PLACE-BASED ECONOMIC DEVELOPMENT: A GUIDE FOR IMPLEMENTING STRATEGIES IN THE HEARTLAND

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Professor Feldman was a winner of the Global Award for Entrepreneurship Research for her contributions to the study of the geography of innovation, the commercialization of university research and the role of entrepreneurial activity in the formation of regional industry clusters. Feldman is a prolific and highly cited author. She received the Distinguished Scholar award from the Technology and Innovation Management division of the Academy of Management.

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Minoli Ratnatunga is an economist dedicated to helping communities prosper, and serves as a fellow with Heartland Forward. Her work at think tanks, non-profits, and local government has focused on the tools and policies that create outcomes that matter.

Minoli’s research at Heartland Forward continues her pursuit of pragmatic and effective policies to spur economic renewal, including exploring the role of research institutions and entrepreneurship in economic development. She draws on both an in-depth local perspective from her time crafting regional development policy in Pittsburgh, and her knowledge of national best-practices built as the director of regional economics research at the Milken Institute.

Minoli helps mission-driven organizations better understand and address critical issues to increase their community impact with Star Insights, a strategic advisory firm based in Los Angeles.

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Heartland Forward's mission is to improve economic performance in the center of the United States by advocating for fact-based solutions to foster job creation, knowledge-based and inclusive growth and improved health outcomes. We conduct independent, data-driven research to facilitate action-oriented discussion and impactful policy recommendations.

The views expressed in this report are solely those of Heartland Forward.
INTRODUCTION

There are many places in the American heartland that are ready for investment to translate local expertise, found in existing small and medium sized firms and their skilled workforce, academic research, and nascent stage entrepreneurial companies, into great economic opportunity. And the appropriate role of regional policy evolves as the number of firms increases, entrepreneurial support services become available, and successful exits allow capital recycling and reinvestment in the community.

A large body of research into effective strategies and practitioner expertise in ecosystems can yield useful insights for policy makers as they develop their strategies. For example, rather than copying mature and established ecosystems, there is a recognition in the literature and in practice that building strong and resilient economies takes time and is a self-organizing local process.

There is no precise recipe for creating place-based economic development: every place is unique. It takes good ingredients and a strategic plan that builds on the local strengths. It requires collaboration between the private sector, local government, philanthropy and universities. It also needs to demonstrate promise and future potential to workers and other citizens. There is a need to learn what policies and programs other places have implemented and then to experiment, evaluate and adjust as needed as circumstances change. Economic development is a process.

This guide aims to help heartland place-makers make the most of the authentic opportunities available in a way that is based on a clear-eyed understanding of their region. It includes tools to help answer questions economic development practitioners and stakeholders may have, organized into six modules:

- Constructing a regional profile
- Identifying target industries for development
- Assessing a regional industry’s maturity
- Building effective partnerships
- Setting relevant goals
- Choosing benchmark regions

Each module points to example data sources and case studies to help the user quickly find relevant data and understand its application. Additional resources are available in our data library.
A regional profile captures information about your economic development focus that is relevant to the audience (e.g., a potential investor or funder) and helps them understand the unique characteristics and capacities of your community. It should identify the opportunities you wish to pursue using data and narratives that describe your region. For example, you might highlight the potential growth of target industries, their strategic or national competitive value, and outline the assets that give your region an edge in potentially developing a successful industrial cluster. These might include areas of research excellence, key technologies, transportation links, access to markets, and anchor firms. The policy environment, for example, relevant incentives and the regulatory environment, may also factor in.

What information is relevant to your regional profile depends on the need or opportunity you are looking to address and the story you wish to tell. Traditionally, elements like employment and gross regional product by industry, along with trends in new business starts, wages, and investment have formed the base of an economic profile. In addition to this general economic context, you might include information on economic diversification and volatility that captures how resilient (or vulnerable) your economy is to the business cycle and macroeconomic trends. If there are industries in decline, you might highlight the skills of the potentially dislocated workforce and make the link to your target industries and the relevant opportunities they could offer these workers.

Disaggregating data on employment, labor force participation, income, and entrepreneurship by gender, age, race, or level of education can help highlight underserved groups who might benefit from your proposed programs. Similarly, looking at the geographic concentration of poverty, food insecurity, or exposure to environmental threats (e.g., extreme weather, climate change, air and water pollution) can highlight sub-regions where targeted programs could help address inequality. Some funders might require that you conduct a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis, and include your findings in your regional profile.

Sharing data on existing capacities and those you wish to bolster in your community can help explain and justify your economic development strategy.

