A Practitioner's Guide

To Economic Development Tools for Regional Competitiveness in a Knowledge-Based Economy

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Research conducted by

- Center for Regional Development, Purdue University
- Indiana Business Research Center, Kelley School of Business, Indiana University
- Center for Regional Competitiveness, Rural Policy Research Institute, Truman School of Public Affairs, University of Missouri
- Strategic Development Group, Inc.
- Economic Modeling Specialists, Inc.

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Introduction

All of our economies—community, regional, state, and national—are undergoing fundamental changes. That means that the job of the economic development practitioner is also shifting dramatically.

To understand how to develop prosperity within their economies, economic development practitioners need new tools, new frameworks, and new practices. In every dimension, economic development has become more complex and challenging. We are moving from a relatively simple game of checkers to a sophisticated game of chess.

These challenges create exciting, new opportunities.

- Entrepreneurs and high-growth companies are finding new ways to leverage the resources of our colleges and universities.
- New regional energy systems are emerging around renewable energy sources.
- Old-line manufacturers are coming together to explore new opportunities in emerging markets in health-care equipment, fresh water technologies, renewable energy, advanced materials, and advanced transportation.
- New agribusiness systems are emerging around regional foods and organic farming.
- State and local policymakers are shifting their focus to entrepreneurs, innovation, collaboration, and new ways to support emerging, high-growth companies.

To take advantage of these new opportunities, this practitioner's guide introduces a new set of tools for the practitioner that leverage the power of the Internet. On one hand, they generate quick insights that can help the economic development practitioner find new opportunities. On the other hand the tools can assist both practitioners and community leaders in steering a course for long-term growth.

The four tools are:

- **Industry Cluster Analysis:** With a useful set of 17 clusters, this tool helps the practitioner see networks of businesses that are creating wealth in their local or regional economy. This tool enables economic development professionals to define their own regions. As such, it represents a major advance in both the ease and flexibility of industry cluster analysis.
- **Regional Innovation Index:** Businesses generate new wealth through innovation. 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, professionals can examine the capacity of their economy to support innovative companies. Like the industry cluster tool, practitioners can design their own region by deciding which counties to include in their analysis.
- **Occupational Cluster Analysis:** One of the major transformations underway involves the closer integration of education, workforce development and economic development. For many economic development practitioners, this shift opens unfamiliar territory to their practice. The occupation cluster tool provides fast insights into the talent base that drives a local or regional economy. With this tool, economic development professionals can begin to structure effective collaborations with businesses managers, educators, and workforce development professionals. Like the industry cluster

analysis and the regional innovation index, the occupation cluster analysis is flexible. It starts at the county level, but practitioners can assemble their own regions by grouping individual counties.

- **Guidelines for Regional Organization and Investment Decisions:** In the new world of economic development, collaboration matters, but it is often tricky. The guidelines for regional organization and investment decisions help leaders move forward as a region. These guiding principles provide frameworks for establishing investment priorities and making investment decisions. Unlike general guides on collaboration, these guidelines are designed specifically to meet the needs of economic development professionals who must structure investments among cooperating partners.

This guide will introduce each tool and give examples of how the tools might be used. The development team for these tools includes:

- The Purdue Center for Regional Development
- The Indiana Business Research Center
- Strategic Development Group, Inc.
- The RUPRI Center for Regional Competitiveness
- Economic Modeling Specialists, Inc.

Benefits to Practitioners

For economic development professionals, regional planners, and community leaders, the four tools offer new ways to understand and strengthen their regional economy. Specifically, the four tools offer the following benefits.

Industry Clusters

Industry cluster analysis undertakes a sequence of steps to identify and locate the clusters present in a region's economy, as well as providing a way to gauge the clusters' strengths and weaknesses compared to the national economy. Such insights can assist in maintaining or increasing cluster strengths by strategic resource targeting. Industry cluster analysis can also help identify new and emerging clusters to replace old and fading ones. Specifically, this tool allows practitioners to:

- Describe how industries in a region compare to each other.
- Identify growth trends through regional location-quotient analysis of industry clusters.
- Reveal emerging industries in a region.
- Analyze the mix of clusters in a diverse region that might include both rural and urban areas.
- Apply a cluster matrix analysis to evaluate potential growth opportunities.
- Rethink business expansion strategies using cluster analysis.
- Reveal groups of industries that have similar workforce needs.
- Build sustained business-to-business connections.
- Prioritize groups of firms that have growth potential.
- Create regional identities and improve marketing effectiveness.

