Unlocking Rural Competitiveness

The Role of Regional Clusters

January 2007

This project was supported by a grant from the U.S. Economic Development Administration with additional support or assistance from the State of Indiana through the Governor’s Office, the Lt. Governor’s Office, and the Indiana Department of Workforce Development.

www.ibrc.indiana.edu/innovation
www.purdue.edu/dp/pcrd/innovation
**PurPose of the Study**

This work sets the stage for the development and implementation of regional initiatives to stimulate new investment and job creation in rural America.

The study resulted in a database, analytical tools, and processes to help rural regions assess their economic competitiveness and create strategies for growth and development.

**Strategies for Success**

Rural areas face new realities and opportunities in today’s global economy. A successful strategy recognizes the importance of a regional framework and linkages between rural and urban America. Key to navigating this new environment is an understanding of industry clusters.

---

**Rurality**

Rurality plays out differently for counties near a metropolitan area vs. places that are more far removed. One result of this project is the Index of Relative Rurality, which incorporates distance to the nearest metro area, along with the creation of a seven-level continuum that differentiates among (a) types of metro areas and (b) areas at the rural-metro interface.
Clusters

The study team developed a set of industry clusters based on the North American Industry Classification System that can be applied to all counties in the United States. The manufacturing cluster was further disaggregated into six more-specialized subclusters for a closer look.

On average, U.S. counties specialize in slightly more than two industry clusters (LQ > 1.2, meaning that the cluster’s share of employment in the county is at least 20 percent higher than the cluster’s share of employment nationally).

About 12 percent of U.S. counties do not specialize in any of the clusters. Many of these counties are too small to have a specialization. Twenty-nine percent of counties specialize in only one cluster, 24 percent specialize in two clusters, 15 percent specialize in three clusters, and 20 percent specialize in four or more clusters.

Certain clusters often co-locate, contrary to the conventional wisdom of a single dominant cluster in a given region. Categorizing a region around a single cluster or economic activity is too simplistic; it is better to think in terms of how clusters interrelate.

A Cautionary Note

Cluster analysis must be used judiciously because it relies upon historical data, and the past is not a perfect predictor for the future. For example, a region currently specialized in a particular cluster may not have a bright future if the national and global outlook for that cluster is one of decline.

Location Quotients (LQ)

The small maps shown throughout this brochure indicate counties with location quotients greater than 1.2 in a specific industry cluster. This means that the cluster’s share of employment in the county is at least 20 percent higher than the cluster’s share of employment nationally (indicating a specialized cluster), and this is the first step in determining where a region’s comparative advantage lies.
• Which clusters are strong in rural regions?
• How can rural areas identify strategies for growth?
• How can rural areas leverage the economies of nearby metro areas?
• What does it take to mobilize leaders for local action?

Use the enclosed CD to learn the answers to these questions or visit the website to get the most recent data relevant to the study:
www.ibrc.indiana.edu/innovation/data.html
**Indiana’s Economic Growth Region 8 (EGR 8)**

The Indiana Department of Workforce Development’s EGR 8 was chosen to demonstrate how this process for analysis and planning can be used by other regions across the United States. This region is similar to many regions throughout the nation, with several rural counties linked to a nearby metropolitan area.

**What the Cluster Analysis for EGR 8 Found**

While EGR 8 has a diverse and reasonably robust cluster array, its individual counties generally have limited cluster strengths on their own. It is tempting to pursue a strategy to strengthen each county’s individual clusters; however, success is more likely by collaborating throughout the region to capitalize on complementary clusters.

**How Economic Developers are Using the Analysis**

A 25-member Regional Advisory Committee (RAC) was essential for guiding and building support for an EGR 8 regional strategy. With support from the RAC, considerable data were gathered through surveys, focus groups, and interviews with key stakeholders. This ground-level information, when combined with the results from the cluster analysis, helped the RAC focus on cluster activation and related strategies for the following:

- Energy; Agribusiness, Food Processing and Technology; Forest and Wood Products
- Biomedical/Biotechnology; Advanced Materials
- Arts, Entertainment, Recreation, and Visitor Industries

**Clusters in EGR 8**

"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 upon farmers.’"

— Mike Johanns, U.S. Secretary of Agriculture, 2006

www.ibrc.indiana.edu/innovation
www.purdue.edu/dp/pcrd/innovation
The strongest rural orientations are in the agribusiness, food processing and technology cluster, the mining cluster, and the forest and wood products cluster. A relatively large number of counties are specialized in agribusiness, food processing and technology and in forest and wood products.

Urban counties have high concentrations of the business and financial services cluster, the biomed/biotech cluster, the information technology and telecommunications cluster, and the printing and publishing cluster.

For rural counties—whether within, adjacent to, or remotely located from a metropolitan area—the percentage of college graduates has a strong positive correlation with income growth, reinforcing the need for rural counties to invest in their citizens’ education.

The concepts and techniques of cluster analysis appear to be a useful tool for regional leadership. This type of analysis also helps rural stakeholders become more comfortable with regional frameworks and rural-urban interdependencies—realities that may otherwise be difficult to embrace.

The business and financial services cluster accounts for 8.5 percent of employment at the national level. However, fewer than 100 of the nation’s counties are specialized in this cluster and these are primarily located along the East Coast, around San Francisco, and around the major metropolitan areas of the U.S. interior, including Chicago, Indianapolis, and Denver.

The energy cluster makes up 5.7 percent of national employment. Almost 8 percent of U.S. counties specialize in energy-related industries. Their spatial location is quite distinct, with concentrations in Texas and Oklahoma, along the Gulf Coast, the mid-Atlantic coast, and in West Virginia. Look for change in the geographic distribution of this cluster due to expansion in the biofuels industry.

The manufacturing cluster accounts for just over 5 percent of total employment nationally. This cluster was broken into six subclusters, the largest being transportation equipment manufacturing. Over 300 counties specialize in this subcluster, forming a geographic axis of concentration from Michigan, south to Indiana, Kentucky, and Tennessee.

The advanced materials cluster is highly concentrated in the upper Midwest: Over half of all the highly specialized counties are found in Minnesota, Wisconsin, Illinois, Indiana, Ohio, and Michigan. Nationwide, the advanced materials cluster accounts for about 4 percent of employment. However, in most counties, the cluster is weakly represented.