**Community capacity:** These are the physical and human capital assets that influence economic development. They include physical infrastructure, like roads and bridges, digital infrastructure like broadband access, and the skills and knowledge in the workforce.

- **US Census** (American Community Survey) This interactive tool allows users to make simple data requests for specific geographic areas, for example looking at the number of county residents with an advanced degree or their commuting patterns. Data are also available for industries in specific geographic areas down to the census tract level.

- The **Social Capital Atlas** uses data from Facebook to map out the connectedness, cohesiveness and civic engagement of communities in US counties. While this data is limited to those with a Facebook account, social media-based metrics of this type can be useful proxies for community ties.

- **LinkedIn** is the largest professional network on the internet and can be used to find individuals located in a specific geography, locate profiles of organizations and build professional relationships. This platform provides a means to identify key organizations and individuals in a place.
Firm and industry capacity: These are the firms’ assets in a location, including their workforce, facilities, equipment, and supply chains. Economic development requires partnerships with these firms and depends on their resources and networks.

- **U.S. Small Business Innovation Ecosystem Mapping Project** provides a comprehensive online platform that links a wide range of public databases and information sources to provide a dashboard and set of tools for analyzing the U.S. small business innovation ecosystem.

- **U.S. Cluster Mapping Project** includes a wealth of information organized around regions and industries in a way that allows users to see trends and concentrations based on employment and patent data. For example, it includes information on key traded clusters, highlighting industries where a region is specialized. A limitation is that it does not include smaller cities and micropolitan areas nor does it address emerging technologies.

Entrepreneurial capacity: This focuses on the potential for generating new small businesses, including a risk-taking culture, networks, financial capital, and a skilled workforce. This capacity includes startup firms and entrepreneurs who would like to start firms.

- This Small Business Administration website includes data and abstracts of all **Small Business Innovation Research (SBIR)** and **Small Business Technology Transfer (STTR) grants** made, and can be searched by state, phase and awarding federal agency. Looking at awards made in your region over time can help identify innovative firms that are developing products with commercial potential.

- The **Crunchbase** platform provides company insights from early-stage startups and is searchable based on address, product categories and funding. Basic data are available free with more details and functionality behind a paywall.

Innovation support capacity: This refers to the resources required to support new products, processes, and organizations. Resources include facilities, support services, and ability to take risks. This capacity extends to research and development activity in existing firms, universities and other organizations.

- **AUTM’s Statistics Access for Technology Transfer (STATT) Database** is a proprietary database that offers information on technology transfer from universities allowing users to build a profile of local universities and their ability to generate and commercialize innovative technologies.

- The U.S. Patent and Trademark Office grants patents, trademarks and copyrights as specified in Article I, Section 8, Clause 8, of the Constitution. Searchable databases on patents [https://www.uspto.gov/patents/search](https://www.uspto.gov/patents/search) and trademarks [https://www.uspto.gov/trademarks/search](https://www.uspto.gov/trademarks/search) provide data on innovative companies and their ideas.

CASE STUDY

Greenwood, Mississippi leveraged its ideal location and existing infrastructure as a launchpad to design their regional economy in practical ways. Specifically, the return to manufacturing has been largely successful in Greenwood in part due to its capacity to provide manufactured parts for many larger corporations conveniently and efficiently.
IDENTIFYING TARGET INDUSTRIES FOR DEVELOPMENT

Innovative individuals, businesses, and regions grow together over time in a dynamic, self-sustaining cycle. Looking at a successful region in its full maturity may not provide prescriptive information about the process of how such regions develop; indeed, many of the features observed in such regions are the result, rather than the cause, of their success. Nonetheless, economic research has yielded useful insights about how regions develop through the establishment of industrial clusters, the birth of businesses, and cycles that reinforce advantage and growth.

Looking at the capacities of your region helps identify the assets that your community has amassed over time. Industries that have contributed to the growth of your local economy in the past may have seeded the skills and infrastructure needed to foster the next generation of industries with the potential to shape the future of your region. Identifying these target industries and then supporting their development requires understanding the relationship between the base industry and the target, as well as assessing the strategic and competitive advantages both of the industry and of your region as a home for firms in this industry. Projections of massive growth in any number of technologies over the years has lured some economic development agencies to overreach and pursue economic development strategies where they would be starting from scratch, while regions that had preexisting expertise were able to outcompete by expanding established clusters into these new areas. Building from a position of strength increases the potential that a target industry, technology, or new application within an established industry is able to succeed in a region.

Beyond the existing workforce, skills-base, and established firms and industry capacities, other assets to consider when identifying target industries for development include anchor institutions like research universities, government labs, the entrepreneurial culture and the natural and cultural resources that might help bolster the development of a target industry. With competition for workers increasing, looking at the intersection of industries with the interests of people drawn to your region for its amenities might offer additional ideas to leverage your regional characteristics attract both a workforce and the employers seeking those workers.