Innovation Index

The *innovation index* provides some perspective on how well a regional economy translates knowledge and innovation capacity into prosperity. Innovation is a critical capability for regional economies, and this is the first practical tool that can assess how well any regional economy innovates. Specifically, this tool allows practitioners to:

- Understand how a region compares to the nation, other regions and states in terms of innovation capacity and innovation results.
- Use online tools to test regional scenarios with different sets of county partners.
- Reveal the individual innovation index components of a region, for example, the occupational mix, level of educational attainment, high-tech industry employment, R&D investment, venture capital investment, and broadband density.
- Use the economic well-being sub-index to help communicate the need for new development.

Occupation Clusters

Occupation clusters offers insights into the knowledge, skills and abilities of the regional workforce that go beyond the relatively simple measure of educational attainment, such as highest degree earned. Specifically, this tool allows practitioners to:

- Analyze the regional knowledge-based workforce in greater detail.
- Combine industry and occupation cluster data to gain new insights into the regional economy.
- Understand the local workforce and educational situation within the broader regional economic development context.
- Bridge the gap between workforce and economic development when constructing a regional economic development strategy.
- Use the local and regional occupation cluster mix to diagnose how well positioned the region and its communities are to participate effectively in a knowledge-based innovation economy.
- Determine how well occupation cluster strengths align with the region's industry cluster strengths.

Regional Investment Decisions

Guidelines for regional investment decisions offer useful frameworks for building a collaborative regional strategy and making strategic investment decisions. Specifically, this tool allows practitioners to:

- Align regional leaders in a common direction for development.
- Capitalize on fundamental elements for regional success.[1]
- Improve the regional strategy process through coaching.
- Use data to help leaders reach consensus on investment decisions.

[1] The five fundamental elements of regional development are: brainpower; innovation and entrepreneurship networks; quality, connected places; branding and storytelling; and collaborative leadership.

Why Focus on Regions and Innovation?

Regional Development

These four tools have been crafted to assist local practitioners in implementing regional approaches to economic development. Economic development professionals have long recognized that marketing an individual community is not the most effective means to long-term prosperity. Today, this is increasingly true. Whether considering new basic employer recruitment or workforce development, a regional approach has significant advantages.

In the arena of new business recruitment, it is easier to gain a site locator's attention by promoting a regional area. In a globalizing economy, site locators rarely restrict themselves to city or county boundaries. A sub-state or multi-state region is easier to market to prospects on the other side of the country or the world.

The brainpower that fuels your economy is regional. Commuters daily ignore county boundaries to travel from home to their place of work outside of their communities. In many larger communities, more than 30 percent of the workforce resides outside of the city's borders. Understanding and developing the workforce requires a regional perspective.

A Knowledge-Based, Innovation-Driven Economy

The four tools are focused on identifying and developing sources of knowledge and innovation in a regional economy. Today's *new economy* is about neither goods nor services per se. Prosperity in today's economy depends on our ability, both individually and collectively, to generate and apply knowledge. The most valuable economic resource is no longer capital, nor natural resources, nor labor (the traditional term economists have used for routine-type work). It is knowledge and our ability to apply knowledge.

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. In today's connected world, innovation can take place anywhere; it is not limited to large metropolitan areas.

Data-Driven 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, finding funding, 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.

To support civic leaders willing to take on the important work of regional strategy, a website provides the four tools discussed in this report, as well as a host of the most current data available to keep these tools updated and useful: www.statsamerica.org/innovation/data.html.

Using the Tools

The following section outlines how practitioners can utilize the four tools created through this project in their daily work. These tools are designed to be intuitive and user-friendly and development professionals should find them easy to adapt into their daily practice.

Industry Cluster Analysis

With this tool, county-level industry cluster data are accessible in a user-friendly format via the Internet. This tool allows users to combine individual counties to define custom regions. Users can also use this tool to quickly compare their region with others. The industry cluster tool focuses on 17 clusters across the United States in order to provide a framework that is easy to analyze and understand. This tool can assist users in identifying the basic competitive strengths in their regional economy. The data enable a practitioner to extend and deepen the analysis of a region.

Example: Understanding Regional Basic Employers

With data provided by the tool, users can create a matrix to show industry employment location quotients above 1.2 for each county in the region and for the region as a whole. (A location quotient over 1.0 means that a region has a higher concentration of employment in a particular industry than the national average. Using a location quotient of 1.2 or more provides a conservative estimation for this example.) This matrix enables users to see the overall competitive strengths of the region, as well as those of individual counties. Understanding a region's industrial strengths provides valuable insights into how different sectors within a region can be connected.

