NUMBER OF SEPARATIONS SINCE 2000

Super-Sector	Separations	
	Number	Percent of Total
Total for All Jobs	72,813	100%
Goods-Producing	46,683	64%
Manufacturing	44,989	62%
Services-Providing	26,130	36%
Trade, Transportation and Utilities	16,470	23%
Professional and Business Services	3,704	5%

Industry	Separations	
	Number	Percent of Total
Manufacturing	44,989	62%
Transportation Equipment Manufacturing	14,929	21%
Motor Vehicle Parts Manufacturing	11,245	15%
Primary Metal Manufacturing	6,327	9%
Iron and Steel Mills and Ferroalloy Manufacturing	3,800	5%
Electrical Equipment, Appliance and Component Manufacturing	5,498	8%
Household Appliance Manufacturing	4,130	6%
Machinery Manufacturing	4,643	6%
Retail Trade	10,014	14%
General Merchandise Stores	4,977	7%
Department Stores	4,502	6%
Transportation and Warehousing	4,816	7%

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

TABLE 3: OCCUPATIONS WITH THE MOST LOSSES IN EMPLOYMENT SINCE 2000 BY EDUCATIONAL ATTAINMENT

Educational Requirement	Skill Cluster	Occupation Title	Layoffs	2005 Median Wage	Skills
Work Experience in a Related Occupation		First-Line Supervisors/Managers of Production and Operating Workers	1,623	\$44,417	Instructing, Management of Personnel Resources, Time Management
Short-Term on-the-Job Training		Retail Salespersons	2,276	\$18,037	Management of Personnel Resources, Judgment and Decision Making, Social Perceptiveness
		Cashiers	2,254	\$15,707	Instructing, Service Orientation, Social Perceptiveness
		Laborers and Freight, Stock, and Material Movers, Hand	2,052	\$21,797	Coordination, Equipment Selection, Operation and Control
		Stock Clerks and Order Fillers	1,552	\$19,695	Coordination, Service Orientation, Social Perceptiveness
		Helpers—Production Workers	1,513	\$21,440	Equipment Selection, Installation, Operation and Control
		Industrial Truck and Tractor Operators	1,323	\$28,254	Equipment Maintenance, Instructing, Operation and Control
		Packers and Packagers, Hand	1,047	\$19,892	Coordination, Service Orientation, Social Perceptiveness
		Shipping, Receiving, and Traffic Clerks	807	\$25,406	Coordination, Social Perceptiveness, Time Management
Moderate-Term on-the-Job Training		Team Assemblers	5,630	\$26,836	Instructing, Operation Monitoring, Quality Control Analysis
		Inspectors, Testers, Sorters, Samplers, and Weighers	1,787	\$29,186	Operation and Control, Operation Monitoring, Quality Control Analysis
		Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	1,232	\$26,339	Equipment Maintenance, Equipment Selection, Operation and Control
		Truck Drivers, Heavy and Tractor-Trailer	1,098	\$36,406	Equipment Maintenance, Operation and Control, Operation Monitoring
		Customer Service Representatives	969	\$27,939	Service Orientation, Social Perceptiveness, Time Management
		Assemblers and Fabricators, All Other	961	\$28,291	Equipment Selection, Quality Control Analysis, Operation Monitoring
		Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	712	\$27,402	Equipment Selection, Operation and Control, Operation Monitoring
		Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	686	\$31,025	Operation and Control, Operation Monitoring, Quality Control Analysis
		Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	679	\$46,884	Persuasion, Service Orientation, Time Management
Long-Term on-the-Job Training		Maintenance and Repair Workers, General	1,418	\$31,894	Management of Financial Resources, Management of Personnel Resources, Programming
		Machinists	1,131	\$34,899	Equipment Selection, Operation and Control, Operation Monitoring
		Computer-Controlled Machine Tool Operators, Metal and Plastic	784	\$31,523	Equipment Selection, Operation and Control, Operation Monitoring
		Electricians	764	\$50,810	Equipment Selection, Installation, Troubleshooting
Postsecondary Vocational Training		Welders, Cutters, Solderers, and Brazers	1,004	\$31,656	Equipment Maintenance, Equipment Selection, Operation and Control
Bachelor's or Higher Degree, Plus Work Experience		General and Operations Managers	707	\$77,402	Judgment and Decision Making, Management of Personnel Resources, Time Management

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

(such as coordination and decision-making skills). Each new skill and each additional year of education will lead to higher wages and job stability. With just one year of postsecondary training and skill development, the laid-off office clerk will have the qualifications to find work as a legal secretary and increase his or her salary from \$21,713 to \$29,941. A two-year associate's degree will increase the salary to \$35,160 as a paralegal.

Next, consider the production worker with a salary of \$21,440 and the metal casting machine operator (average salary \$27,402) who lost their jobs. Both of these workers have developed equipment selection, operation and control, and installation skills. These are also the three most important skills necessary to succeed as a structural iron and steel worker, which ranks on Indiana's Hot Job list with an average salary of \$48,434.

Lastly, think about the retail salesperson, who has been making approximately \$18,037 annually. Whether he or she worked for a department store, a lawn and garden store, or even a local grocer, that person has been developing Systems skills (including management and coordination experience). With an interest or previous work experience in landscaping or construction, the salesperson may find work as a first-line supervisor, making \$31,000 to \$51,000 annually, depending on industry and experience. Many other Systems and Information cluster occupations will require additional education or training. However, the skills mentioned throughout this article and in the enclosed tables will prove beneficial and necessary for occupational growth. Skill development will lead to worker success in an

emerging or expanding occupation. All workers will open new doors of opportunity and increase their personal income by building their skills, through work experience, vocational training and/or higher education.

Conclusion

The above analysis should illustrate the wide range of potential career opportunities available to Indiana's workforce and the importance of all types of skills in today's fast-paced and unpredictable economy. With a renewed focus on skills, AEMA hopes to better prepare the workforce to achieve their career goals. In some cases, additional education or training may be required; in others, it may be a simple matter of recognizing workers' existing skills. The skills necessary to succeed transcend industry—from manufacturing to health care and

information. As dislocated workers, new job seekers and career counselors analyze future opportunities, the hope is that we will all gain new understanding of the transferability of skills from declining to emerging occupations. Further encouraging Indiana workers to focus on developing their skills and abilities will benefit employers and future economic growth in the state.

Notes

1. Active Learning, Active Listening, Critical Thinking, Learning Strategies, Mathematics, Monitoring, Reading Comprehension, Science, Speaking, Writing
2. Allison Leeuw, "The Butcher, the Baker and the Candlestick-Maker Revisited: Indiana's New Skills-Based Career Clusters," *InContext*, 7 (12): 8–9; available at www.incontext.indiana.edu/2006/december/6.html
3. For more data, visit Hoosiers by the Numbers at www.hoosierdata.in.gov/

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

TABLE 4: HOT JOBS—HIGH WAGE, HIGH DEMAND OCCUPATIONS IN INDIANA

Occupation	Annual Wages	Education or Experience Required
Industrial Engineers	\$61,530	Bachelor's degree
Market Research Analysts	\$44,463	Bachelor's degree
Social Workers	\$32,625	Bachelor's degree
Legal Secretaries	\$29,941	Postsecondary vocational training
Registered Nurses	\$49,067	Associate degree
Occupational Therapists	\$56,080	Bachelor's degree
Physical Therapist Assistants	\$42,452	Associate degree
Fire Fighters	\$37,175	Bachelor's degree
Paralegals and Legal Assistants	\$35,160	Associates degree
Medical and Clinical Laboratory Technologists	\$45,355	Bachelor's degree
Structural Iron and Steel Workers	\$48,434	Bachelor's degree
Bus and Truck Mechanics and Diesel Engine Specialists	\$35,523	Postsecondary vocational training
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$35,547	First professional degree
Computer and Information Systems Managers	\$73,068	Bachelor's degree, plus work experience
Construction Managers	\$68,532	Bachelor's degree, plus work experience
Medical and Health Services Managers	\$62,163	First professional degree
First-Line Supervisors/Managers of Landscaping	\$34,556	Work experience in a related occupation
First-Line Supervisors/Managers of Construction Trades	\$51,047	Work experience in a related occupation
Computer Software Engineers, Applications	\$65,549	First professional degree
Network Systems and Data Communications Analysts	\$56,212	First professional degree
Surgical Technologists	\$35,483	Postsecondary vocational training

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

Measuring Rurality

Rurality is a vague concept. Being rural as opposed to urban is an attribute that people easily attach to a place based on their own perceptions, which may include low population density, abundance of farmland or remoteness from urban areas.