Tools that assess concentration of industry or relevant occupations like location quotients can be helpful in identifying potential emerging areas of strength. Shift-share analyses offer insight into how your region is performing and how much of an industry’s growth can be attributed to local competitive factors. Data on new business formation and patents granted can identify areas where innovators and entrepreneurs are seeing opportunities. In addition to these datapoints, interviewing experts at local firms on what gaps they see in their supply chain, commercial real estate agents on who is looking to relocate to your region, or technology transfer officers on the technologies that their universities are producing and where they see the most commercial potential, can yield insights into opportunities.

Economically productive places have a coherent, place-specific activity set that is not easily transferred or replicated but instead has developed over time. Clusters—collections of firms within one specialized industry or technology, concentrated within the same local geographical area—create ecosystems that support a sustainable advantage for both firms and industries.

Writing in his magisterial Principles of Economics (1890), British economist Alfred Marshall cited three reasons for the clustering of industry in England: the infrastructure of related and supporting industries; the presence of deep, specialized, skilled labor pools;
and the presence of nonmonetary externalities that arise from accelerated knowledge exchange facilitated by geographic proximity. Marshall maintained that related firms within a specialized industry clustered together because they drew from a deep local pool of skilled and specialized labor.

These firms also shared knowledge and best practices via local market transactions (when information on customer demand is passed up along the supply chain, for example) or through nonmarket knowledge spillovers (e.g., when a worker with specialist skills left one firm and joined another, bringing along new knowledge and techniques). Because of the density and geographical proximity of workers with similar skill sets, economic actors—specifically, the firms, entrepreneurs, scientists, or workers—could more easily use formal and informal channels to solve problems. Experience with a technology or industry increased the stock of available knowledge locally, yielding better ideas. That is, economic agents benefited from easy communication, knowledge exchange, reduced transaction costs, and unexpected—but highly relevant—chance occurrences.

Industrial clustering has been observed at different times and across multiple geographic regions. This phenomenon is heightened in a knowledge—versus an agricultural or industrial—economy, as innovation is a creative, cognitive activity that benefits from colocation. So-called knowledge spillovers, or the nonpecuniary transfers of knowledge, are a major reason why innovators cluster spatially. Knowledge spillovers are subtle; over time, individuals observe one another, copy ideas, and build up the stock of knowledge with new ideas, components, and design elements. Industrial clusters typically include an infrastructure of related and supporting industries, the presence of specialized skilled labor, and proximity to a strong research base.

We describe the factors that contribute to industry success using four different types of reinforcing and related capacities:

**Community capacity:** These are the physical and human capital assets that influence economic development. They include physical infrastructure, like roads and bridges, digital infrastructure like broadband access, and the skills and knowledge in the workforce.

- The [State New Economy Index](#), published by the Information Technology and Innovation Foundation, is an example of an index that aggregates varied indicators to try to capture the economic structure of a state and thus its suitability to foster innovation-driven economic development.

**Firm and industry capacity:** These are the firms’ assets in a location, including their workforce, facilities, equipment, and supply chains. Economic development requires partnerships with these firms and depends on their resources and networks.
• The Quarterly Census of Employment and Wages published by the US Bureau of Labor Statistics provides state and county estimates of employment and wages by industry.

• The County Business Patterns data collected by the US Census Bureau, offers data on the number of establishments, employment and payroll, offering a tool to track long term trends at the establishment (branch) level.

Entrepreneurial capacity: This focuses on the potential for generating new small businesses, including a risk-taking culture, networks, financial capital, and a skilled workforce. This capacity includes startups firms and entrepreneurs who would like to start firms.

• The Business Formation Statistics database collected by the US Census Bureau tracks new business applications and formations and offers insight into the economic dynamics. The national data is reported monthly, with county data reported annually with a lag, and both can be useful when identifying industries that have potential for development.

Innovation support capacity: This refers to the resources required to support new products, processes, and organizations. Resources include facilities, support services, and ability to take risks. This capacity extends to research and development activity in existing firms, universities and other organizations.

• PatentsView is the US Patent and Trademark Office's tool to provide access to data on patents issued. Narrowing the data by geography can provide a snapshot of the types of innovations with potential commercial value being developed and protected in your region.