For example, in **Table 1**, one sees that the region is strong in advanced materials, concentrated in Owen and Lawrence counties. At the same time, Brown County has competitive strength in apparel and textiles. Can the competitive strengths in advanced materials be connected to the businesses in apparel and textiles? Is there a future, for example, in using nano-structured coatings that provide wear-resistance and water-proofing for fabrics in apparel and textiles? Chances are, the people managing apparel and textile businesses in Brown County have no idea of what is taking place with advanced materials in Owen and Lawrence counties. By using the data provided through this tool, economic development professionals can start these conversations.

Additional examples further illustrate the benefit of this tool. What if Martin County has a strong electrical equipment manufacturing sector? Development professionals in that community would likely benefit from knowing how connected the individual firms in the cluster actually are and whether some firms have access to specialized equipment that could be shared more widely? In another example, Milwaukee manufacturers within the water technology cluster, who were asking similar questions among themselves, discovered that they had sophisticated laboratory facilities that could be more widely shared within the region to mutual benefit.

Table 1: Clusters with Location Quotients ≥ 1.2 in Counties of Indiana Economic Growth Region 8

Clusters	Monroe	Greene	Brown	Owen	Lawrence	Martin	Orange	Daviess
Advanced Materials	1.5			6.6	4.1	1.3		
Agribusiness, Food Processing and Technology		1.4						6.3
Apparel and Textiles			4.1				1.4	1.6
Arts, Entertainment, Recreation and Visitor Industries			4.5				1.8	
Biomedical/Biotechnical (Life Sciences)	1.3			2.7				1.2
Business and Financial Services								
Chemicals and Chemical-Based Products	1.7				3.8	2.6		
Defense and Security						10.8		
Education and Knowledge Creation	5.6							
Energy (Fossil and Renewable)		3.5				1.5	2.7	1.3
Forest and Wood Products				2.3			11.4	2.2
Glass and Ceramics			1.9		4.7			
Information Technology and Telecommunications								
Manufacturing Supercluster					3.6			
Computer and Electronic Product Mfg								
Electrical Equip, Appliance and Component Mfg	7.1					5.4		
Fabricated Metal Product Mfg					2.6			
Machinery Mfg					2.4			
Primary Metal Mfg					18.1		3.3	
Transportation Equipment Mfg					4.9			
Mining	1.6			3.0	9.8	2.7	7.6	
Printing and Publishing	1.2			1.4				
Transportation and Logistics								1.5

Innovation Index

The ability of a regional economy to innovate drives healthy growth, but innovation is a complex concept. How can you measure innovation in order to improve it? This index provides leaders and practitioners with the first tool for comparing regional innovation performance with that of the United States, a state, or other regions. Like the cluster tool, the primary advantage of the innovation index is its flexibility. Users can design their own region and easily make comparisons across regions.

A word of caution is in order: measuring regional innovation can be tricky. As a result, this tool allows the exploration of the different dimensions of innovation. In a sense, the index opens the "black box" of innovation so users can look inside. As with any complex process, a better understanding is gained by taking multiple perspectives. For example, when describing the weather, one does not simply use a single measurement, such as temperature. The weather is usually described from a variety of perspectives. In addition to temperature, it might be useful to know whether it is cloudy or sunny, whether it is humid or dry, how strong the wind is blowing and in which direction. A composite of all of these measures provides a better understanding of the weather.

So it is with innovation. No single measure will do. Innovation must be viewed from a variety of perspectives. First, the innovation index comprises two broad categories: inputs to innovation, which measure innovation capacity, and outputs of innovation, which measure the results. Within each large class, the index provides additional detail and individual measures that collectively compose the broad categories. (For those who are interested, the website also points to the research that demonstrates why a particular indicator is important to innovation.)

So, for example, economic dynamics play an important "input" role in innovation. The term "economic dynamics" captures a variety of indicators: venture capital, broadband penetration, investments in R&D, and business formation. The index enables one to explore each of these variables in depth and download detailed data by simply clicking the drill-down feature. Human capital is also a vital input to innovation. Therefore, the index provides different perspectives to evaluate a region's human capital.

In addition, this tool includes state-level indicators—total R&D spending and science and technology graduates—that can help evaluate the strength of a state's investments to support innovation.

Innovation is not only about inputs, however. A region's economy must translate these inputs into productive outcomes: employment in high-technology firms, greater output per worker, the creation of patents, to name a few. By examining the output indicators, one can explore how well your economy converts innovation inputs into performance.

Because the index is not dealing with simple linear relationships, there is no direct cause-and-effect connection between inputs and outputs. The innovation index is designed to show the innovation process more clearly. The tool, in general, lets the practitioner explore innovation within your region by guiding questions and conversations about the region's performance. Generally, the tool provides information on how users can improve their region's innovation capacity by aligning, linking, and focusing relevant energy and investments.

