

# 1. Introduction

## 1.1. Project Background, Purpose and Goals

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### 1.1.1. Background

In an era of increasing global competition and urbanization, many rural areas in the United States struggle to maintain their economic vitality and viability. Although there is no single comprehensive measure of economic performance, researchers agree that rural areas of the United States, in general, have historically underperformed urban areas. Typically, per capita income is lower than in metropolitan areas overall, the incidence of poverty is higher, and education levels lag. At the same time, rural America is incredibly diverse in a multitude of ways, including economic performance. For example, Isserman (2000) makes the following observation:

... had I argued in 1950 that rural America had certain key comparative advantages, and it would grow faster over the next half-century than urban America, I probably would not have been taken seriously. But I would have been right! How can that be? The explanation is simple. Between 1950 and the present, the Office of Management and Budget took 552 counties out of rural America and reclassified them as metropolitan. Today some 71 million people, one-fourth of the U.S. population, live in what was rural America in 1950 but is considered urban America today (pp. 126).

In other words, some parts of rural America are growing so fast they ultimately become urban.

Most analysts and policymakers feel public policy directed toward improving rural economic performance has been largely ineffective (Browne 2001). The reasons for this are myriad. One aspect involves the mistaken belief that the billions of dollars the federal government spends annually in support of agriculture must surely benefit rural America. However, today's reality is that agriculture, especially farm-level production, is an extremely small portion of rural America's population and economic base. For example, Ghelfi and McGranahan (2004) note that of the roughly 2,000 non-metropolitan counties in the United States, only 420 are classified by the USDA as farming dependent (meaning 15 percent or more of earnings or employment comes from farming). Additional analysis by Drabenstott (2005) indicates job gains and population growth are generally negative in those counties most heavily dependent upon agriculture. To reinforce this point, Secretary of Agriculture Johanns (2006) made the following statement earlier this year: "If most agricultural producers are dependent upon off-farm income, then we must pay special attention to our support of rural economies and [move] beyond agriculture. To quote from a report recently released by the American Farm Bureau Federation: 'Farmers are more dependent on rural communities than rural communities are dependent on farmers.'"

Although per capita federal spending is roughly comparable between metro and non-metropolitan America, Reeder and Calhoun (2004) note the composition of the spending is very different. A far larger share of federal spending in rural areas consists of transfer payments to individuals through methods such as Social Security, food stamps, and other assistance to low-income individuals, while in urban areas a much greater share of the spending is for community and economic development investments, including infrastructure, housing, education, and business assistance.

Despite the long-standing challenges facing rural America, the cause is far from hopeless. A recent report from the Southern Growth Policies Board suggests that a positive future for rural America can be built around six pillars (Clinton et al 2005):

- Regional strategies
- Innovation-based strategies
- Entrepreneurial focus
- Maximizing the impact of industry clusters
- The infrastructure of technology
- Inclusive, grass roots involvement

In recognition of both the challenges and opportunities facing rural America, the U.S. Economic Development Administration (EDA) released a major report in 2004 titled *Competitiveness in Rural U.S. Regions: Learning and Research Agenda*. This project was led by Professor Michael Porter and the Institute for Strategy and Competitiveness at Harvard Business School. This report was summarized in the *EDA Update* as follows:

The Porter research is particularly helpful in outlining some clear strategies for rural regions to be successful, detailing the flaws in current understanding of rural economies, and dismissing the myth that every rural region is the same. The research also suggests that America's rural regions have tremendous potential that past efforts have failed to unlock, and that a fresh and collaborative approach – based on new thinking about regional economies – is needed.