CASE STUDY

In the Kansas City Animal Health Corridor, education and talent development is heavily geared to support the existing animal health industry in the region. This support is well balanced with an effort to maintain industry diversity, but the region has identified their key industry, capitalized on it and leveraged its strengths to continue building the regional profile.
Industries evolve along distinct pathways over time, following the biological metaphor of a lifecycle. Industries are defined as a group of companies working on related activities. Think of them as producing goods that might be substitutes or using similar methods to produce goods or services. Some industries serve local customers, and their growth potential depends on growth in the local population. Other industries may start out serving local customers but have the ability to scale to serve national or international markets and offer greater growth potential. It is never easy or straightforward to assess the economic potential of an industry or even a company. A great deal depends on the entrepreneurs and the firm owners who guide the firm and determine its potential.

New industries often begin rather humbly as discoveries made while entrepreneurs work for other companies or universities. At the time of discovery, the commercial potential is unknown and only a few experts may appreciate its significance. Translating the discovery into commercial activity and realizing its economic potential involves building an appreciation of what is possible among potential investors, customers and employees. In the process of learning about the possibilities, individuals – workers, suppliers, funders, government officials – transform into champions and actively contribute to furthering the industry.

While there are standard ways of defining industries such as the North American Industry Classification System (NAICS), there is also an opportunity to think more holistically about firms that share commonalities. For example, aircraft manufacturers and wind power mills manufacturing share commonalities in blade design and manufacturing while being classified differently. The critical thing is defining commonalities to build upon. This requires talking to firms to understand what they are doing and what they need.

Too often, economic development is concerned with just a few high technology industries, ignoring the full potential of the range of activity. Recent policy initiatives to re-shore manufacturing create unlimited opportunities for a full spectrum of products.

When we think about a human life cycle we think about age, but industry maturity is tied to the number of firms and related activity in the industry and region. The number of firms determines the ability to advance similar ideas, the potential for share resources, the opportunities to advocate for worker training programs and favorable public policies. This combination of concentrated activity, along with advanced technology development, reduce production costs and diminish the advantages of offshore production.

Industries pass through well-known stages. The first is nascency, when there are a few firms, no local industry organizations or advocacy groups, and little support for industry activity. The industry is literally under the radar. The most opportune nascent industry is something that is unique and for which the region has some advantage. Other nascent industries in a location may be well-known, such as biotechnology, but for which the region can develop a segment such as exists now for ag-bio tech in Indiana or animal products in Kansas and Missouri. These activities started small, and firms may not even be aware of one another.

To best serve nascent industries, resources are most effective if they are deployed to address fundamental concerns to make sure that the community has essential capacity, such as a high-quality educational system and strong infrastructure that directly support the nascent firms. Together with reinforcing amenities and improving essential services, this provides the basis to retain workers and firms and attract inmigrants.
The next stage is an inflection point of accelerated growth. Often, transition is marked by some event that draws attention to the industry and region, such as a company filing for an Initial Public Offering (IPO), securing a big infusion of funding or getting a big contract. At this point, the industry gains momentum and, with demonstrated successful examples, more new companies will be started. Accelerators and incubators will have a sufficient number of customers, angel investors will find deal flow and there will be multiple opportunities for employees to explore and advance. Firms move into the region to take advantage of resources and relationships.

To best serve accelerating industries, investment in building consensus about the possibilities of the industry is important. With increased activity in the industry, there are new opportunities to reach out to potential entrepreneurs and employees to inform them about the opportunity. Programs for training workers at all skill and occupation levels will assist the development of the industry and provide good employment prospects. Institutions of higher education can assist with extension services to provide solutions to technical problems and offer entrepreneurship training and assistance with firm growth and scale-up. At this stage there will be a growing cadre of entrepreneurs who can also serve as mentors. The creation of industry associations, often public-private partnerships, can further the interests of individual firms in a way that they could not achieve individually.

The final stage is the resilient stage, when growth stabilizes. The ecosystem is fully formed and functioning. At this stage, the industry and region have buzz – and your region is recognized as a center of activity. But this is no time for complacency.

In this resilient stage, firms that were once small and entrepreneurial have grown. Regions typically have multiple industries operating at different levels of maturity. In this way, the various industries provide a portfolio to ensure regional resilience. Often these industries are inter-related, for example, software and e-games, banking and ecommerce, or medical devices and therapeutics. Often industries may be related in supply chain relationships. For example, firms producing packaging equipment may also be suppliers for food products. By this phase of firm development, the community should have a well developed ecosystem of services to support new product development, new applications of existing products, new linkages between firms and the development of new markets, which perpetuates the startup cycle and builds resiliency against both business cycle impacts and dominant firms that become obsolete in their respective markets.
**TABLE 1: MATRIX OF POLICIES TO FOSTER REGIONAL CAPACITIES AT THREE STAGES OF INDUSTRY MATURITY**