Example: Create a Quick Snapshot of the Innovation Level and Innovation Elements of a Region

Using the online Innovation Index tool at www.statsamerica.org/innovation:

1. Select a standard region or create a custom region by using the custom region manager.
2. Compare that region with other regions and the U.S. average for the Innovation Index. (An example is shown in **Figure 1**.) An option to download all of the data in the index is also available.
3. Drill down to the four sub-indexes to compare that region with competing regions or the United States. **Figure 2** graphically compares three regions and the United States for the Human Capital, Economic Dynamics, Productivity and Employment, and Economic Well-Being sub-indexes.)
4. Compare regions using the numerical values, as shown in **Table 2**.
5. Click on the graphical sub-index comparison and see graphical comparisons (for the selected regions) for all the variables used to construct the sub-index.
6. Click on the graphical comparison for one variable and see the granular data, county by county, for that variable for each region selected.

Figure 1: Innovation Index for Three Regions and the United States

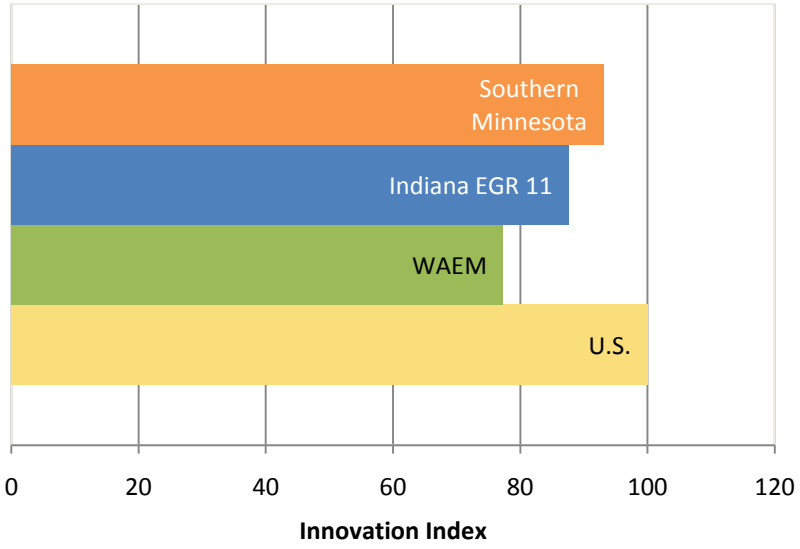

Figure 2: Comparing Innovation Sub-Indexes for Three Regions and the United States

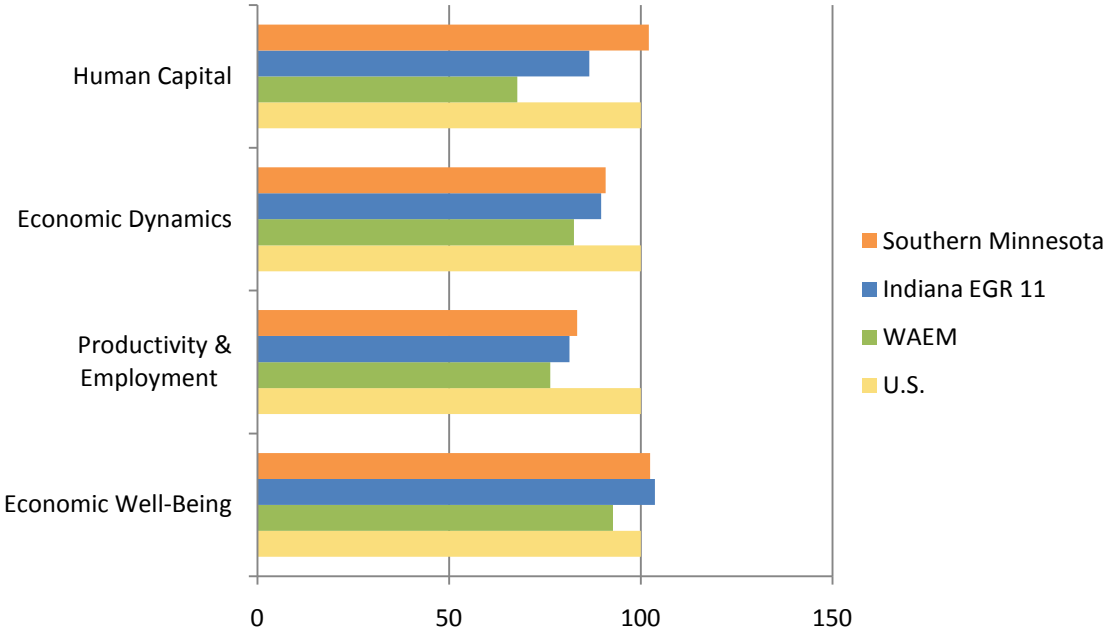

Table 2: Innovation Index and Sub-Index Values for Three Regions and the United States

