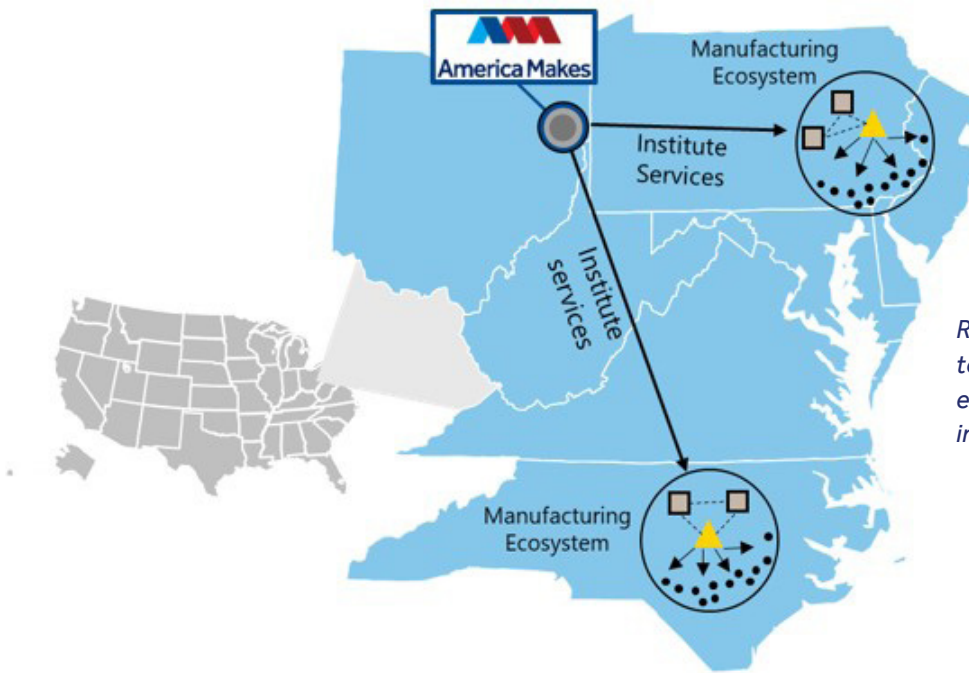


Institutes evaluated for regionalization of additive manufacturing

One playbook, one roadmap constructed to meet goals



Regionalization provides a method to leverage local ecosystems to expand Institute reach to SMMs in new communities

PROBLEM

The economic vitality and national security of the United States are built upon a foundation of successful American manufacturing. However, American manufacturers are increasingly challenged by foreign competitors, creating an urgency for growth in communities across the country. There is a ratio of approximately 1:10,000 America Makes employees to small and medium-sized manufacturers (SMMs), which prevents the Institute from resourcing our team members to regionalization efforts. Therefore, an opportunity exists to expand the Institute’s reach to impact those SMMs dispersed across the country.

OBJECTIVE

The objectives of this project were to expand America Makes and the other Manufacturing Innovation Institutes to new regions across the country and to develop a roadmap and guiding principles for a sustainable regionalization strategy. Key goals were to assess opportunities for this regional expansion and to identify incentives for America Makes and the other Institutes to participate in regionalization activities.



**AMERICA MAKES
TECHNOLOGY
DEVELOPMENT
ROADMAP**

This project aligns to:



PROCESS

**ASTM PROCESS
CATEGORY:**
N/A

EQUIPMENT:
N/A

MATERIAL:
N/A

TECHNICAL APPROACH

There were three main phases in this project: Landscape Assessment, Identification of Incentives, and Roadmap Development. The landscape assessment focused on the Philadelphia region and six Institutes: America Makes, The Digital Manufacturing and Design Innovation Institutes (DMDII), Advanced Robotics Manufacturing Institute (ARM), Advanced Functional Fabrics of America (AFFOA), Institute for Advanced Composites Manufacturing Innovation (IACMI), and Lightweight Innovations for Tomorrow (LIFT), and capitalized on previous work conducted by the Delaware Valley Industrial Resource Center (DVIRC), and Deloitte. The incentive portion of the project was focused on developing methods to incentivize the Institutes to participate at the regional level. In culmination, a roadmap was developed to guide regional expansion efforts to include tasks, responsibilities, milestones, roles, value propositions, costs, potential revenue streams, etc.

ACCOMPLISHMENTS

The project team was able to successfully complete their goals. Led by America Makes, the team worked collaboratively to develop and formalize a regionalization strategy to expand program impact. Philadelphia was determined to be a prime location to develop the regionalization strategy because of its diverse industrial composition, the absence of significant Institute influence, and its strong network of manufacturing ecosystem members.

The Regionalization Strategy Playbook was created and acts as a guide to capture the steps required at each decision point allowing other Institutes and regional partners to identify mutually beneficial opportunities and incentives for regionalization activities. The playbook leverages a strategic choice framework to effectively structure regionalization roll-out and captures lessons learned from the initial case. Following the Playbook results in a tailored, actionable roadmap that aligns partners' goals and capabilities.

The Philadelphia Roadmap was devised as a specific plan of action focused on a region or metropolitan area and identified market offerings for roll-out in the region or metropolitan area to include tasks, stakeholder roles and responsibilities, milestones, incentives, potential revenue streams, and decision points to drive action.

PROJECT END DATE

July 2019

DELIVERABLES

- Roadmap
- Playbook
- Final report

FUNDING

\$1,235,021 total project budget

(\$1,155,170 public funding, \$79,851 private funding)

PROJECT PARTICIPANTS

Project Principal:

Deloitte Consulting, LLC

Other Project Participants:

NCDMM/America Makes

Delaware Valley Industrial Resource Center

Public Participants:

U.S. Department of Defense