<table>
<thead>
<tr>
<th>CAPACITY</th>
<th>NASCENCY STAGE</th>
<th>ACCELERATING STAGE</th>
<th>RESILIENT STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community capacity:</td>
<td>• Address fundamentals</td>
<td>• Consensus planning</td>
<td>• Look for new ideas/opportunities</td>
</tr>
<tr>
<td>The physical, social, and environmental assets that influence the context for economic development;</td>
<td></td>
<td>• Increase diversity through outreach</td>
<td></td>
</tr>
<tr>
<td>Firm and industry capacity:</td>
<td>• Procurement Contracts</td>
<td>• Specialized Training</td>
<td>• Invest in local supply chains</td>
</tr>
<tr>
<td>The assets relevant to firms and industry, including workforce, facilities and equipment, organization, and supply chain;</td>
<td>• Build shared facilities</td>
<td>• Extension programs</td>
<td>• Industrial Parks</td>
</tr>
<tr>
<td>Entrepreneurial capacity:</td>
<td>• Programs to increase access to startup capital</td>
<td>• Incubators</td>
<td>• Continue nurturing new talent</td>
</tr>
<tr>
<td>The potential for generating new small businesses, including a risk-taking culture, networks, access to financial capital and a skilled workforce;</td>
<td>• Invest in STEM education</td>
<td>• Accelerators</td>
<td></td>
</tr>
<tr>
<td>Innovative infrastructure:</td>
<td>• University tech transfer policy optimized</td>
<td>• Create industry associations</td>
<td></td>
</tr>
<tr>
<td>The capacity to support new products, processes, and organizations, in terms of facilities, support services, and willingness to take risks.</td>
<td>• Engage foundations and civic leaders</td>
<td>• University technology extension programs</td>
<td></td>
</tr>
</tbody>
</table>

Data provides a first step to assess the presence of industries and their stage of development. Google Maps provides a search function that can be used to examine firms in a given geography. Searching Crunchbase and reading firms’ descriptions provides another information source.

**Community capacity:** These are the physical and human capital assets that influence economic development. They include physical infrastructure, like roads and bridges, digital infrastructure like broadband access, and the skills and knowledge in the workforce.

- **Lightcast**, formerly the EMSI (Economic Modeling Specialists Incorporated) Burning Glass, provides web-based software and consulting services built around labor market data. The developed database contains comprehensive information on industries, occupations, occupational skills, education, training, and demographics which can be filtered by geography to help assess and understand employment trends, education and economic development, and dynamics.

**Firm and industry capacity:** These are the firms’ assets in a location, including their workforce, facilities, equipment, and supply chains. Economic development requires partnerships with these firms and depends on their resources and networks.

- The **Longitudinal Business Database** is a research dataset constructed by the U.S. Census Bureau providing annual data for a complete and accurate set of longitudinal establishment linkages and contains basic information on establishments, allowing researchers to track trends of firm formation, tenure and death, and regional firm evolution.
- **Business Employment Dynamics** (BED) provides quarterly data on establishment openings, closings, and changes by industry and size of firm, as well as establishment births, deaths, and survival by age. Analysts can identify patterns of gross job creation and destruction by industry sector, and track survival and identify contributions of establishments to employment growth.
Entrepreneurial capacity: This focuses on the potential for generating new small businesses, including a risk-taking culture, networks, financial capital, and a skilled workforce. This capacity includes startups firms and entrepreneurs who would like to start firms.

- **Business Dynamics Statistics (BDS)** provides measures of net and gross job flows, including measures of job creation and destruction. Aggregate statistics are available by state, by firm characteristics and industry classification. Users can ascertain patterns of entrepreneurship, structural change, the gross job flows that underlie net employment change, and employment contributions by firm size and age.

- **GeoIQ** by Quantduo Technologies is a client-based geospatial data management, visualization, and analysis platform. Users can share and merge data, while using location as the common pivot point to identify trends and patterns, fuse together information from numerous sources and identify trends to drive better business decisions. Data and maps are shared through GeoCommons, a public platform to which GeoIQ users contribute location-relevant information, facilitating the ability to track a diverse set of location-specific economic and social factors.

Innovation support capacity: This refers to the resources required to support new products, processes, and organizations. Resources include facilities, support services, and ability to take risks. This capacity extends to research and development activity in existing firms, universities and other organizations.

- The **Business R&D and Innovation Survey (BRDIS)** is overseen by the National Science Foundation and the Census Bureau and provides data on a range of R&D activity performed by U.S. companies by major industry, line of business or business segment, state, and firm size. BRDIS allows for the comparison of business R&D and innovation activities by sector and geographic area over time.