	U.S.	WAEM	Southern Minnesota	Indiana EGR 11
Innovation Index	100	77.3	93.1	87.6
Human Capital	100	67.8	102.1	86.5
Economic Dynamics	100	82.6	90.8	89.6
Productivity & Employment	100	76.4	83.4	81.4
Economic Well-Being	100	92.8	102.5	103.6

Occupation Clusters

Occupation cluster analysis is a relatively new approach in regional development. In contrast to industry clusters that focus on what businesses produce, occupation clusters focus on the knowledge, skills and abilities of the individuals who work for those businesses. Like the industrial cluster tool, this tool enables users to explore their regional economy from a different perspective. Like the other tools, its main advantage is flexibility: users can define custom regions and make comparisons easily.

The swift transformation taking place in the global economy makes occupation cluster analysis particularly valuable. The global integration of markets has eliminated many regional competitive advantages. Low-cost land with transportation and communications infrastructure in place is no longer scarce. Technology quickly jumps national borders. Reliable unskilled labor costs only a few dollars a day in many places across the globe.

In this low-cost competitive environment, a region's best chance to differentiate itself is with its brainpower: the education, knowledge, skills, and abilities of its workforce. From this perspective, every region has the potential to be competitive.

Until recently, economic development practitioners paid scant attention to workforce issues, but this is changing. In addition to globalization, the retirement of the Baby Boom generation and the move of businesses toward more innovative, knowledge-based markets have combined to make the skills of the workforce central to economic development.

Until now, economic development practitioners had few tools to evaluate the knowledge, skills, and abilities of their workforce. Occupation cluster analysis provides insight into the workforce. Regions in the United States are in the beginning stages of creating knowledge-driven economic development strategies. The extensive array of labor force data compiled by the U.S. Department of Labor is giving regional leaders a greater understanding of this economic development asset.

Exploring occupation clusters within one's region represents a first step. Working with occupational data can quickly become overwhelming. To simplify analysis and aid in understanding, the tool identifies a set of important occupation clusters. The following examples offer details on how the tool can be used to assist in daily practice.

Example 1: Identify the Fastest Growing Occupations in a Region

Occupation cluster analysis helps identify the fastest growing occupations within the region. Here is an example from one region in Indiana (Economic Growth Region 11). This region is a center for riverboat gaming. The data show how the growth of this business sector has created new demands for different occupations. **Table 3** helps quickly identify those occupations with the strongest percentage change and the largest increase in the number of jobs from 2001 to 2007. So, for example, agents and business managers of artists, performers, and athletes had the largest percentage change, but that occupational segment is relatively small. Photographers represent the largest growth category in absolute terms, with 99 new jobs added in that occupational category.

This type of analysis is useful in a number of different ways. By understanding the dynamics of growth within an occupation cluster, an economic development professional can communicate more effectively with educators and workforce development professionals to build a talent pipeline needed to support businesses within the region.

Table 3: Fast Growing Occupations in the Arts, Entertainment, Publishing and Broadcasting Cluster in Indiana Economic Growth Region 11

Arts, Entertainment, Publishing and Broadcasting Cluster Fastest Growing Occupations	2001 Cluster Jobs	2007 Cluster Jobs	Change, 2001-2007	Percent Change, 2001-2007
Total Arts and Entertainment Cluster	3,095	3,348	253	8.2%
Agents & business managers of artists, performers, and athletes	19	25	6	31.6%
Writers and authors	272	346	74	27.2%
Multi-media artists and animators	76	95	19	25.0%
Set and exhibit designers	28	35	7	25.0%
Choreographers	12	15	3	25.0%
Radio operators	4	5	1	25.0%
Fine artists, including painters, sculptors, and illustrators	71	88	17	23.9%
Fashion designers	28	34	6	21.4%
Interior designers	51	61	10	19.6%
Music directors and composers	137	163	26	19.0%
Art directors	84	99	15	17.9%
Jewelers and precious stone and metal workers	28	33	5	17.9%
Photographers	606	705	99	16.3%
Musicians and singers	225	249	24	10.7%
Camera operators, television, video, and motion picture	10	11	1	10.0%
Interpreters and translators	95	104	9	9.5%
Camera and photographic equipment repairers	11	12	1	9.1%
Graphic designers	274	295	21	7.7%
Editors	118	127	9	7.6%
Desktop publishers	73	78	5	6.8%
Musical instrument repairers and tuners	15	16	1	6.7%

Example 2: Identifying "Clusters of Opportunity"