In contrast to this colloquial use, there is no consensus among researchers about how to define or measure the concept of rurality. Many existing measures are ill suited, if not flawed—including the commonly used metropolitan/nonmetropolitan definitions from the federal Office of Management and Budget (OMB).¹ Many counties with low population size and low density are allocated to the same category as highly urban counties; a prime example is the inclusion of

both Brown County and Marion County in the Indianapolis–Carmel metro area. Likewise, the urban influence code defined by the U.S. Department of Agriculture’s Economic Research Service does a good job in measuring accessibility to a metro area, but a poor job in capturing a county’s rural character.

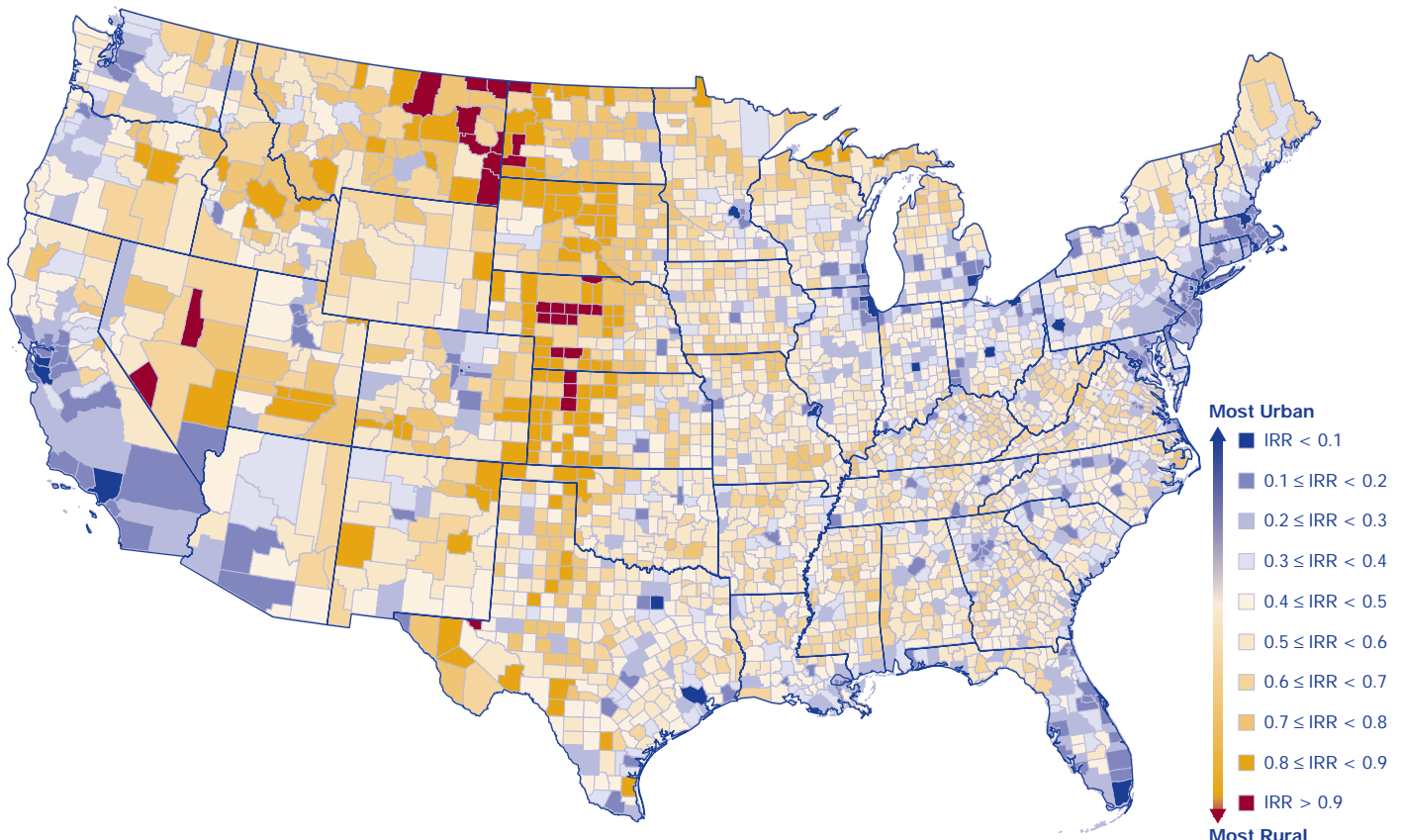
The Index of Relative Rurality

A recently introduced, continuous, multidimensional measure of rurality, the Index of Relative Rurality (IRR), avoids the confusing effects of inclusion in metro boundaries.² It does not answer the question “Is a county rural or urban?” but instead addresses the question “What is a county’s degree of rurality?”

The IRR is based on four dimensions of rurality: population, population density, extent of urbanized area and distance to the nearest metro area. These dimensions are unquestioned in terms of their contribution to rurality and are incorporated implicitly in many existing rurality definitions. The index is scaled from 0 to 1, with 0 representing the most urban place and 1 representing the most rural place (see Figure 1).

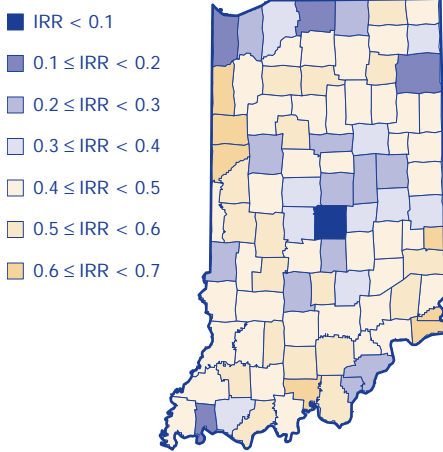
The lowest rurality scores (i.e., highly urban areas) are recorded for counties along the coasts as well as for the urban centers along the Great Lakes. Counties east of the Mississippi have low to medium levels of rurality; the most rural county east of the Mississippi is Keweenaw, Mich., with an IRR value of 0.895. Moving west

FIGURE 1: U.S. INDEX OF RELATIVE RURALITY, 2000



Source: Purdue University’s Department of Agricultural Economics

FIGURE 2: INDIANA'S INDEX OF RELATIVE RURALITY, 2000



Source: Purdue University's Department of Agricultural Economics

from the Midwest to the Great Plains coincides with a distinct increase in rurality. In fact, extreme rurality (IRR > 0.8) is widely prevalent in many counties of the Great Plains and the Mountain States.

Within Indiana, IRRs ranged from 0.09 in Marion County to 0.64 in Crawford County (see Figure 2).