Highlighted findings include:

- The capacity for regional innovation is often driven by industry “clusters” – broad networks of companies, suppliers, service firms, academic institutions, and organizations in related industries that, together, bring new products or services to market.
- Clusters significantly enhance the ability of regional economies to build prosperity because they act as incubators for innovation.
- Clusters possess the primary elements needed to transform ideas into prosperity – universities or research centers that churn out new knowledge; companies that transform knowledge into new services or products; suppliers that provide critical components or equipment; and marketing and distribution firms that deliver the product to customers.
- Regions with successful clusters enjoy higher average wages, productivity, rates of business formation, and innovation.
- A specific challenge rural communities face is economic competitiveness. Rural wages in the U.S. are typically about 70 percent of urban wages, and rural communities are losing their most productive workers to cities with more opportunities.
- Professor Porter's research indicates that there is a clear commitment to mobilizing the inherent potential of rural regions. What is currently lacking is an overall framework that puts individual ideas into context and provides policy makers with actionable guidance on how to develop and implement new strategies.
- There is considerable consensus on many issues. For instance, there is agreement around the performance gap and the challenges confronting rural regions; agreement on the lack of coordination within the institutional network supporting rural development, and among policy makers, thought leaders, and practitioners; a growing understanding that the central issue is competitiveness; and widespread agreement on the importance of cluster thinking in rural economic development.
- Overall, many participants in the research debate lament the disconnect between what is advocated and current U.S. rural economic development policy. Policy does not seem to drive rural development, but

responds to special interests; many sensible ideas proposed by experts are not acted upon. Without a strong conceptual framework, it is not surprising that economic development efforts for rural regions have been particularly vulnerable to political pork battles between small but well-organized interest groups, frequent institutional redesigns without lasting effect, and the re-invention of old policies under new names.

Subsequent to Porter's initial study, EDA chose to fund a follow-up study. One of the consortia funded by EDA was a partnership among Purdue University, Indiana University and the State of Indiana.

### **1.1.2. Purpose and Goals of the Study**

The overall purpose of this 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. The team accomplished this broad goal by organizing our efforts into two major projects.

#### **Project 1: Analysis of Cluster Data**

The goals of Project 1 were to (a) build a comprehensive national database suitable for cluster studies and (b) analyze several selected issues using this database. Specifically, the research team examined three broad research questions:

1. What are the linkages between cluster structure, degree of rurality and economic performance? For example, are there systematic differences in cluster composition, specialization, and size as the degree of rurality and remoteness changes?
2. How are industry clusters distributed spatially, and how does the interface between rural and metropolitan regions affect emerging agglomeration economies? For example, do industry clusters differ in their degree of spatial clustering? What is the nature of the interface between rural and metropolitan regions? Are certain industry clusters more "distance-sensitive" than others? Do certain clusters profit from large distances to metropolitan areas?
3. What are the growth trajectories for counties that differ with respect to cluster structure, degree of rurality and distance to metropolitan areas? For example, do rural regions in close proximity to metropolitan areas grow faster than remote rural regions?