At the level of the cluster as a whole, occupation cluster analysis can help to identify which clusters of occupations provide the best opportunities for investment to build different types of skills, supporting existing or emerging industry clusters, and which occupation clusters show a competitive skills advantage in the region. **Table 4** shows employment growth by cluster, the 2007 location quotient for the cluster and the percent change in the location quotient between 2001 and 2007 in Indiana Economic Growth Region 11. Twelve occupation clusters showed an increase in employment. Only the skilled production workers cluster had a location quotient higher than 1.2, indicating a concentration of such workers within the region compared to the United States overall. However, the health care and medical science cluster not only had the highest rate of growth in employment, but had a location quotient of 1.04—an increase of just over 6 percent since 2001. Likewise, the building, landscape, and construction design cluster increased in employment by

almost 11 percent during the period, and the location quotient grew by 7.5 percent. These two occupation clusters merit a closer look by policymakers and economic development professionals, and they should likely be compared with the regional industry clusters to discern needs for expanded training and development of the skills embedded in the clusters.

Table 4: Occupation Clusters of Opportunity in EGR 11

Occupation Cluster	Employment Growth (%), 2001-2007	2007 LQ	% Growth of LQ
Health Care and Medical Science	14.6%	1.04	6.1%
Building, Landscape, and Construction Design	10.9%	0.72	7.5%
Arts, Entertainment, Publishing, and Broadcasting	8.2%	0.63	3.3%
Public Safety and Domestic Security	6.4%	0.69	3.0%
Postsecondary Education and Knowledge Creation	6.3%	0.64	-3.0%
Natural Sciences and Environmental Management	5.0%	0.78	1.3%
Skilled Production Workers: Technicians, Operators, Trades, Installers, and Repairers	4.6%	1.38	1.5%
Primary/Secondary and Vocational Education, Remediation, and Social Services	4.0%	0.84	0.0%
Managerial, Sales, Marketing, and HR	3.4%	0.72	-1.4%
Legal and Financial Services, and Real Estate	2.0%	0.78	-6.0%
Information Technology	1.4%	0.48	2.1%
Personal Services	0.2%	0.84	-8.7%

Occupational analysis provides economic development practitioners with insights into the talent base within a region. Each occupation represents a portfolio of knowledge, skills and abilities. In Southeast Wisconsin, the Milwaukee 7 region, economic and workforce development professionals are looking at the occupational composition of 15 targeted industry groups, including pharmaceuticals, plastics, and industrial machinery. Based on the occupational structure of these industry clusters, they are identifying the core knowledge, skills, and abilities that must come through their talent pipeline to supply these businesses. So, for example, production occupations within these clusters share a common need for high levels of quality control analysis, oral comprehension, and the skills of active learning.

Additionally, occupational analysis opens the door to uncovering clear career pathways. So, with some additional analysis, Southeast Wisconsin is learning the career connections between welders and machinists and between machinists and mechanical engineers.

Guidelines for Regional Investment Decisions

This framework and tool helps regional leaders prioritize public investments in economic development. For a region to prosper, a relatively small number of well-placed public investments can unlock the region's strongest economic potential. They can open up and leverage new possibilities for private sector investment, the key driver of any region's success.

Leaders in successful regions think and act strategically, but they do not necessarily follow lockstep a traditional strategic planning process. Instead, they improvise within a clear strategic framework. They make complex decisions about investments by designing their own collaborative process. The Guidelines for Regional Investment Decisions are designed to help development professionals and regional leaders understand and implement this process.

The investment process is similar to improvisation in jazz. Musical improvisations are not free-form and chaotic; they are based on a foundation. The structure gives players a focus within which to develop their ideas. In the end, sound strategies adapt as circumstances change and new opportunities arise.

Successful regions design a process for making public economic development investments that answer three core questions:

1. **The Who:** Who guides the strategy and investment process? Successful regions recruit leaders who share some common characteristics. They are not drawn from a static list of "stakeholders." Instead, successful leaders are people willing to supersede traditional organizational and political boundaries. They partner in new ways.
2. **The What:** What investments hold strong potential for the region? Successful regions define their strategies within a clear strategic framework. This framework provides stability and focus over the years.
3. **The How:** How do we prioritize investments that hold the most promise for the region? Successful regions produce effective strategies in an open, collaborative process that marries transparency with objective analysis. Public economic development investments that are the product of narrow political considerations normally fail. In contrast, public investments that are the product of open participation and strategic thinking can create sustainable transformations.

The Who: Building a Leadership Team Capable of Thinking and Acting Together

As regional leaders grapple with these design questions, they learn to become more trusting of one another. As these relationships grow, leaders' capacity to think and act quickly on complex strategic issues can increase dramatically. Stronger, more focused leadership networks emerge that are capable of taking on the challenges of transforming a regional economy.