Defining the Rural-Metropolitan Interface

Rurality plays out differently for counties within the influence of a metropolitan area versus places that are

TABLE 1: DEFINITIONS OF THE RURAL-METROPOLITAN INTERFACE LEVELS

Level	Definition	Location Relative to Metro Area	Degree of Rurality	Example
Metropolitan Sphere				
A	Metropolitan central counties with a population of at least 500,000.	Within	Low	Marion County (Indianapolis metro)
B	Metropolitan central counties with a population of less than 500,000.	Within	Low	Tippecanoe County (Lafayette metro)
C	Outlying metropolitan counties with IRR < 0.4	Within	Low	Hancock County (Indianapolis metro)
Rural-Metropolitan Interface				
D	Outlying metropolitan counties with IRR ≥ 0.4	Within	High	Brown County (Indianapolis metro)
E	Nonmetropolitan counties adjacent to a metropolitan area and IRR < 0.4	Adjacent	Low	Henry County (east of Indianapolis metro)
F	Nonmetropolitan counties adjacent to a metropolitan area and IRR ≥ 0.4	Adjacent	High	Orange County (west of Louisville metro)
Rural Sphere				
G	Nonmetropolitan counties not adjacent to a metropolitan area	Remote	High	Daviess County

Source: Purdue University's Department of Agricultural Economics

far away from a metropolitan area. The most obvious reason for this difference is accessibility to the amenities of a metro area, such as airports, shopping and cultural opportunities.

The IRR can capture the rurality of a place based on a set of widely accepted characteristics (small size, low density, remoteness) but—because of the index's composite nature—cannot be used to pinpoint the county's location relative to a metro area.² Coupling the IRR with the urban influence code captures the idea of a rural-metropolitan

interface, as they are responsive to both rurality and metro-accessibility.

The result is seven levels that are jointly defined by rurality and metropolitan access (see Table 1).

- Levels A and B refer to highly urban metropolitan core counties. They differ by population size (above vs. below 500,000).
- Levels C and D are outlying metropolitan counties. They differ by degree of rurality (IRR above vs. below 0.4).
- Levels E and F are nonmetropolitan counties adjacent to a metropolitan



Unlocking Rural Competitiveness: The Role of Regional Clusters

Recognizing both the challenges and opportunities facing rural America, the U.S. Economic Development Administration (EDA) chose to follow-up on a 2004 study (*Competitiveness in Rural U.S. Regions: Learning and Research Agenda*). One of the two consortia funded by the EDA for this work was a partnership among the Purdue University Center for Regional Development, the Indiana Business Research Center at Indiana University's Kelley School of Business, Strategic Development Group, Inc. and the State of Indiana.

The overall purpose of this new study was to develop a database and methodology to help rural areas in the United States assess their regional economic competitiveness to support growth and development strategies.

This article overviews a new way to measure rurality, which was used extensively in the study. To read the full report, *Unlocking Rural Competitiveness: The Role of Regional Clusters*, or to access maps and the online database, visit www.ibrc.indiana.edu/innovation/.

area. They, too, differ by the degree of rurality (above vs. below 0.4).

- Finally, level G includes nonmetropolitan counties that are not adjacent to a metropolitan area.

It is in levels D, E and F where the metropolitan sphere meets the rural sphere. These three levels are considered the rural-metropolitan interface.

Figure 3 shows the spatial distribution of the seven rural-metropolitan levels. Three features are most notable:

1. There is an abundance of metropolitan counties along the coasts and the Great Lakes.
2. The counties of the rural-metropolitan interface (levels D, E and F) form rings around the highly urban core of the metropolitan areas.

TABLE 2: RURAL-METROPOLITAN LEVEL BY POPULATION SHARE, POPULATION GROWTH, INDEX OF RELATIVE RURALITY AND DISTANCE TO METROPOLITAN CENTER

Rural-Metropolitan Level	Number of Counties	Share of Total Population		Percent Population Growth: 1990-2000	Index of Relative Rurality		Miles to Metropolitan Center	
		1990	2000		Average	Standard Deviation	Average	Standard Deviation
Metropolitan Sphere								
A	64	29.80	29.57	12.25	0.112	0.040	0.0	0.0
B	294	19.42	19.30	12.38	0.253	0.066	0.0	0.0
C	327	28.78	29.62	16.46	0.263	0.089	24.4	9.0
Rural-Metropolitan Interface								
D	400	4.08	4.25	17.87	0.527	0.078	29.8	11.1
E	108	2.63	2.55	9.55	0.360	0.037	29.6	9.0
F	947	9.05	8.86	10.83	0.543	0.092	40.8	15.7
Rural Sphere								
G	968	6.25	5.86	6.12	0.632	0.138	82.8	36.2

Source: Purdue University's Department of Agricultural Economics

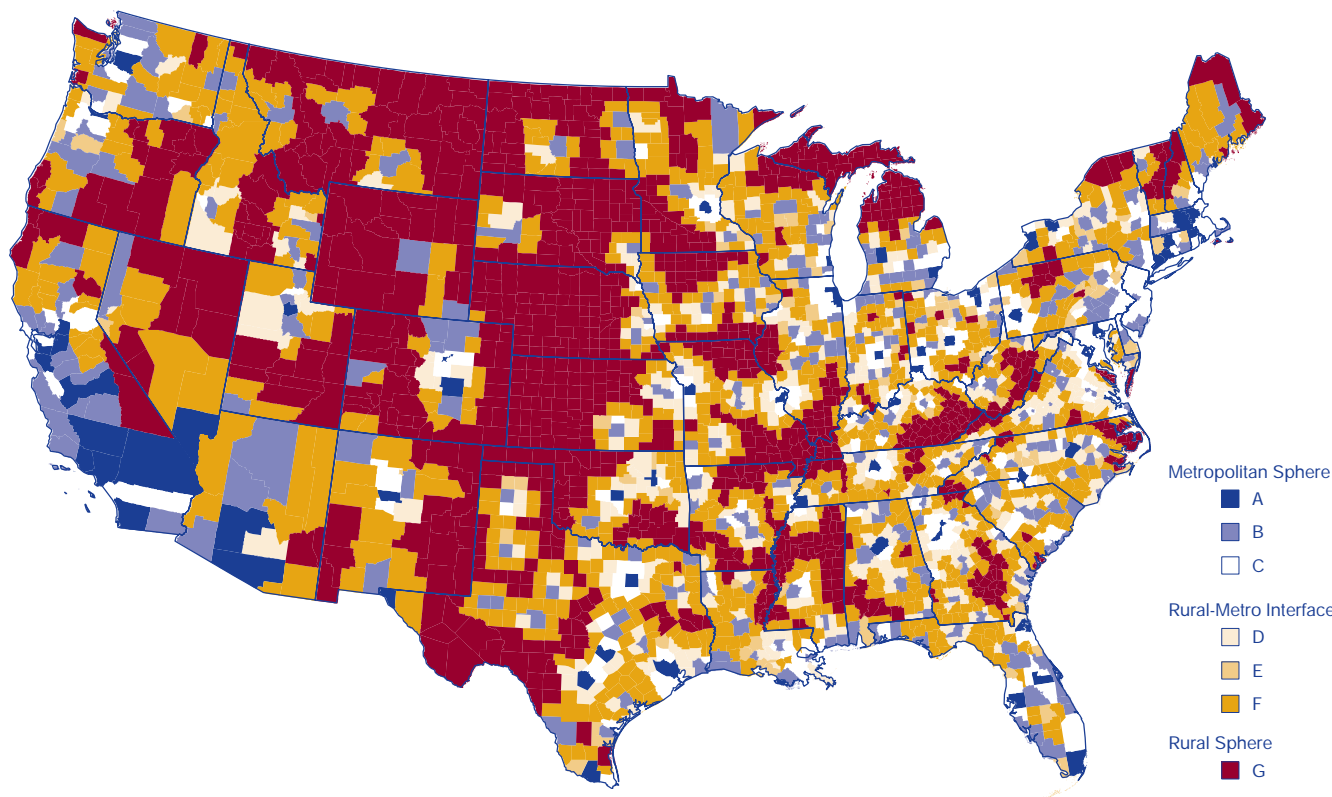
3. In the western part of the United States, the rural-metropolitan interface consists primarily of level F counties. These are counties that are rural in character and adjacent to metropolitan core counties. A reason for the absence of level D and level E counties is undoubtedly

the large size of counties that are often big enough to encompass a good deal of the urban sprawl.