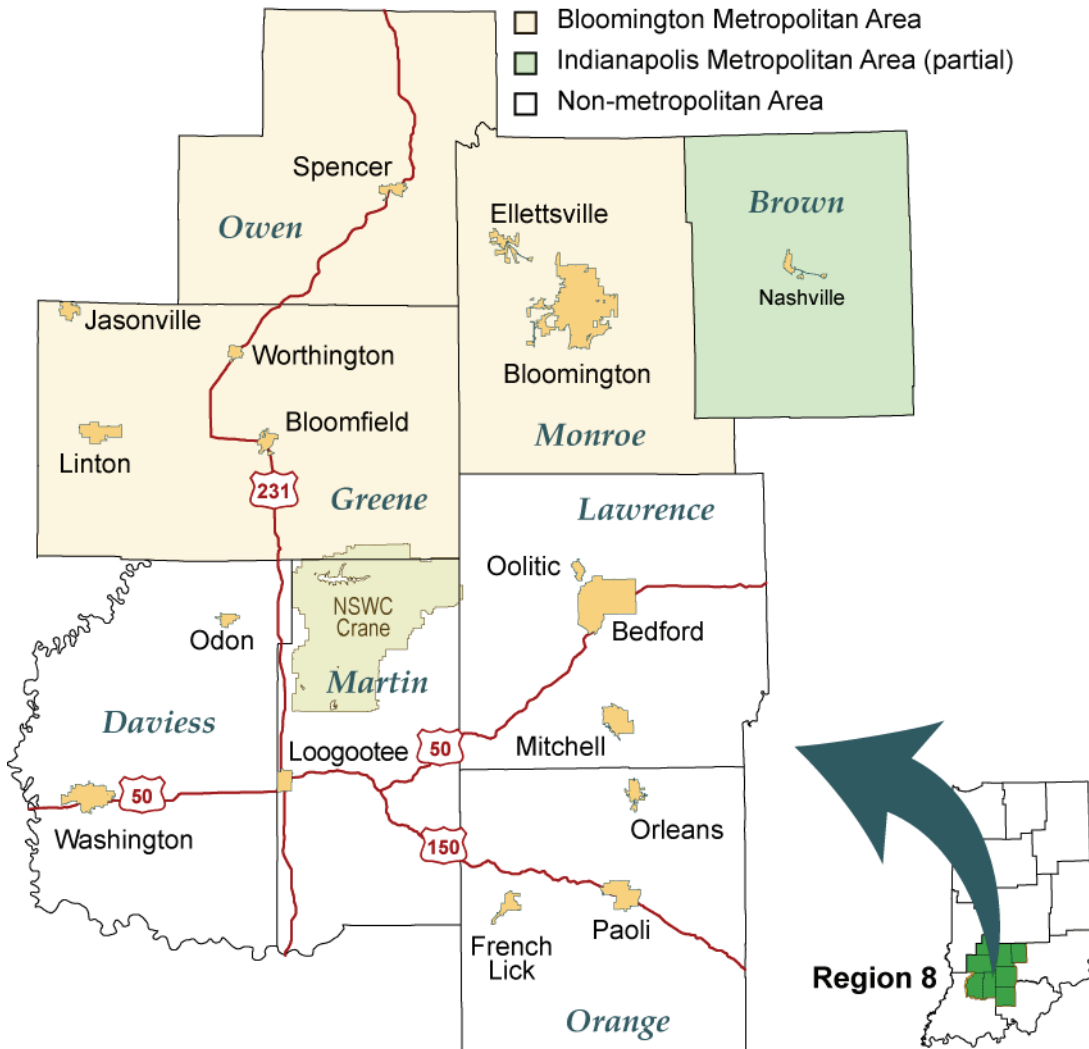
#### **Project 2: Applying the Analysis in a Rural Region**

The goals of Project 2 were to (a) apply the database and methodology developed in Project 1 to a particular rural region, (b) supplement these secondary data with additional local knowledge, and (c) mobilize the local constituency in a planning process that was grounded in both secondary data and localized primary data. The study group designed Project 2 as a pilot study with the hope to create and document a process for rural regional development planning and action that other rural regions of the country can replicate.

The pilot region chosen was Indiana's Economic Growth Region 8 (see **Figure 1**). The region's population, which was 299,888 in 2005, is growing at a modest rate, expanding by 9.6 percent during the 1990s but expected to gain only 7.2 percent in the current decade. The region is

comprised of eight counties that represent a mix of four metropolitan and four non-metropolitan counties.

**Figure 1. Counties in Economic Growth Region 8**



Source: Indiana Business Research Center

The four metropolitan counties are located in the northern portion of the region and include Brown County, which is part of the Indianapolis metro area but very rural in nature, as well as Monroe, Greene and Owen counties, which are part of the Bloomington metro area. The four non-metropolitan counties are Daviess, Lawrence, Martin, and Orange counties, with each reflecting different degrees of rurality. Lawrence County represents a county with a low degree of rurality; it is adjacent to a metropolitan area and has a sizable urban population. At the other end of the scale is Daviess County, which is not adjacent to a metropolitan area and has a negligible urban population.