Successful regions build stable, pragmatic partnerships composed of people who share important qualities. These individuals possess the personal integrity needed to strengthen the bonds of trust within the team. They have access to resources that they are willing to link, leverage and align with the region's strategy. Finally, effective leaders represent individuals willing to cross both political and organizational boundaries. They provide a model of more productive collaborative behavior.

Developing an effective leadership team involves a process. Over time, an effective team develops a comfortable discipline of working together. They develop the ability to balance their conversations both on big strategic questions and small next steps. The best regional leadership teams operate in a warm permissive atmosphere in which honest perspectives, whether hostile or friendly, can be accepted and discussed in an objective way.

How did these leadership teams evolve? First, they do not emerge magically from a static list of "stakeholders." They evolve through three distinct phases. In the first phase, leaders get to know each other. They set some ground rules for their discussions. They begin to pool their knowledge and share their perspectives. Economic developers can facilitate these early discussions by sharing stories of what other regions have accomplished by working together. The stories help regional leaders form a shared perspective on the opportunities in front of them. Sharing the stories of other regions naturally leads to the question, "If Region A could accomplish so much through collaboration, why can't we?"

To begin building the regional partnership during this first phase, economic development professionals guide the leadership team through an exercise of mapping a region's assets. Individual leaders rarely have the complete grasp of all the different economic development assets within a region. Mapping these assets—literally marking them on a wall-sized map of the region—can help leaders see the future in a new way.

Mapping regional assets goes beyond compiling lists of economic development assets. Critically, the team's conversations must focus on how the region's assets can be linked to create new opportunities. The economic development professional might focus on how a region's community college could be connected more effectively to its manufacturers. For example, Metro Denver is investing in Red Rocks Community College to develop the college's Green Jobs Pathway, a program that will prepare high school students to enter a variety of careers in the green jobs industry.

The second phase in the development of an effective regional partnership involves moving toward a shared strategic framework—a shared mental model—of the opportunities ahead. This phase involves exploring where the region's most promising economic opportunities lie.

The third phase of development for a leadership team tests the team's ability to make strategic decisions together. At this stage they must effectively answer "the How" question ("How do we decide among competing alternatives for investment?").

The What: Building a Shared Strategic Framework

Developing a shared framework for strategy is often a complex and confusing process that can be simplified by starting with a flexible, comprehensive strategic framework. The framework divides strategy into five categories of connected activity and investment: Brainpower; Innovation and Entrepreneurship Networks; Quality, Connected Places; Branding Experiences; and Civic Collaboration. A balanced regional economic development strategy will have activities and investments in each of these focus areas.

The logic of this strategy framework is straightforward, inclusive, and easy to communicate. The framework's strategy message runs as follows:

- **Brainpower:** To compete globally, a region needs 21st-century brainpower—people with the skills to support globally competitive businesses. Economic development starts with sound education and imaginative, entrepreneurial educators.

- **Innovation and Entrepreneurship Networks:** A region needs business development networks to convert this brainpower into wealth through innovation and entrepreneurship. These networks include cluster organizations, angel capital networks, mentoring networks, and so on.
- **Quality, Connected Places:** Third, a region needs a strategy to develop quality, connected places. Skilled people and innovative companies are mobile; they can move virtually anywhere. They will choose to locate in places that have a high quality of life and that are connected to the rest of the world.
- **Branding Experiences:** Next, a region needs to tell its story effectively through defining its most distinctive attributes and communicating them. These stories are important, especially for regions facing a "brain drain." Young people want to live in regions with a future, and they can see this future most clearly through the stories they hear about a region.
- **Civic Collaboration:** Finally, a region needs leaders skilled in the art and discipline of collaboration. The economy demands the ability to collaborate to compete. Economic and workforce development investments involve multiple partners. A region that understands how to collaborate will be more competitive.

Economic development professionals can use this strategic framework in a variety of different ways. As a first step, it is useful in mapping current regional economic development activities. In most regions, these activities are spread across a variety of different organizations. Leaders of these organizations often do not communicate effectively with each other. By listing each organization's major focus and activities on the grid, important patterns and gaps emerge.

So, for example, workforce development activities—STEM education at the local high school, adult literacy initiatives, retraining initiatives for displaced workers, on the job training in lean manufacturing—naturally fit within the Brainpower component of a regional strategy. Entrepreneurship and small business development activities—an entrepreneurship course at the local college, the activities of a Small Business Development Center, an angel capital network, or an incubator—fall within Innovation and Entrepreneurship Networks.

Most tourism and business recruitment activities fall into the Quality, Connected Places component of a regional strategy. Finally, leadership programs, annual meetings, and citizen forums represent the core elements of Civic Collaboration.