**CASE STUDY**

In Omaha, Nebraska, the variety of industries are at differing points in their maturity. While investment firms like Berkshire Hathaway and telecommunications firms like US West and Cox Communications have a very robust support network, other industries are at varying levels of maturity. Union Pacific Railroad, for example, while a historic corporation, has few transportation counterparts in Omaha.
BUILDING EFFECTIVE PARTNERSHIPS

Building and maintaining strong relationships advances the ability to realize a vision for your region. It’s about connecting with people to build community in and around a shared goal.

Prosperous regions build effective partnerships among entrepreneurs, who invest in building infrastructure as they build their firms; local champions, who believe in a place and make long-term investments in building its social capital; and large organizations, either academic institutions or corporations that build and sustain local resources. Having these actors in place is no guarantee. A critical factor is the construction of shared meaning and listening to and incorporating the opinions of all stakeholders.

Building partnerships and sustaining partnerships is essential to regional industrial development. Potential partners include:

- Government, state and local
- Firms, both large and small
- Chambers of Commerce (including Ethnic or other specialized Chambers)
- Labor Unions
- Indigenous Nations
- Universities, government labs, research and translational partners
- Foundations, especially local community foundations and family funds

Many opportunities for funding are currently underway from the federal government. Organizing to respond to a funding opportunity is one way to form partnerships and engage in dialogue. Yet, the important outcome is not producing a proposal or gaining funding. The real outcome is learning to work together. By constructing a shared understanding and appreciation of an emerging technology and what might be possible in a region is the first step to forming a community of common interest. Partnerships are about building relationships, which take time and commitment. It’s not about writing one grant application but about sustaining effort to be ready for the next opportunity.

Community Consensus Discussion Guide

We offer this discussion guide as an initial suggestion for starting community conversations. Achieving meaningful partnerships requires being inclusive. It also requires hearing and being open to new ideas and being challenged about preconceptions. A critical concern is that economic development can gentrify communities and displace existing residents. Economic development works best when it addresses the needs of the entire community.

As a starting point, use some or all of the questions below and interview local officials, economic development professionals and community leaders to understand the key issues facing the community and what is, or has been done, to address them. The responses received can then be used to frame focus groups and/or open forums that capture a much broader set of voices from the community. Consensus building techniques can be utilized in the focus group and forums to move the conversation toward collective action and buy-in around critical aspects of the place-based economic development strategy.
Community Consensus Questions

1. What type of future do you envision for your community?

2. What would a prospering future look like for your community in 10 years? What does the term “prosperity” mean from your point of view?

3. What do you think “entrepreneurship” means in your community?

4. What does the term “innovation” mean in your community?

5. To what local organizations do you belong? What is the focus of those organizations (e.g., school oriented, social, political)?

Project specific questions

1. How do you think the project that we have described could be designed to align with the cultural and spiritual values of your community?

2. How might this economic development project contribute to the overall well-being of your community?

3. What are your thoughts on the potential opportunities that the economic development project may create for the community? Jobs? Other business opportunities?

Potential Concerns

1. Do you have concerns regarding the proposed concept and its potential effects on the community?

2. Who should we include in our discussions? Who are the most influential individuals? Who are the community members that we need to include in our discussions?

Recommendations

1. What incentives do you believe would motivate members of the community to actively seek employment in the project that we have described? What would make the project’s jobs attractive? (e.g., wages, benefits)

2. How might we engage people in training and skill development opportunities?

3. Do you have any suggestions for how we build community engagement and hear diverse perspectives?

Entrepreneurship

1. Have you ever thought of starting a new business or new organization? Has anyone you know started a new business/organization? What happened?

2. What are some of the factors that either inhibit or facilitate entrepreneurship in your community? How should the factors that inhibit entrepreneurship be addressed?
To inform your partnership building, relevant data on the capacities of your region can provide valuable context and focus for your discussion.

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- **Labor/Insight** is a comprehensive database of job posting information extracted from online job boards, newspapers, and employer sites daily. Users can analyze changing employer demand for various skills and occupations, identify new and emerging jobs and industries, and find changes in individual employer hiring demand across sectors. Labor/Insight provides profiles of growth sectors, employer targeting strategies, and workforce training support.

**Firm and industry capacity:** These are the firms’ assets in a location, including their workforce, facilities, equipment, and supply chains. Economic development requires partnerships with these firms and depends on their resources and networks.

- The **Dataverse Network Project** is a free virtual web archive created and hosted by Harvard University that allows researchers to publish, share, reference, extract, and analyze research data. The tool provides an open-source application for publishing, citing, and discovering research data related to several R&D areas that allow users to share data relevant for regional economic and innovative analysis.