On average, both the rurality (IRR) and the distance to the metropolitan center increase as we proceed from level A to level G (see **Table 2**). Only

(continued on page 15)

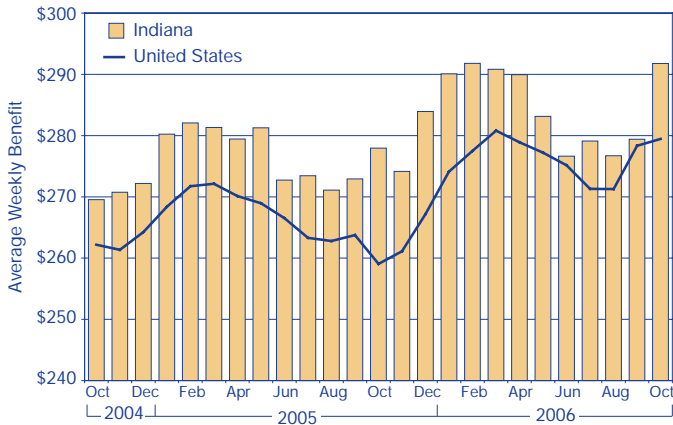
FIGURE 3: RURAL-METROPOLITAN LEVELS, 2000



Source: Purdue University's Department of Agricultural Economics

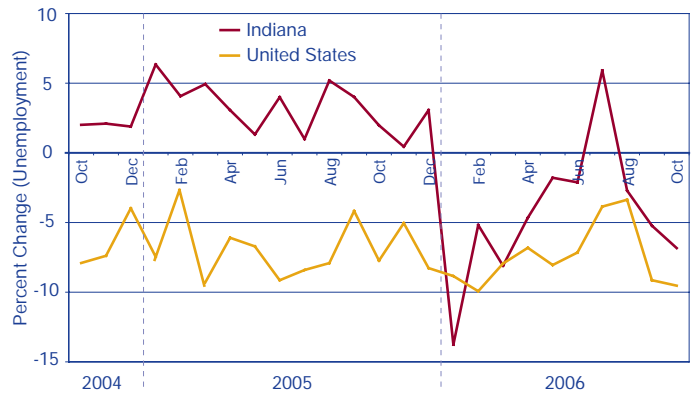
Monthly Metrics: Indiana's Economic Indicators

AVERAGE BENEFITS PAID FOR UNEMPLOYMENT INSURANCE CLAIMS



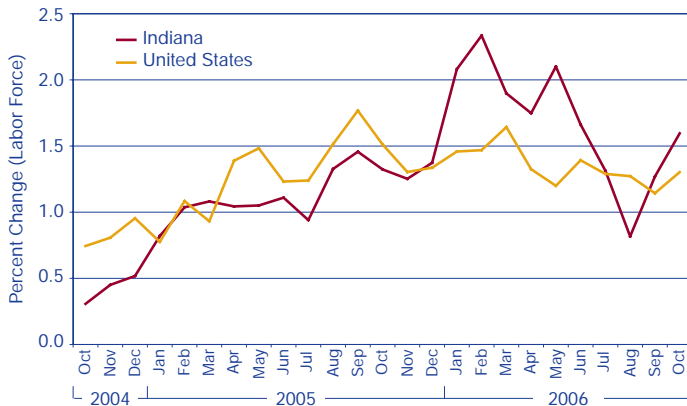
Source: IBRC, using U.S. Department of Labor data

PERCENT CHANGE IN UNEMPLOYMENT FROM THE PREVIOUS YEAR*



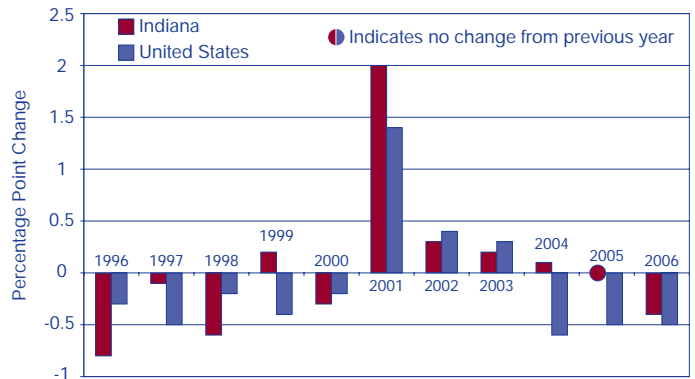
*seasonally adjusted
Source: IBRC, using Bureau of Labor Statistics data

PERCENT CHANGE IN LABOR FORCE FROM PREVIOUS YEAR*



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

CHANGE IN UNEMPLOYMENT RATE FROM OCTOBER OF PREVIOUS YEAR*



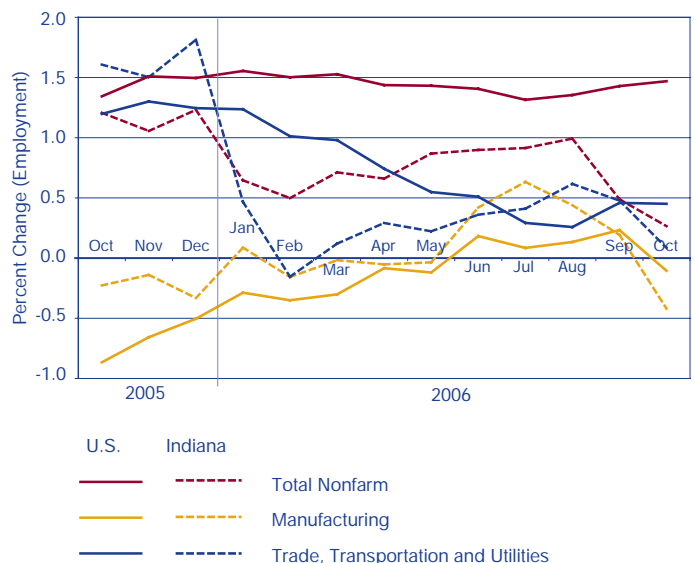
*seasonally adjusted
Source: IBRC, using Bureau of Labor Statistics data

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

Industry	Indiana		United States
	Change in Jobs	Percent Change	Percent Change
Total Nonfarm	7,900	0.3	1.5
Financial Activities	2,300	1.6	2.0
Information	600	1.5	0.1
Other Services	1,400	1.3	1.0
Leisure and Hospitality	3,200	1.1	2.5
Educational and Health Services	1,200	0.3	2.5
Trade, Transportation and Utilities	500	0.1	0.5
Government	200	0.0	1.1
Professional and Business Services	-800	-0.3	2.8
Manufacturing	-2,400	-0.4	-0.1
Natural Resources and Mining	-100	-1.4	8.3

