Between July and December 2020, a team of researchers at the University of North Carolina, led by Dr. Nichola Lowe in the Department of City and Regional Planning, conducted research to document the wide range of responses of MEP centers to the COVID-19 pandemic. Some of these responses are new and the direct outcome of CARES Act funding, while others leverage and expand pre-pandemic programs.

A total of $49,985.45 was expended from this grant, along with supplemental research assistance through the UNC-Chapel Hill I-4 Boundary Spanners program. The following four individuals were paid from this award:

Nichola Lowe, UNC-CH Professor of Planning, Department of City and Regional Planning
Todd Owen, UNC-CH Associate Director, Center for Urban and Regional Studies
Matthew Wilson, UNC-CH Doctoral Student, Department of City and Regional Planning
Olivia Raines, UNC-CH Masters Student, Department of City and Regional Planning

In addition, the research team included I-4 Boundary Spanner Fellow Rumana Rabbani, UNC-Chapel Hill Doctoral Student, Gillings School of Global Public Health

To begin research, the team first developed a database, which captures basic center information and responses to the pandemic for each center. The database draws primarily from information gathered through an extensive Internet search. We looked at MEP center websites, news articles, and press releases. This research was an iterative process, and took place over several months in Fall 2020.

After the team completed preliminary research, we developed a brief 1-2 page profile capturing the responses. We then sent the profiles out to each MEP center, asking that they confirm our research findings, and provide any additions, corrections, or omissions. This ensured that our team captured the full extent of each center's COVID response. All told, we received feedback from 43 of the 51 centers, or roughly 85%. The profiles contain data collected between August 17th and December 18th, 2020, and therefore do not include any initiatives that may have been developed subsequent to that date. Additional information was provided by an advisory group consisting of both national leaders within the MEP system and external partners. Advisory group members, including MEP leaders, provided feedback throughout the project and helped inform data presentation.

Key components and outcomes of the project include the following.

- Designed and developed a database to document the actions individual Manufacturing Extension Partnership centers (MEPs) have undertaken in response to the pandemic.
- Created an advisory committee which met multiple times to help identify exemplary states and review the final profiles. Advisory team included: Ken Voytek (MEP Chief Economist, National Institute of Standards and Technology), Mark Troppe & Allison
Forbes (Center for Regional Economic Competitiveness), David Boulay (Illinois Manufacturing Excellence Center), Phil Mintz (North Carolina Manufacturing Extension Partnership), Aaron Fox (Oregon Manufacturing Extension Partnership), Katy Stanton (Urban Manufacturing Alliance), Josh Levy (NC Commerce) and Greg Schrock, (Portland State University).

- Conducted in-depth interviews with leaders of 11 representative state MEPs (Florida, Iowa, Illinois, Maryland, New Jersey, North Carolina, Pennsylvania (Pittsburgh MEP), South Carolina, Ohio (Cleveland MEP), Oregon, Rhode Island)
- Surveyed MEPs in all 50 states and Puerto Rico.
- Created individual profiles for 51 MEPs.
- Packaged the individual profiles and an overall analysis and summary of findings in the report Gearing Up: MEP Center Responses to the COVID-19 Pandemic. Report was uploaded and can be found here: [https://curs.unc.edu/wp-content/uploads/sites/400/2021/01/Gearing_Up.pdf](https://curs.unc.edu/wp-content/uploads/sites/400/2021/01/Gearing_Up.pdf)
- Created a website to enable people to access the report and findings.
- Key findings include:
  - MEP centers in 48 states provided new or expanded consulting services or performed needs surveys
  - MEP centers in 42 states provided product and/or supplier matching services
  - MEP centers in 31 states created return-to-work guides
  - MEP centers in 29 states provided assistance with retooling to produce PPE
  - MEP centers in 13 states assisted manufacturers with PPE product testing and development
- Shared the final report with all 51 MEPs.
- Worked with the National Institute of Standards and Technology (NIST) to disseminate the report broadly.
- The team collaborated with NCMEP to analyze data that NCMEP collected from a survey of over 300 manufacturers in the state of North Carolina to understand pandemic-related challenges and needs facing NC’s manufacturers,
- Although the original project was completed, the research team is collaborating with two MEP centers to understand their equity and diversity goals and to provide resources to support those goals. Outreach and dissemination efforts continue as well.
- Work also continues on expanding the website to include an interactive map (see below) and additional data visualizations.