**Entrepreneurial capacity:** This focuses on the potential for generating new small businesses, including a risk-taking culture, networks, financial capital, and a skilled workforce. This capacity includes startups firms and entrepreneurs who would like to start firms.

- **CB Insights** uses big data to track venture capital and angel investments, private equity, and government-backed private companies as well as their investors. CB Insights helps users identify sectors/industries of growth to inform their economic development plans and aids local companies in search of investment.

**Innovation support capacity:** This refers to the resources required to support new products, processes, and organizations. Resources include facilities, support services, and ability to take risks. This capacity extends to research and development activity in existing firms, universities and other organizations.

- **Factual** is an open data platform for application developers that leverages large-scale data aggregation and community exchange. The focus is on making data more accessible (i.e., cheaper, higher quality, and less encumbered) for machines and developers to drive and accelerate innovation. Factual provides access to clean, structured data that enables analysts to customize analyses of multiple facets of regional economic activity using web sourced data.

**CASE STUDY**

- **Central Indiana** has effectively leveraged its local entities to create the Central Indiana Corporate Partnership, an organization which facilitates private-public partnerships to bolster innovation, develop a robust talent pipeline and help Hoosiers find successful careers.

- **Warsaw Indiana Orthopedic Device Cluster:** a description of the cluster’s evolution can also be found at this [website](#).
SETTING RELEVANT GOALS

Bringing together a large group of stakeholders around a shared vision for economic development is a prerequisite for setting relevant goals. Identifying the key capacities you wish to affect through policy and programs can help build alignment around your vision for the region and leveraging your partnership building and your regional profile. With a shared understanding of the current state of the region and the necessary stakeholders at the table, you can set about collecting information on what gaps are currently most important to your stakeholders and what outcomes matter most to them. An inclusive process, that respects the time and input people offer without over-promising the extent to which their individual concerns will affect the collective outcome is crucial. It allows those facilitating the visioning process to gather ground level input on the current experience of participants and to gather their myriad aspirations for the region's future. Tools from human centered design can help elicit details on challenges as well as generate and refine potential solutions – for example when exploring barriers to access that may limit use of existing resources by underserved groups.

A number of community consultation tools exist to help guide the development of a shared vision. The Community Toolbox hosted by the Center for Community Health and Development at the University of Kansas contains sections on developing a vision and creating objectives. We have created a community consensus discussion guide that elicits information about aspirations for the future to highlight the alignment and divergence among stakeholders’ desired outcomes.

Equipped with a shared vision, you can set about establishing goals. Measurable goals for changes in capacities might include metrics like labor force participation rates, training programs completed, reduction in disparities in key outcomes, new firm formation, real wages, venture capital funds invested, or patents awarded, for example. The private sector has experience collecting and using metrics that capture harder to measure factors like customer satisfaction, and the tools they have developed may also be of value in setting and assessing progress toward goals. Funding agencies may establish goals as part of their funding agreement with you. Attempts have been made to capture characteristics like “resilience” by aggregating a range of variables, so exploring available indexes from reliable sources might yield useful additional metrics.

We describe the factors that contribute to industry success using four different types of reinforcing and related capacities that may offer a starting point for goal setting:

**Community capacity:** These are the physical and human capital assets that influence economic development. They include physical infrastructure, like roads and bridges, digital infrastructure like broadband access, and the skills and knowledge in the workforce.

- National Economic Resilience Data Explorer, from Argonne National Laboratory, has assembled dashboards for each county that assess a range of metrics to assess the county’s economic resilience.

**Firm and industry capacity:** These are the firms’ assets in a location, including their workforce, facilities, equipment, and supply chains. Economic development requires partnerships with these firms and depends on their resources and networks.
• The Business Enterprise Research and Development Survey is a rich source of data on private sector R&D activity. Most of the data is available at a national level, but Table 13 and Table 54 report state level data on private sector R&D activity and state R&D employment. Tables 29-A and 29-B report private sector R&D activity by industry by state.

Entrepreneurial capacity: This focuses on the potential for generating new small businesses, including a risk-taking culture, networks, financial capital, and a skilled workforce. This capacity includes startups firms and entrepreneurs who would like to start firms.

• The Pitchbook-National Venture Capital Association Venture Monitor offers analysis of VC trends in the US and provides data on VC deals and fundraising by combined statistical area (for the top performers).

Innovation support capacity: This refers to the resources required to support new products, processes, and organizations. Resources include facilities, support services, and ability to take risks. This capacity extends to research and development activity in existing firms, universities and other organizations.