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

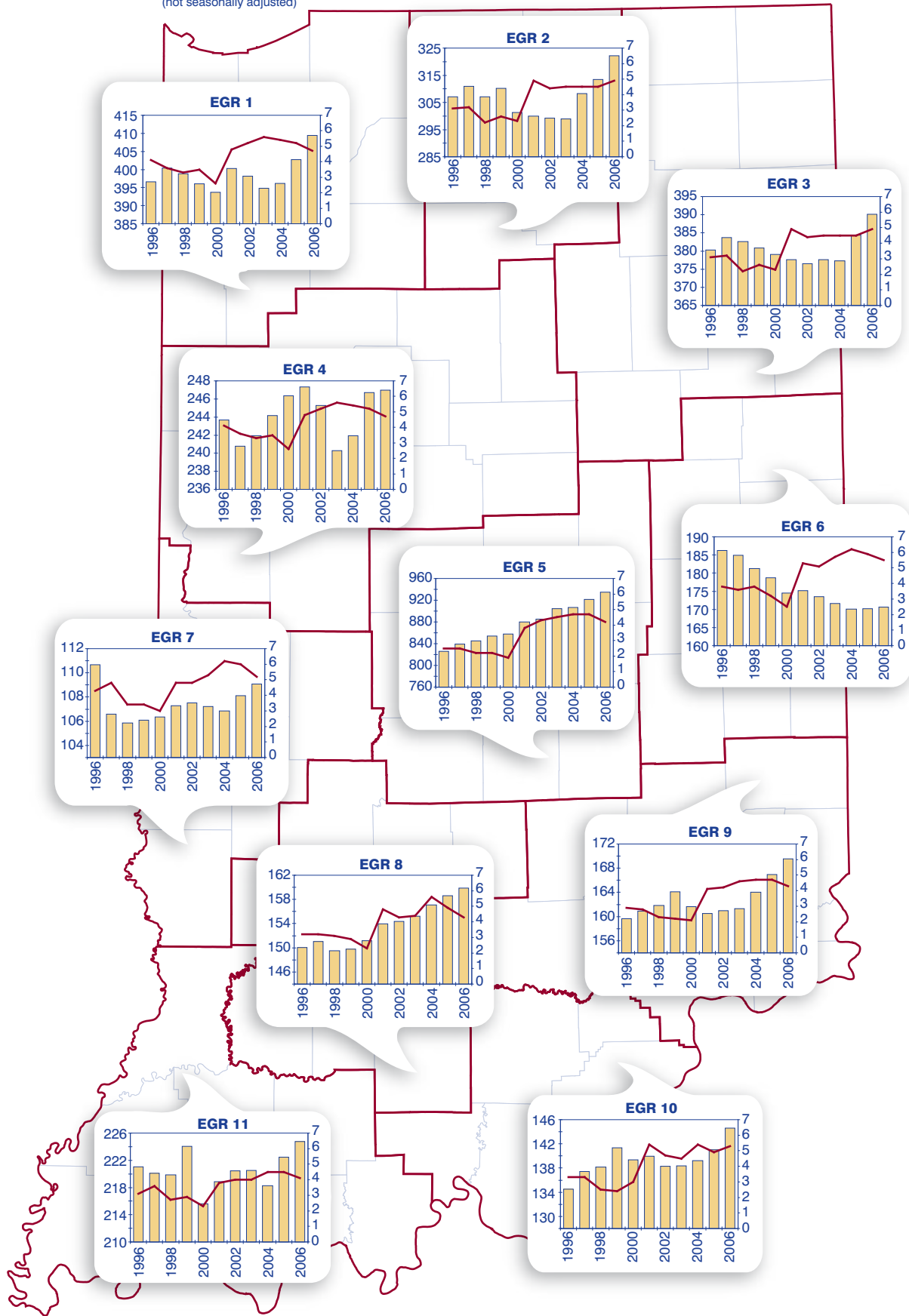
OVER-THE-YEAR PERCENT CHANGE IN EMPLOYMENT BY SUPER-SECTOR*



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

Regional Labor Force and Unemployment Rates

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



New Residential Permit Trends in Southern Indiana

Four counties (Clark, Floyd, Harrison and Washington) of southern Indiana belong to the Louisville Metropolitan Statistical Area (metro). Trends in new housing permits are analyzed in the following article for southern Indiana’s metro counties and compared to regional and state data for July 2006, but supplemented with more recent August data. In addition, both short and long term trends are discussed.

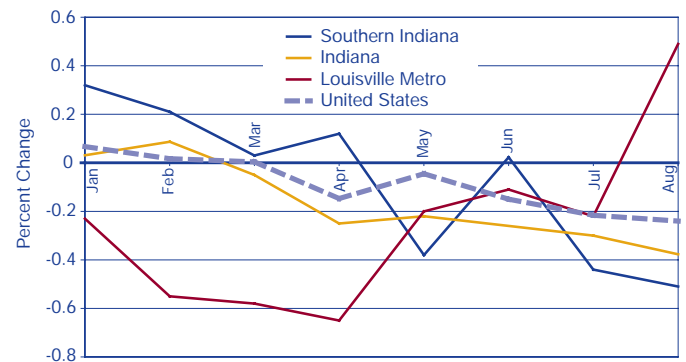
Southern Indiana Metro Counties

Based on new residential housing permits issued from January to July, the new construction market in southern Indiana fared better than state and regional trends. **Table 1** shows housing permit change by geographic region from January to July for 2005 and 2006. The four southern Indiana metro counties saw a slight decline (-4.9 percent) in housing permits the first seven months of the year. This compares to a 17 percent drop for Indiana and a 38 percent drop for the Louisville metro. Removing the four Indiana counties that comprise the Louisville metro, Louisville and the surrounding Kentucky counties

experienced a 46 percent decline in new residential permits.

Floyd County housing permits were actually above state and regional trends (see **Table 1**). However, the numbers are somewhat deceiving. Even though permits increased 9 percent in Floyd County, January saw an unusually high number of issued permits. Housing permits in January were about double typical January levels. As a result, the first quarter for Floyd County was very strong, compared to last year’s first quarter. Unlike Floyd County, the other three Indiana counties experienced declines in issued permits. Clark and Washington counties saw the largest declines. Clark county permits were down 8 percent from July 2005 to July 2006, and Washington County actually observed the steepest percentage decline at 26 percent. Harrison County saw the smallest decline in July at only 3 percent.

FIGURE 1: CHANGE IN PERMITS FROM PREVIOUS YEAR, 2005 TO 2006



Source: State of the Cities Data Systems

Figure 1 displays the housing permit changes from 2005 to 2006 for January to August. Since the beginning of 2006, southern Indiana counties performed better than Indiana and the Louisville metro in most of the months. However, the declines in May, July and August for southern Indiana were steeper than in the United States, Indiana and the Louisville metro.

This large decline for July permits in southern Indiana is evident in the August data. **Table 2** provides housing permit change by geographic region from January to August for 2005 and 2006. The new August data point to a larger decline in southern Indiana, and a slight improvement in the overall decline for the Louisville metro. August data indicate that southern Indiana permits are down 13 percent the first eight months of 2005 compared to the first eight months of 2006. Floyd County continues to show an increase in permits from August 2005 to August 2006. Trends observed in July for Clark, Washington and Harrison counties continued in August. The recently released August data on new residential permits point to further declines in all three counties. Clark County experienced a larger decline than indicated in July. The August 2005 to August 2006 permit change now

TABLE 1: PERCENT CHANGE IN HOUSING PERMITS BY GEOGRAPHIC REGION, JANUARY THROUGH JULY, 2005 TO 2006

Geographic Area	Percent Change
Indiana	-16.8
Louisville metro	-37.5
Southern Indiana counties	-4.9
Louisville metro (Kentucky portion)	-45.8
Floyd	9.3
Floyd Unincorporated	9.2
Clark	-7.8
Clark Unincorporated	-21.9
Harrison	-2.9
Washington	-26.3

Source: State of the Cities Data Systems

TABLE 2: PERCENT CHANGE IN HOUSING PERMITS BY GEOGRAPHIC REGION, JANUARY THROUGH AUGUST, 2005 TO 2006

Geographic Area	Percent Change
United States	-8.7
Indiana	-19.9
Louisville metro	-30.7
Nonmetro Southern Indiana	-36.5
Southern Indiana	-13.0
Clark	-18.0
Floyd	9.4
Harrison	-16.1
Washington	-27.4

Source: State of the Cities Data Systems

TABLE 3: CONSTRUCTION INVESTMENT

County	August		Percent Change
	2006	2005	
Floyd	\$57,732,559	\$51,870,151	11
Clark	\$91,820,581	\$117,156,416	-22
Harrison	\$19,321,725	\$19,836,135	-3
Washington	\$7,040,478	\$9,475,223	-26
Total	\$175,915,343	\$198,337,925	-11

Source: State of the Cities Data Systems

shows a decline of 18 percent in Clark County. Harrison likewise experienced much steeper declines in permits.