This region is much like many parts of rural America where non-metropolitan and metropolitan counties intersect. It thus offers an excellent opportunity to take a close look at the interface of metropolitan and non-metropolitan counties and provide an in-depth assessment of differences in cluster composition, business environment, and economic performance.

Overall, the population of the eight-county region is racially homogeneous (95.6 percent are white) and its age composition, by and large, represents that of the nation as a whole. Yet, there are distinct differences between the metropolitan portion in the north and the non-metropolitan portion in the south:

- The more urbanized metropolitan areas have a young and well-educated population, reflecting the presence of Indiana University in Bloomington (Monroe County).
- The four metropolitan counties are also the prime contributors to the region's population growth. In fact, between 2000 and 2010 the population of the four metro counties is expected to increase by 12.2 percent. In contrast, the non-metropolitan counties are expected to lose population during the current decade, and this loss may further increase the average age of their population.
- As of 2000, only 10.2 percent of the adult population (age 25 or older) in the four non-metropolitan counties had at least a four-year college degree, compared to 28 percent in the four metropolitan counties.

## 1.2. Organizing to Accomplish this Project

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This project was accomplished through teamwork. Three main teams were built around the expertise and capacity of the professional staff of three organizations:

- The Purdue University Center for Regional Development (PCRD);
- The Indiana Business Research Center (IBRC) at Indiana University's Kelley School of Business; and
- The Strategic Development Group (SDG), a private consulting group located in Bloomington, Indiana.

Each organization had a unique but interrelated role and responsibility. The PCRD has strength and capacity in cluster analysis and regional and rural development policy and took the lead on the analytics associated with Project 1. The IBRC has served for many decades as Indiana's official representative to the Census Bureau. Its rich repository of data and the intimate knowledge of various databases served as the foundation for the analytics of Project 1. The IBRC also took the lead for a survey of businesses in the pilot region. One of the strengths of SDG is its long-standing relationship with the Southern Indiana Rural Development Partnership (SIRD), a 39-county nonprofit organization devoted to improving the economy of rural Southern Indiana. Because of its work and relationship with SIRD, SDG was uniquely positioned to lead in the organization and mobilization of stakeholders in Economic Growth Region 8. In taking the overall lead for Project 2, SDG facilitated various meetings, focus groups and one-on-one interviews with local stakeholders. This approach appears to have created an effective and sustainable regional planning process. Finally, Indiana State Government – especially the Governor's and Lieutenant Governor's offices – were champions of this project and helped bring various resources and capacity to the table to further both Projects 1 and 2.

Given the complexity of the organizational structure associated with this project, communication and coordination were major challenges but were managed effectively through regular meetings of the entire research team. Additional coordination and communication in the form of e-mail and conference calls occurred on a more informal basis among individual team members and subgroups, as well as between the team and representatives in Indiana State Government.

### 1.3. Organization of this Report

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The remainder of this report comprises four subsequent chapters plus extensive appendices. Also delivered along with the report is a completely digital product—an interactive database publicly accessible on the Internet at [www.ibrc.indiana.edu/innovation/](http://www.ibrc.indiana.edu/innovation/).

Chapter 2 provides an overview of the cluster concept, explains why clusters are important, and provides descriptions and definitions for the 17 clusters used in this study.

Chapter 3 describes the methodology and results of Project 1. The methodology for Project 1 is largely focused on the database created for this study, including issues associated with undisclosed data; measuring rurality; examining spatial variations in cost-of-living; operationalizing the concept of innovation; measuring economic performance; and evaluating the relationships across the three main constructs (rurality, innovation, and economic performance).

Chapter 4 provides the methodology and results from Project 2. The methodology describes how secondary data were supplemented with local knowledge and the processes involved in working with local stakeholders.

Chapter 5 summarizes the main findings and conclusions from the study, suggests how the work in the pilot region may be replicated elsewhere, and offers suggestions for further research and applications.

The appendices include a plethora of supporting material, including acknowledgments, maps, a glossary, cluster taxonomies, rurality codes, and survey instruments and questionnaires used in Project 2.

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