• STATSAmerica’s Innovation Intelligence includes recent data by county on topics like business formation and dynamics, along with employment, patenting and human capital measures. It rolls these factors into a headline Innovation Index.

RESOURCES

• Minneapolis Saint Paul Regional Economic Development Partnership has a regional indicators project that tracks a variety of metrics, including inclusive growth and entrepreneurship along with the typical wages and production measures.

• In “A roadmap to developing inclusive regional economic indicators” the Brookings Metro group reflected on inclusive growth indicators, and how to develop them as a community.
CHOOSING BENCHMARK REGIONS

The complexity of the modern economy means that no region is in complete control of its own destiny. National and international macroeconomic trends and technological developments can affect local firms and industries and their rate of growth. And global shocks – wars, pandemics, climate change – can affect communities of all sizes. Intuitively, we know that the ability to achieve an investment or job creation goal could be affected by a recession, but it is still desirable to track progress and have a sense of whether our region is weathering headwinds as well as it could. Well-selected benchmark regions can help provide context for regional performance on metrics of this type. If your tourism-focused region grew more slowly because of a recession, but still managed to grow faster than other tourism-focused regions, perhaps your programs are working better than those in peer regions. Good benchmarking can also help identify best practices. If a peer region is reducing inequality in educational outcomes faster than your region is able, there might be something to learn from their programs.

Which regions to select as benchmarks depends on what comparisons would be most helpful for tracking and learning. It also depends on the types of goals your community has set for itself. While many benchmarks are selected based on shared geography, industrial history, demographic characteristics, or natural resources, you might find it more helpful to look at cities that share your highly skilled workforce or nascent entrepreneurial ecosystem. Identifying regions that have a target industry at a similar level of development to yours, or a region that has similar capacities but is located somewhere completely different in the country may be more helpful than simply looking for regions nearby with a similar history. While there are potentially interesting lessons to be learned from regions that are far more developed or are much larger or smaller, they typically do not make good benchmarks because the dynamics at work in these economies are too different.

Tracking performance against benchmarks can serve multiple purposes. It can be a way of assessing performance against goals for accountability, of communicating progress in context to key stakeholders and the public, and it can help drive decision-making. It can also do some combination of the three. Identify the information that aligns with your community goals and that are most important to your community and plan to track these indicators. Some will be quantitative and available across regions from national sources, others may be less easy to track and compare and proxy indicators or binary policy measures might be applicable. Leveraging publicly available data, indicators that are already collected locally or by partner organizations, and information available from funding agencies can make this easier. Depending on the aim of the benchmarking, tools like dashboards can be helpful to share and communicate the collected information. We describe the factors that contribute to industry success using four different types of reinforcing and related capacities that can help you select appropriate benchmarks:
**Community capacity:** These are the physical and human capital assets that influence economic development. They include physical infrastructure, like roads and bridges, digital infrastructure like broadband access, and the skills and knowledge in the workforce.

- The Distressed Communities Index prepared by the Economic Innovation Group tracks disparities across the US by community and allows users to identify areas where disparities are increasing or where need is high.
- STATS America collects and shares a variety of useful indicators, including their measuring distress tool which can report data for a range of geographies, including at the county, regional or even at a census tract level.

**Firm and industry capacity:** These are the firms’ assets in a location, including their workforce, facilities, equipment, and supply chains. Economic development requires partnerships with these firms and depends on their resources and networks.

- U.S. Cluster Mapping Project includes a wealth of information organized around regions and industries in a way that allows users to see trends and concentrations. For example, it includes information on key traded clusters, highlighting industries where a region is specialized.

**Entrepreneurial capacity:** This focuses on the potential for generating new small businesses, including a risk-taking culture, networks, financial capital, and a skilled workforce. This capacity includes startups firms and entrepreneurs who would like to start firms.

- State Data Breakouts from the National Venture Capital Association offer information on large investments, industry trends and total VC investments by state.

**Innovation support capacity:** This refers to the resources required to support new products, processes, and organizations. Resources include facilities, support services, and ability to take risks. This capacity extends to research and development activity in existing firms, universities and other organizations.

- The National Center for Science and Engineering Statistics collects data on a range of variables that can be viewed by state or by academic institution to help you understand the scale and sources of research funding attracted by institutions in your region and in your benchmark regions.
- In their report on Invention, Knowledge Transfer and Innovation, the National Science Board analyzed patents granted to US owners in 2020 on a per capita basis allowing for county level benchmarking (see “The Geography of US Patenting” subsection of the "Invention Indicators” chapter).

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**RESOURCES**

CEDS Central has resources targeted at Economic Development Districts (EDDs) and includes information on best practices and case studies of regional Comprehensive Economic Development Strategies and their development.