

### **MCEM Executive Summary:**

There are upwards of 250,000 manufacturers operating in the United States, and each relies on a network of public and private stakeholders: a "manufacturing ecosystem". Manufacturing ecosystem stakeholders seek to maximize the impact and effectiveness of manufacturing (and manufacturing adjacent) investments made in their region. To adopt a more effective strategic approach, develop smarter interventions, and maximize the value added to manufacturing ecosystems and their parent regions as a whole, decision makers need ways to understand the industrial and institutional composition, interactions, and outputs of their manufacturing ecosystem.

Addressing this need, the Manufacturing Community Ecosystem Metrics (MCEM) Tool and Playbook is being developed by AMCC in partnership with NIST MEP and other stakeholders, structured around six key regional systems that comprise a manufacturing ecosystem: Workforce and Training, Research and Innovation, Infrastructure and Site Development, Supply Chain Support, Trade and International Investment, and Operational Improvement and Capital Access. This Tool, once developed, aims to provide actionable information to regional stakeholders to identify and understand critical components, relationships, and interventions within their manufacturing ecosystems. The Playbook will serve a guide on how regional stakeholders can use the Tool.

Fundamentally, this project is an effort to describe, in detail, the major component parts of thriving regional manufacturing communities, and work towards a definition of what constitutes a "thriving" manufacturing ecosystem. Through a co-created, open-source approach, the Tool aims to offer a common language to align diverse stakeholders with varying interests, enabling collective actions that strengthen manufacturing communities.

Recent steps of the project involve organizing efforts around the six designated criteria areas, conducting regional workshops with trial end user groups, and engaging national stakeholders across federal agencies to support the Tool and Playbook development process. The current project team has completed a "beta-protocol" for developing the tool and visualizing information, which the team is working on turning into a functional prototype. The project seeks additional participation from regions and manufacturing ecosystems, as well as support from designers, researchers, and developers to realize the first version of the MCEM Tool.

AMCC's mission is to create and strengthen an alliance of communities with regional economic development initiatives underway dedicated to achieving sustainability through economic growth, improved environmental performance, and inclusive well-paid job creation supporting initiatives to create new opportunities and equity within a revitalized American manufacturing base. As a result of the 2021 American Rescue Plan, the U.S. Department of Commerce's Economic Development Administration recently [selected AMCC to continue its work](#) to strengthen the cornerstone of American progress; manufacturing in key industries in regions across the nation.

AMCC and the MCEM Tool team are ready to accelerate progress, and create an increasingly comprehensive and improving self-assessment MCEM Tool and Playbook regions can use across the nation, one that empowers stakeholders with the insight and know-how to produce more predictive outcomes for regional manufacturing ecosystems.