

Executive Summary

The basic purpose of this EDA-funded effort 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. Principal partners were Purdue University, Indiana University, Indiana State Government, and Strategic Development Group, Inc.

The research team organized its efforts into two major projects. The goals of Project 1 were (a) to build a comprehensive national database suitable for cluster studies and (b) to use this database to analyze the following research issues:

- The linkages between cluster structure, degree of rurality, and economic performance
- The spatial clustering of industrial clusters and the interface between rural and metropolitan regions in emerging agglomeration economies
- Growth trajectories for counties that are differentiated by cluster makeup, degree of rurality and distance to metropolitan areas

The goals of Project 2 were to (a) use the database developed in Project 1 to analyze the cluster structure of a selected region, (b) supplement these secondary data with additional local knowledge, and (c) mobilize the regional constituency in a planning process that was grounded in both secondary data and localized primary data. In essence, Project 2 was a pilot study designed to create and document a prototype process for rural regional development planning and action – one that can be replicated in other rural regions of the country.

Exploring the various research questions and relationships associated with Project 1 required operational measures of three important constructs: rurality, cluster, and economic performance.

With respect to **rurality**, an Index of Relative Rurality (IRR) was created. The IRR indexes U.S. counties along a rural-urban continuum with values ranging from 0 to 1. Values on the IRR were also used to classify counties into seven different categories with three of the categories representing the “metropolitan sphere” of influence; three categories representing the “rural-metropolitan interface;” and the seventh category labeled as “the rural sphere” of influence.

Seventeen **clusters** were defined and used in the analysis. In addition, the manufacturing supercluster was broken down into six subclusters.

Key Findings from Project 1

1. Different clusters are distributed in very different ways across the nation’s geography.
2. Location patterns of the 17 clusters support common perceptions of regional variation in economic activity.
3. For some clusters specialization within an individual county level may reflect a larger regional specialization pattern, but in the case of other clusters this may not occur.

4. Labeling or categorizing a region around a single cluster or economic activity is too simplistic due to the considerable co-location of clusters.
5. Most of the 17 clusters analyzed tend to be concentrated in urban counties. The clusters most strongly oriented toward urban locations are business and financial services; biomedical/biotechnology; information technology and telecommunications; and printing and publishing. The three clusters with the strongest rural orientations are agribusiness, food processing and technology; forest and wood products; and mining.
6. Although rural economies have historically lagged behind urban economies, there is scattered evidence of the possible narrowing of the gap between rural and urban economic performance.
7. The clusters most strongly associated with higher levels of economic performance are business and financial services; information technology and telecommunications; and printing and publishing.
8. Human capital (as measured by educational attainment) is the primary factor related to differences in income growth among counties.

In addition to the analysis associated with Project 1, the research team also created a database via the Web geared to obtaining indicators and cluster-based employment, wage, and establishment data critical to implementation and continued measures of progress. This database also integrates measures of rurality. The Indiana Business Research Center (IBRC) will maintain and enhance the online database that is available at www.ibrc.indiana.edu/innovation/data.html.

Key Findings from Project 2

Research Project 2 targeted Indiana's Economic Growth Region 8 (EGR 8), an eight-county region in southern Indiana that includes four metropolitan and four non-metropolitan counties. Many of the key assets in this region are located in Monroe County, the county with the largest population and the home of Indiana University. Analysis was done with and without Monroe County. Results suggest the need for an integrated two-pronged development strategy. One component would attempt to take advantage of existing cluster strengths in the more rural areas of the region. The other component would attempt to build stronger connections between the more rural counties in EGR 8 and the metropolitan assets and capacity in Monroe County.

The key organizational component for Research Project 2 was a 25-member Regional Advisory Committee (RAC). The RAC was essential and instrumental for guiding and building support for the project. In addition to the secondary data and analysis, considerable primary data were gathered through surveys, focus groups, and interviews with key informants—including existing businesses, local economic development organizations, local and regional plan commissions, and other knowledgeable stakeholders. The process for constructing an economic development strategic plan in Economic Growth Region 8 followed the normal steps used for any strategic planning exercise. The RAC and the planning effort are now focusing on cluster activation and related strategies in the following targeted areas:

- Energy; Agribusiness, Food Processing and Technology; Forest and Wood Products
- Biomedical/Biotechnology; Advanced Materials

- Arts, Entertainment, Recreation, and Visitor Industries

Lessons Learned and Important Considerations for Additional Work

- Clusters are a useful concept for strategic planning for rural regional economic development.
- Contrary to traditional thinking, most rural economies are not dependent upon agriculture.
- Non-disclosure of establishment data at detailed NAICS levels is a major obstacle to the finer-grained analysis that is most useful. This is a particular problem in analyzing rural areas because the number of establishments tends to be much smaller than in metropolitan areas.
- Mapping is a particularly helpful way to illustrate and communicate data on counties and regions.
- A successful planning activity requires at least six months to engage and collaborate successfully with regional stakeholders.
- The concepts and techniques of cluster analysis appear to be a useful tool for regional leaders; however, an educational component on the front end of the project is essential.
- Rural stakeholders may not be accustomed to thinking in regional frameworks, but are amenable to broaden their perspective.
- Surveying business executives in the region may require repeated efforts to collect an adequate number of responses.