The decline in housing permits for the four counties in southern Indiana corresponds to an approximate \$22 million (or 11 percent) reduction in construction dollars compared to August of last year (see **Table 3**). Clark County leads the way with an aggregate dollar decline of \$25 million (or 22 percent). Consistent with the increase in permits for Floyd County, construction dollars are up approximately \$6 million (or 11 percent).

Louisville Metro

August data indicate that the Louisville metro improved slightly from July to August, but continued to observe declines larger than the nation and Indiana (see **Table 2**). Permits point to an 8.7 percent decline in the nation between January–August 2005 and January–August 2006, but a decline of 31 percent in the Louisville metro and 20 percent in Indiana. Removing the four southern Indiana counties from the Louisville metro shows permits are down 37 percent. This is a slight improvement from January–July 2005 to January–July 2006 numbers, which were down 46 percent on the Kentucky side of the Louisville metro (see **Table 1**).

TABLE 4: CHANGES FOR SELECTED MUNICIPALITIES, JANUARY TO JULY, 2005 TO 2006

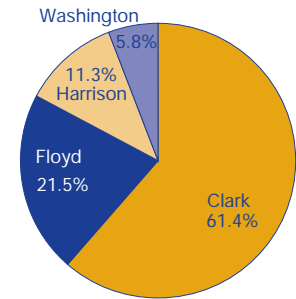
City	Percent Change
Charlestown	-10.7
Clarksville	55.6
Jeffersonville	-7.0
Georgetown	112.0
New Albany	-28.0

Source: State of the Cities Data Systems

Incorporated vs. Unincorporated Areas

Clark and Floyd, the two counties with the largest incorporated areas, experienced different patterns with respect to permits issued in incorporated vs. unincorporated areas. For Floyd County, the January–July permits are up 9 percent in the unincorporated sections, but down in the incorporated areas of the county (see **Table 1**). The decline in permits in incorporated sections of the county can be attributed primarily to New Albany. New Albany permits are down 28 percent when compared to July of 2005 (see **Table 4**). The largest increase in permits for the first seven months

FIGURE 2: PERMITS BY COUNTY, 2005

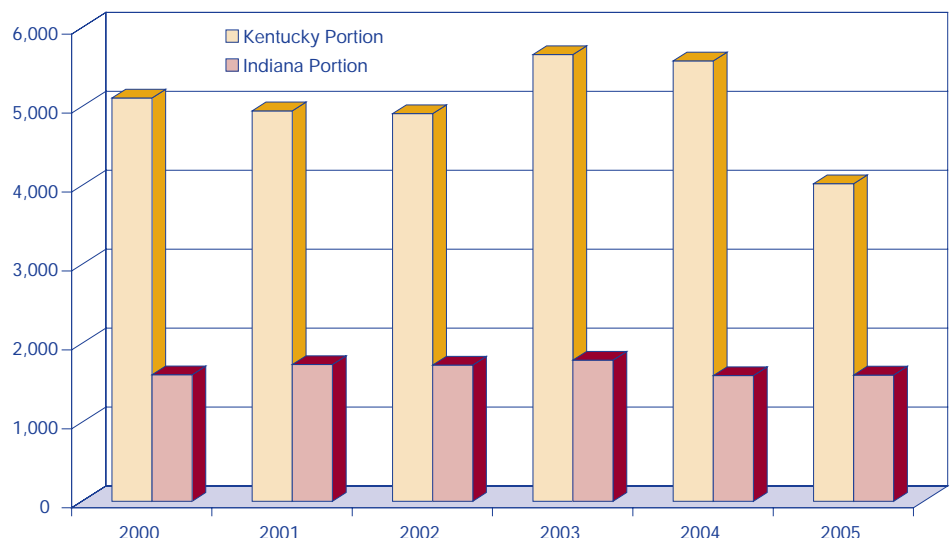


Source: State of the Cities Data Systems

of the year occurred in Georgetown, which is consistent with population trends. Based on a recent analysis of the Indiana Business Research Center, Georgetown has one of the fastest growing populations in Indiana.

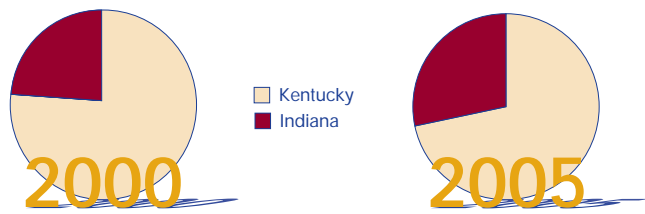
A different trend can be observed in Clark County. Clark County observed a smaller decline in housing permits for incorporated sections of the county. Even though overall permits in the county are down by 8 percent, permits in unincorporated sections of the county are down 22 percent compared to July of last year. The decline in permits in incorporated sections of Clark County can be attributed primarily to Charlestown, where permits were down

FIGURE 3: KENTUCKY AND INDIANA SHARE OF LOUISVILLE METRO PERMITS



Source: State of the Cities Data Systems

FIGURE 4: INDIANA-KENTUCKY SHARE OF PERMITS, 2000 AND 2005



Source: State of the Cities Data Systems

11 percent when compared to July 2005 (see **Table 4**).

Southern Indiana Share of Louisville Metro

Floyd and Clark counties continue to be dominant in the issuance of new residential permits, and unincorporated sections of those two counties lead the way. **Figure 2** presents permits by county. Eighty-two percent of permits issued in the four-county region are located in Floyd and Clark counties. Unincorporated sections of those two counties also make up a significant component of overall permits issued, as 55 percent of all permits issued in the four-county area are located in the unincorporated sections of Floyd and Clark. This is up from 43 percent during the year 2000.

Today, permits in the four southern Indiana counties make up a larger portion of permits generated in the Louisville metro area (see **Figure 3**). In 2000, southern Indiana counties generated approximately 24 percent of all permits issued in the Louisville metro. By the end of 2005, that

number was up to roughly 28 percent (see **Figure 4**). Currently, southern Indiana is on pace to produce 30 percent of permits generated in the Louisville metro for 2006.

Long Term Trends

Table 5 shows year-end permit changes from 2000 to 2005 for different areas. Over the long term, Indiana has an average decrease of 0.3 percent each year, and the Louisville metro has an average decrease of 2.7 percent each year. As for the southern Indiana counties, Floyd has an average decrease of 2.1 percent each year, Clark has an average increase of 1.2 percent, and Harrison has an average decrease of 8 percent. Overall, within the Louisville metro, the performance of Indiana counties is better than that of the Kentucky counties.

Table 6 shows year-end permit changes from 2000 to 2005 for selected municipalities. Charlestown, Clarksville and Georgetown had very high average increases each year over the long term, while Jeffersonville had

TABLE 6: PERCENT CHANGE IN HOUSING PERMITS IN SELECTED MUNICIPALITIES

City	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	Average
Charlestown	-13.0	40.0	3.6	135.0	33.8	39.9
Clarksville	61.1	169.0	-34.0	-38.0	-9.4	29.7
Jeffersonville	65.9	-30.8	-32.3	-2.8	17.3	3.5
Georgetown	-37.0	229.0	25.0	-28.6	-34.0	30.9
New Albany	-26.7	-9.7	54.8	-43.1	2.7	-4.4

Source: State of the Cities Data Systems

TABLE 5: YEAR-END PERCENT CHANGE IN NEW CONSTRUCTION PERMITS

Geography	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	Average
Indiana	3.5	1.9	0.1	0.1	-6.9	-0.3
Louisville Metro	-0.1	-0.1	12.2	-3.7	-21.6	-2.7
Nonmetro Southern Indiana	-3.3	-0.1	15.2	-1.4	-27.9	-3.5
Floyd	-12.0	-8.8	39.6	-21.6	-7.7	-2.1
Clark	24.3	1.1	-1.4	-7.2	-10.9	1.2
Harrison	-8.3	5.8	-6.1	-15.6	-15.8	-8.0

Source: State of the Cities Data Systems

a moderate average increase and New Albany had an average decrease.