Development professionals can use the same framework to map their existing strategy. To what extent is the region's strategy balanced across the different dimensions? To what extent does the region have a clear set of shared outcomes within each category of investment? This framework provides a regional leadership team with a base map on which to plot strategy. In this way, the framework can help clarify development initiatives and sustain momentum to fulfill regional goals. Most importantly, a shared strategic framework helps the regional leadership develop common understandings, stay focused, and not get lost in side issues.

The How: Focusing Public Investment in the Region's Economic Future

The capstone in successful regional collaboration is reaching agreement on the region's economic development investment priorities. During the first two phases of its evolution, the regional team explores the region's assets and identifies a range of strategic opportunities—new pathways to regional prosperity. The team must then select its top economic development investments from among a long list of opportunities. These investments represent a small number of relatively large commitments that will unlock the region's

most promising economic opportunities. Effective economic development investments align with the region's core economic strengths or competitive advantages. These development investments both leverage the region's existing economic strengths and extend the region's economy into new areas unlocked through transforming innovations.

The dilemma every regional leadership team must resolve is how to select those investments projects most likely to spur growth in areas 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, as well as questions of equity ("Are we investing to benefit the entire region or just a part of it?"). The Guidelines for Regional Investment Decisions help a region prioritize investments through guided, focused discussions within the leadership team. The Regional Investment Portfolio Tool represents the most advanced tool within these guidelines. Drawing on lessons from portfolio management, the Portfolio Tool amounts to a high-level summary of information on alternative investments. As shown in **Figure 3**, the tool combines comparable information for competing projects (the rows in the table) and allows leaders to compare the projected returns and risks. Obviously, the power of this comparison depends upon sound information. Thus, this tool requires a careful preparation step in addition to in-depth facilitation. To ensure objective comparisons, the discussion should be facilitated by a professional external to the region.

The Regional Investment Portfolio Tool helps regional leaders focus on the strategic dialogue on the issues that matter. In the end, the quality of the leadership team's conversations drives the quality of its decisions. If these conversations are focused, respectful, capable of exploring dissenting views, connected to objective facts in the market, and based on a commitment to transparency, they will create more powerful, lasting impacts.

For Further Information

The staff at the Purdue Center for Regional Development and the Indiana Business Research Center will be happy to talk with you about any aspect of the tools.

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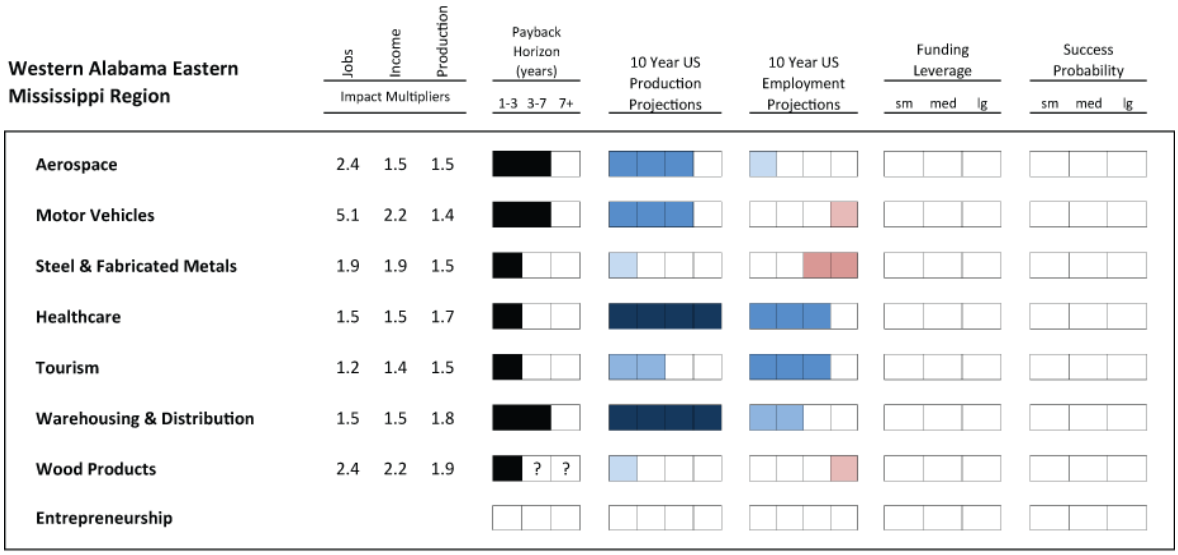
Figure 3: Components of the Regional Investment Portfolio Tool

Investment Allocation Matrix (Principal Investments)



Investment Prioritization Matrix (Subcomponent Detail)