

Manufacturing Communities Ecosystem Metrics Project Statement

Why is this project necessary?

Manufacturing communities around the country know that manufacturing has a strong ripple effect on local economic development. While both the public and private stakeholders that make up these communities want to improve their manufacturing ecosystem of support, they are also unclear about what constitutes a thriving manufacturing ecosystem. Without a roadmap to understand the major components and relationships that drive success in manufacturing ecosystems, both federal and regional stakeholders lack the ability to design and implement appropriate interventions that promote sustainable development; development that includes economic innovation, inclusive dignity, and environmental sustainability. As a result, efforts to support local manufacturing sectors and economies fail to achieve their full potential. Both public and private actors would benefit from a set of metrics and a playbook of interventions to determine feasible and mutually beneficial short and long-term community driven objectives; design appropriate interventions in pursuit of these objectives; and align activities across stakeholders in the community to cultivate a thriving manufacturing ecosystem.

What is the objective of this project?

The primary goal of this project is to provide metrics for manufacturing ecosystem health that community members can easily understand and act on **immediately**, especially in terms of operationalizing new federal, state, and private investments in establishing and expanding US manufacturing capabilities. The result of this effort is to create an evolving, open-access set of metrics and roadmaps for public and private manufacturing community stakeholders to:

- 1) Identify the major component parts of a thriving manufacturing ecosystem
- 2) Identify how best to measure each of those component parts and the ecosystem as a whole
- 3) Identify gaps in how to measure the component parts and the ecosystem as a whole
- 4) Identify how best to bridge those measurement gaps
- 5) Identify a playbook of targets and interventions most likely to improve the component parts and the ecosystem as a whole

How is this project different from existing benchmarking and metric initiatives? This project seeks to co-create a novel, community based data infrastructure around manufacturing ecosystem health and capacity that can serve as a common language for entities to use to align interests and actions. Many ongoing projects provide indicators for regional economic health, such as [the Kauffman Foundations Entrepreneurship Index](#), the [US Cluster Mapping Project](#), [Economic Innovation Group's Distressed Communities Index](#), and the [ITIF's New State Economy Index](#). These existing resources and others like them primarily provide assessments of community level economic health that local stakeholders can use to identify regional weaknesses and strengths. However, manufacturing community stakeholders still need better metrics, roadmaps, and playbooks to focus their efforts, identify regional collaborators, align incentives across multiple public and private entities, and implement adaptive and dynamic interventions.

What are the existing and next steps for the project?

This project seeks to build on existing collections of metrics and measures used to assess “thriving” or “distressed” communities to 1) identify the metrics most relevant to manufacturing ecosystems and 2)

bridge the gap between descriptive metrics and actionable measures. As manufacturing ecosystems increasingly involve multiple public and private entities (from firms of different sizes, to regional economic development organizations (EDOs,) Manufacturing Extension Partnerships (MEPs), and state governments), this project seeks to use data and metrics to create a common language that entities with different interests and incentives can use to align activities.

To accomplish this goal, we propose the following initial tasks and workflow:

Task 1: The project will begin by organizing its efforts using the 6 designation criteria areas of a previous [Department of Commerce program called IMCP](#) to frame an assessment of what metrics and data we have and what metrics and data we need to create.

Task 2: Simultaneously perform case study evaluations on thriving regional manufacturing ecosystems and benchmark these ecosystems against a) stated state objectives, b) stated regional objectives, c) local EDO organizations and initiatives (including MEP centers), and d) the metrics and measures gathered from Task 1.

Task 3: Synthesize a set of best practices from the results of the first two Tasks to understand the nature of successful programs and the mix of regional actors necessary to achieve success.

Task 4: Iterate on the best practices from Task 3 within this project and with community stakeholders to create a validated, understandable, and executable roadmap and playbook with a set of usable metrics as described above.

More On The Point: We believe in the importance of US manufacturing for health, security, and prosperity. During a time of unprecedented investment in US manufacturing, it is more important than ever to increase the efficiency and effectiveness of federal and other investments in manufacturing communities. An important outcome of this project is to enhance the impact of federal investments in manufacturing communities by developing a consistent and increasingly accurate understanding of what constitutes the best interventions to produce a thriving manufacturing community. Presently, federal agencies help manufacturing communities thrive by providing agency resources in the form of assistance, funds, and incentives; however, manufacturing communities often struggle to effectively and efficiently utilize these disparate resources. Similarly, it is hard for federal agencies to understand many of the key actors in these communities and their individual (and intersecting) needs. Regional metrics can allow manufacturers to provide, aggregate and synthesize data that they may not be aware of or might be otherwise hesitant to disclose. Such disclosure adds value to manufacturers and their ecosystem supporters in understanding the activities of regional peers, what is present in their region that they can benefit from, what is lacking in-region, and where gaps and opportunities exist. Furthermore, such disclosures may help federal agencies evaluate, in real-time, their grantee's performance. A common understanding of regional manufacturing participants and health will also enable federal agencies and local communities to drive more strategic and targeted investments in the areas most needed. This common understanding will also likely empower local manufacturing communities to better articulate the impact of investments made in their community to their constituents.