Summary

In 2006, the new construction market in southern Indiana, as measured by new residential permits, has not observed the declines observed in Louisville, Indiana, and the nation. August data, however, do show a larger decline for southern Indiana, and this decline is larger than the national average for January–August numbers. Clark and Floyd continue to be the dominant counties in terms of total permits issued, and a larger percentage of permits issued in the Louisville metro originate from the four southern Indiana metro counties. The recently released August data on new residential permits point to larger declines in Clark, Washington and Harrison counties. August data also show continued increases in Floyd County. A slight improvement in the Louisville metro from July to August 2006 is also evident. In the long term, however, both southern Indiana and the Louisville metro have a decreasing trend in the number of new permits, but the performance on the Indiana side is better than that on the Kentucky side.

—*Uric B. Dufrene, Sanders Chair in Business, and Yan He, Associate Professor of Finance, School of Business, Indiana University Southeast*

The Chicago–Naperville–Michigan City CSA

This article is the first of seven with a focus on Indiana’s mega metros, otherwise known as Combined Statistical Areas (CSAs). CSAs are groupings of federally defined metropolitan (metro) and/or micropolitan (micro) areas that, as the title suggests, combine these areas to “represent larger regions and

reflect broader social and economic interactions.”¹

The Chicago–Naperville–Michigan City CSA is made up of the Chicago–Naperville–Joliet metro, the Kankakee–Bradley (Illinois) metro, and the Michigan City–La Porte metro and spans three states (see **Figure 1**). For the purposes of this article, we

FIGURE 1: METROS INCLUDED IN THE CHICAGO-NAPERVILLE-MICHIGAN CITY CSA

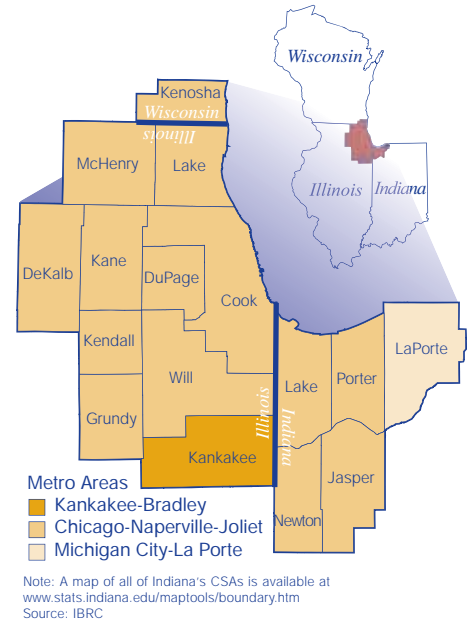
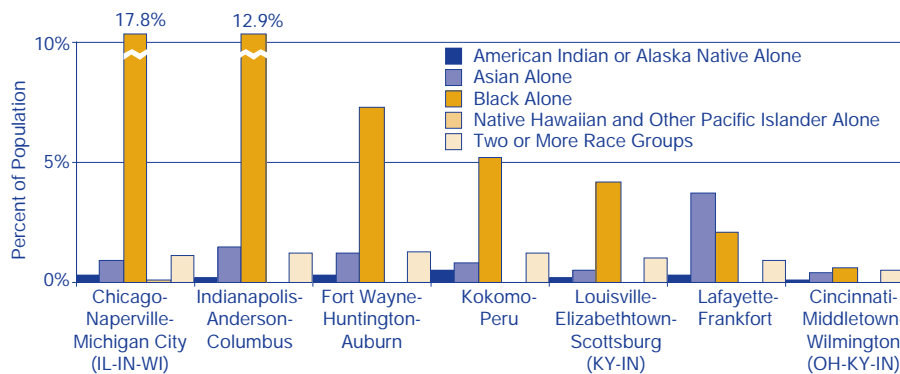


FIGURE 2: PERCENT OF POPULATION IN EACH CSA BY RACE, 2005



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

TABLE 1: CHANGE IN JOBS IN THE CHICAGO-NAPERVILLE-MICHIGAN CITY CSA, 2001:1 TO 2006:1

Industry	Indiana Portion of the Chicago–Naperville–Michigan City CSA			Indiana		
	2006:1	Change Since 2001:1	Percent Change	2006:1	Change Since 2001:1	Percent Change
Total	305,042	-1,973	-0.6	2,843,705	-1,735	-0.1
Management of Companies and Enterprises	1,581	292	22.7	26,480	-350	-1.3
Health Care and Social Services	42,880	5,772	15.6	349,595	35,583	11.3
Construction	19,515	2,549	15.0	137,935	4,542	3.4
Accommodation and Food Services	25,132	2,417	10.6	231,028	14,639	6.8
Professional, Scientific and Technical Services	9,036	617	7.3	94,692	5,489	6.2
Transportation and Warehousing	12,865	559	4.5	127,509	-166	-0.1
Educational Services	29,839	1,280	4.5	250,983	18,503	8.0
Agriculture, Forestry, Fishing and Hunting	1,182	29	2.5	10,317	267	2.7
Finance and Insurance	7,711	89	1.2	100,222	-5,149	-4.9
Other Services (Except Public Administration)	11,069	-29	-0.3	82,546	-2,460	-2.9
Retail Trade	39,069	-623	-1.6	324,878	-22,508	-6.5
Public Administration	15,714	-437	-2.7	123,844	1,497	1.2
Administrative, Support and Waste Management	12,084	-666	-5.2	149,635	21,153	16.5
Real Estate and Rental and Leasing	3,483	-220	-5.9	36,535	332	0.9
Wholesale Trade	10,294	-812	-7.3	121,434	-2,423	-2.0
Arts, Entertainment and Recreation	7,656	-847	-10.0	38,605	-622	-1.6
Utilities	1,748	-207	-10.6	16,426	-203	-1.2
Manufacturing	47,325	-10,315	-17.9	567,360	-64,442	-10.2
Information	3,905	-863	-18.1	46,397	-5,554	-10.7
Mining	295	-116	-28.2	6,130	-22	-0.4

Source: IBRC, using Bureau of Labor Statistics data

will focus on the Indiana portion of the CSA, which includes the following five counties: Lake, Porter, LaPorte, Newton and Jasper.

These five counties make up 12.9 percent of Indiana’s 6.3 million residents, and 8.4 percent of the entire CSA’s population. Gary is the largest city in the CSA, pushing a population of 99,000 people. The Hoosiers calling the Chicago–Naperville–Michigan City CSA home are more racially diverse than any of the other six CSAs and the state overall (see **Figure 2**).

Employment

Jobs in the Indiana portion of the Chicago–Naperville–Michigan City CSA have taken a hit over the past five years, with losses of nearly 2,000 jobs from the first quarter of 2001 to 2006 (down 0.6 percent). Meanwhile, Indiana lost 0.1 percent of its jobs during that same time.

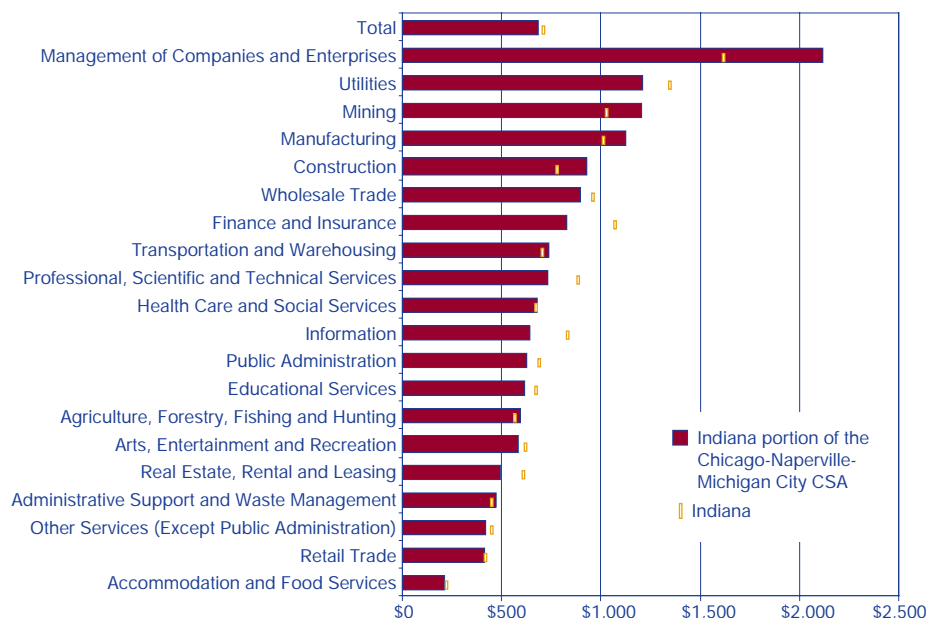
At the individual industry level, despite its losses of more than 10,300 jobs over the past five years,

manufacturing remained the largest industry in the region, making up 15.5 percent of all jobs in 2006. Compare that to 20 percent of all jobs at the state level. Other than manufacturing, the health care and social services industry supplied the most jobs at both the regional and state levels, making up 14.1 percent and 12.3 percent of jobs, respectively (see **Table 1**).

Wages

Those working in the management of companies and enterprises industry in the Chicago–Naperville–Michigan City CSA didn’t have much to complain about in terms of available jobs or the wages received. From 2001 to 2006, the CSA added 292 jobs and increased average weekly wages by \$745. This brought average weekly wages in the industry to \$2,117, the only industry to pay average wages of more than \$2,000 per week in any industry across any of Indiana’s CSAs. The Fort Wayne–Huntington–Auburn CSA came closest, paying utility workers an average of \$1,905 per week.

FIGURE 3: AVERAGE WEEKLY WAGES IN THE CHICAGO-NAPERVILLE-MICHIGAN CITY CSA, 2006:1

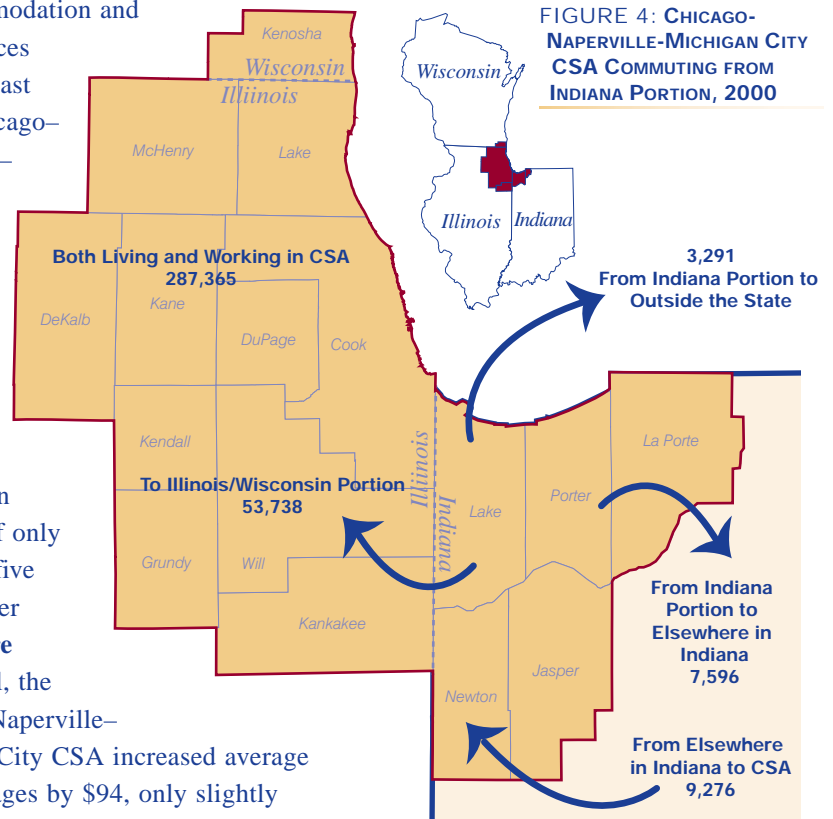


Source: IBRC, using Bureau of Labor Statistics data

Accommodation and food services paid the least in the Chicago–Naperville–Michigan City CSA, averaging \$213 per week in the first quarter of 2006, an increase of only \$11 from five years earlier (see **Figure 3**). Overall, the Chicago–Naperville–Michigan City CSA increased average weekly wages by \$94, only slightly better than Indiana’s increase of \$93 over the five-year span.

Commuting

There were just over 287,300 workers living and working in the Indiana



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

portion of the Chicago–Naperville–Michigan City CSA in 2000, according to Census data. Another 6,527 came into the region from elsewhere in the state (see **Figure 4**). The Indiana portion of the CSA sent out a total of 64,625 workers, 83.2 percent of which traveled to the Illinois and Wisconsin portions of the CSA to work (11.8 percent traveled elsewhere within Indiana and 5.1 percent traveled out of state, but not anywhere within the CSA).²

Notes

1. U.S. Office of Management and Budget, available at www.whitehouse.gov/omb/
2. These numbers do not add to 100 due to rounding.

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

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(continued from page 7)

the 400 counties of level D deviate from this trend and deserve particular attention.

These counties are part of metropolitan areas but are very rural in character. In fact, they are typically more rural than the 108 counties of level E that are adjacent but not within a metro area.

Level D counties also have the fastest population growth, amounting to 17.9 percent between 1990 and 2000 compared to only 13.1 percent for the entire population in the 3,108 counties of the continental United States. As a result, they slightly increased their share of the total population. In contrast, counties outside metropolitan areas (levels E, F and G) had a below-average population growth and thus a dwindling population share during the 1990s.

Indiana has 24 counties in the metro sphere and seven counties in the rural sphere, which means that the bulk of Hoosier counties (61) fall within the rural-metro interface.

Recognizing the important link between rurality and public policy, the Indiana Office of Community and Rural Affairs has developed a statewide strategic plan to help rural Indiana prosper.⁴ Helping these counties in the rural-metro interface and the rural sphere succeed in an era of increasing urbanization and global competition will be a key factor in Indiana's future economic vitality.

Notes

1. A. M. Isserman, 2005. "In the National Interest: Defining Rural and Urban Correctly in Research and Public Policy," *International Regional Science Review*, 28 (4): 465-499.
2. Parts of this article are based on a more extensive discussion in B. Waldorf, *A Continuous Multi-dimensional Measure of Rurality: Moving Beyond Threshold Measures*, 2006. Paper selected for the Annual Meetings of the Association of Agricultural Economics, Long Beach, CA, July 2006. http://agecon.lib.umn.edu/cgi-bin/pdf_view.pl?paperid=21522&ftype=.pdf
3. While remoteness—measured as distance to a metropolitan area—is included in the index of relative rurality, the composite nature of the index does not allow us to identify whether a county's index is high because of its remoteness from a metro area or because of, for example, low population density.
4. Indiana Office of Community and Rural Affairs, "Breaking the Boundaries—Strategic Plan for Rural Indiana," available at www.in.gov/ocra/breakingtheboundaries.shtml.

—Brigitte Waldorf, Professor, Department of Agricultural Economics, Purdue University